TARIFF ORDER

True-up of FY 2016-17, Annual Performance Review of FY 2017-18 and Approval of Aggregate Revenue Requirements (ARR) and determination of tariff for FY 2018-19

Petition No. 240/2017

Petition No. 247/2017

For

DNH Power Distribution Corporation Limited

30th January, 2018

JOINT ELECTRICITY REGULATORY COMMISSION
For the State of Goa and Union Territories,
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List of abbreviations

Abbreviation	Full Form
A&G	Administration and General
ACoS	Average Cost of Supply
Act	The Electricity Act, 2003
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal of Electricity
BPL	Below Poverty Line
CAGR	Compound Annualized Growth rate
Capex	Capital Expenditure
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievance Redressal Forum
CGS	Central Generating Stations
COD	Commercial Operation Date
Cr.	Crore
Discom	Distribution Company
DNHPDCL	Dadra & Nagar Haveli Power Distribution Corporation Limited
DSM	Deviation Settlement Mechanism
EA 2003	The Electricity Act, 2003
ED	Electricity Department
EHT	Extra High Tension
ERP	Enterprise Resource Planning
FPPCA	Fuel and Power Purchase Cost Adjustment
FY	Financial Year
GFA	Gross Fixed Assets
HT	High Tension
IEX	Indian Energy Exchange Limited
IPP	Independent Power Producer
ISTS	Inter State Transmission System
JERC	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
LT	Low Tension
MU	Million Units
MYT	Multi Year Tariff
NFA	Net Fixed Assets
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance
PGCIL	Power Grid Corporation of India Limited

Abbreviation	Full Form
PLF	Plant Load Factor
PLR	Prime Lending Rate
POSOCO	Power System Operation Corporation Limited
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
REC	Renewable Energy Certificate
RLDC	Regional Load Despatch Centre
RoE	Return on Equity
RPO	Renewable Purchase Obligation
SBI PLR	SBI Prime Lending Rate
SERC	State Electricity Regulatory Commission
SLDC	State Load Despatch Center
SOP	Standard of Performance
T&D	Transmission & Distribution Loss
TVS	Technical Validation Session
UI	Unscheduled Interchange
UT	Union Territory
WART	Weighted Average Retail Tariff

Before the

Joint Electricity Regulatory Commission

For the State of Goa and Union Territories, Gurugram

QUORUM

Sh. M. K. Goel (Chairperson)

Smt. Neerja Mathur (Member)

Petition No. 240/2017

Petition No. 247/2017

In the matter of

Approval for the True-up of the FY 2016-17, Annual Performance Review for the FY 2017-18 and Aggregate Revenue Requirements (ARR) and Tariff proposal for the FY 2018-19.

And in the matter of

DNH Power Distribution Corporation Limited ....Petitioner

ORDER

Dated: 30th January 2018

a) This Order is passed in respect to separate Petitions filed by the DNH Power Distribution Corporation Limited for approval of True-up of FY 2016-17 and Annual Performance Review for the FY 2017-18, Aggregate Revenue Requirements (ARR) and Tariff proposal for the FY 2018-19.

b) After receiving both the Petitions, 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 and the veracity of the information submitted. 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:

Table 1: Timelines w.r.t the Petition filed for true-up of FY 2016-17

Particular	Details
Date of Admission	20th September, 2017
Technical Validation Session	12th October, 2017
Public Hearing	30th October, 2017

Table 2: Timelines w.r.t the Petition filed for APR of FY 2017-18 and ARR of FY 2018-19

Particular	Details
Date of Admission	12th December 2017
Public Hearing	10th January 2018

Particular	Details
Technical Validation Session	16th January 2018

c) The regulatory surcharge as approved shall be applicable for all the bills raised on or after 1st February, 2018 onward and shall remain applicable till 31st March, 2019. The approved tariff, as detailed in the Chapter "Tariff Schedule," shall come into force from 1st April 2018 and shall remain valid till further Order 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-
Neerja Mathur	**M.K. Goel**
(Member)	**(Chairperson)**

JOINT ELECTRICITY REGULATORY COMMISSION
(For the State of Goa and Union Territories)

Place: Gurugram
Date: 30th January 2018

(Certified Copy)

Keerti Tewari

1. Chapter 1: Introduction

1.1. About Joint Electricity Regulatory Commission (JERC)

In exercise of powers conferred by the Electricity Act 2003, the Central Government constituted a Joint Electricity Regulatory Commission for all the Union Territories except Delhi to be known as "Joint Electricity Regulatory Commission for the Union Territories" vide notification no. 23/52/2003-R&R dated 2 May, 2005. Later with the joining of the State of Goa, the Commission came to be known as "Joint Electricity Regulatory Commission for the State of Goa and Union Territories" (hereinafter referred to as "JERC" or "the Commission") vide notification no. 23/52/2003-R&R (Vol. II) dated 30 May, 2008.

JERC is an autonomous body responsible for regulation of the Power Sector in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry, consisting of generation, transmission, distribution, trading and use of electricity. Its primary objective includes taking measures conducive to the development of the electricity industry, promoting competition therein, protecting interest of consumers and ensuring supply of electricity to all areas.

1.2. About Dadra & Nagar Haveli Power Distribution Corporation Limited (DNHPDCL)

Dadra & Nagar Haveli Power Distribution Corporation Limited (herein after referred as "DNHPDCL" or "the Petitioner" or the "Licensee") has been created from the erstwhile Electricity Department of Dadra & Nagar Haveli (ED-DNH) and started its operations from April 1, 2013. It is a statutory body engaged in the procurement and distribution of electricity in the Union Territory of Dadra & Nagar Haveli (herein after referred as "the State" or "the Territory"). The primary objectives of the utility include:

- Laying and operating of electric lines, sub-stations and electrical plants that are primarily maintained for the purpose of distributing electricity in the area of supply of DNHPDCL;
- Arranging, in-coordination with the Generating Company(ies) operating in or outside the State, for the supply of electricity required within the State and for the distribution of the same in the most economical and efficient manner;
- Supplying electricity, as soon as practicable to any person requiring such supply, within its competency to do so under the said Act;
- Preparing and carrying out schemes for distribution and generally for promoting the use of electricity within the State.

The present distribution system of DNHPDCL consists of 279.9 km of 66 kV D/C lines, 833.7 circuit km of 11 kV lines along with 1091 distribution transformers. DNHPDCL has total sub-transmission capacity of 1000 MVA, including 520 MVA in Kharadpada and 480 MVA Khadoli sub-stations. The total installed capacity at 66/11 kV sub-stations is 712 MVA.

The power demand in the Territory is primarily met from the Central Sector Generating Stations of Western Region. The present average demand of the Territory hovers around 580 to 600 MW with a peak demand of 860 MW. Rapid industrialization, improved standard of living and increasing per capita electricity consumption is expected to increase the power demand in the Territory speedily in the coming years.

1.3. Multi Year Distribution Tariff Regulations, 2014

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014 on 30th June 2014 applicable for a three year Control period starting from FY 2015-16 till FY 2017-18. The Commission subsequently notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi Year

Distribution Tariff) (First Amendment) Regulations, 2015 on 10th August 2015 shifting the MYT Control Period to FY 2016-17 to FY 2018-19. The Regulations applied to all the distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry.

1.4. Filing and Admission of the Present Petition

DNH Power Distribution Corporation Limited initially filed the Petition for true-up for FY 2016-17 vide letter dated 18th September 2017. On preliminary scrutiny of the Petition, certain data gaps were observed for which the reply of the Petitioner was sought. The Petition was also scrutinized in terms of JERC (Conduct of Business) Regulations, 2009. The Petition for true up of FY 2016-17 was admitted on 20th September 2016 and numbered as Petition No. 240/2017. The letter indicating gaps in the information as well as the documentation was sent to the Petitioner.

The Petition for Annual Performance Review (APR) for the FY 2017-18 and determination of Aggregate Revenue Requirement (ARR) was filed vide letter dated 8th December 2017. Various data gaps were observed and were communicated to the Petitioner in the form of Discrepancy Notes, against which replies were sought. The Petition for APR & ARR was admitted on 12th December 2076 and numbered as Petition No. 247/2017.

1.5. Interaction with the Petitioner

A preliminary scrutiny/analysis of the Petition submitted by the Petitioner was conducted and certain deficiencies were observed. Accordingly, deficiency notes were issued to the Petitioner. Further, additional information/clarifications/justifications were solicited from the Petitioner as and when required. The Commission and the Petitioner also discussed various concerns of the Petitioners and key data gaps, which included O&M Expenses, revenue from retail tariff, capitalisation, tariff proposal etc. The Petitioner submitted additional information through various letters, as listed in the table below.

The Commission conducted the Technical Validation Session (TVS) with the Petitioner at the Commission's office in Gurugram, during which discrepancies in the Petition were discussed and additional information required by the Commission were sought. Subsequently, the Petitioner submitted replies to the issues raised in these sessions and provided documentary evidence to substantiate its claims regarding various submissions. The following table provides the list of interactions with the Petitioner along with the date:

Table 3: Timelines w.r.t the Petition for true up of FY 2016-17

S. No	Subject	Date
1	Issue of First Discrepancy Note	25th September, 2017
2	Reply received from Petitioner	11th October, 2017
3	Technical Validation Session	12th October, 2017
4	Issue of 2nd Discrepancy Note	12th October, 2017
5	Reply received from Petitioner	17th October, 2017
		3rd November, 2017
6	Issue of 3rd Discrepancy Note	8th November, 2017
7	Reply received from Petitioner	17th November, 2017
8	Public Hearing	30th October, 2017

Table 4: Timelines w.r.t the Petition for APR of FY 2017-18 and ARR of FY 2018-19

S. No	Subject	Date
1	Issue of 1st Discrepancy Note	21st December, 2017
2	Reply received from Petitioner	2nd January, 2018
		5th January, 2018
		10th January, 2018
		15th January, 2018

S. No	Subject	Date
	Reply received from Petitioner	16th January, 2018
		17th January, 2018
		18th January, 2018
3	Issue of 2nd Discrepancy Note	17th January, 2018
4	Reply received from Petitioner	19th January, 2018
7	Public Hearing	10th January, 2018
8	Technical Validation Session	16th January, 2018

1.6. Public Hearing

The public hearing was held on 30th October 2017 from 11:00 am onwards at "The President Hall, Yatri Niwas" at Silvassa for the true-up Petition and on 10th January 2018 from 11:00 am onwards at "The President Hall, Yatri Niwas" at Silvassa for APR and ARR Petition, to discuss the issues related to the Petition filed by the Petitioner. The issues and concerns voiced by various stakeholders have been examined by the Commission. The major issues discussed during the public hearing and/or written comment made by the stakeholders, the responses of the Petitioner thereon and the views of the Commission, have been summarized in Chapter 3.

1.7. 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.

Table 5: Details of Public Notices published by the Commission on True up Petition

S.No.	Date	Name of Newspaper	Place of Circulation
1	6th October 2017	Indian Express (English)	Silvassa
		Gujarat Samachar (Gujarati)	Silvassa
2		Navbharat Times (Hindi)	Silvassa
3	28th October, 2017	Indian Express (English)	Silvassa
		Gujarat Samachar (Gujarati)	Silvassa
		Navbharat Times (Hindi)	Silvassa

Table 6: Details of Public Notices published by the Commission on APR and ARR Petition

S.No.	Date	Name of Newspaper	Place of Circulation
1	23rd December 2017	Indian Express (English)	Silvassa
		Gujarat Samachar (Gujarati)	Silvassa
2	24th December 2017	Navbharat Times (Hindi)	Silvassa
3	8th January 2018	Indian Express (English)	Silvassa
		Gujarat Samachar (Gujarati)	Silvassa
		Navbharat Times (Hindi)	Silvassa

Copies of the Public Notices published by the Commission for intimation of the Public Hearing are attached as Annexure 1 to this Order. This notice was also uploaded on the Commission's website.

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.

2. 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 MYT Regulations, 2014.

The Public Hearing was held on 30th October 2017 and 10th January 2018 at Silvassa for Petition on True-Up of FY 2016-17 and Petition on APR of FY 2017-18 and ARR of FY 2018-19 respectively. During the Public Hearing, a few 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. Truing up for FY 2016-17

2.2.1.1. True up of FY 2016-17 not done

Stakeholder's Comment:

DNHPDCL may be directed to revise and resubmit this Tariff Petition for FY 2018-19 based on the approved Trued-up data of FY 2016-17.

Petitioner's Response:

The Petition for the truing up of FY 2016-17 has already been submitted to the Hon'ble Commission. The Order on the True up Petition is still awaited.

Commission's View:

The Commission, in accordance with MYT Regulations, 2014 is issuing the Tariff Order for True-Up of FY 2016-17, APR of FY 2017-18 and ARR of FY 2018-19. The Commission has considered the Trued-Up values of FY 2016-17 for computing the APR of FY 2016-17 and ARR of FY 2018-19.

2.2.1.2. Non-tariff Income

Stakeholder's Comment:

The submission of the Petitioner of not considering interest on Fixed Deposit (FD) in non-tariff income for FY 2016-17 is not acceptable.

Petitioner's Response:

The DNHPDCL has noted the observations regarding the Non-Tariff Income.

Commission's View:

The Commission has noted the concern of the Stakeholders. The Commission has included the interest on FD as Non- Tariff income while truing up for FY 2016-17.

2.2.2. Review of FY 2017-18

2.2.2.1. Power Purchase Cost

Stakeholder's Comment:

For FY 2017-18, DNHPDCL has shown purchase of 169.31 MU of power from Mauda @ Rs. 6.60 per unit. In Tariff Order for FY 2017-18, Hon'ble JERC had not approved any power purchase from Mauda assuming consumers availing open access. As large number of consumer did not opt for Open Access, the DNHPDCL might be required to purchase power from Mauda power plant. For FY 2016-17, the Commission considered lower quantum of power being purchased by the DNHPDCL from Mauda when consumers did not avail Open Access. In line with FY 2016-17, the DNHPDCL should avoid buying power from Mauda power plant which could reduce Rs 29.82 Cr in the power purchase cost.

Merit Order is not observed/followed in purchase of power by DNHPDCL causing sub-optimal power purchase cost, which needs to be examined by the Hon'ble Commission

Petitioner's Response:

The power purchase cost as submitted in the Tariff Petition is the actual cost incurred by the DNHPDCL in procurement of power from the various generating stations allocated to it by the Ministry of Power. Moreover, there is no own generation of DNHPDCL, hence, DNHPDCL has to rely on power scheduled from the capacity of the generating stations allocated to it. It is therefore requested that the Hon'ble Commission may approve the power purchase cost for the FY 2016-17 as submitted in the True-up Petition for the FY 2016-17.

DNHPDCL would like to submit that the Department always follows merit order principles while purchasing power

Commission's View:

The Commission has noted the Stakeholder's concern. The Commission directs the Petitioner to look for cheaper alternative sources of power such as through IEX/Bilateral to reduce the burden of power purchase costs. However, the Commission also recognizes that the Petitioner has to honour the long term PPA's signed with generating stations and the opportunity for the Petitioner to save the variable cost of these generating stations is limited.

During the True-Up FY 2016-17, the Commission has approved the Power Purchase Costs after detailed prudence check.

2.2.2.2. Distribution Losses

Stakeholder's Comment:

Distribution losses of the DNHPDCL are very high considering two 220 kVA and 66 kVA substations transforming the 85% of power load. The Commission should approve the loss only after a diligent study.

Petitioner's Response:

A loss level of 4.68% is achieved for FY 2016-17. The loss level of the Petitioner 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.

Commission's View:

The Commission has noted the submission of the Stakeholder. 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 them at the level less than 5%. The Commission has approved loss level of 4.73% for FY 2016-17 and 4.70% for FY 2017-18 and FY 2018-19 in this Order. This also included the transmission losses of 0.61% at the 220 kV network. The Commission, however, directs the Petitioner to capture voltage wise losses, which will help in identifying opportunities for future loss reduction.

2.2.2.3. Gross Fixed Assets

Stakeholder's Comment:

Gross Fixed Asset computations made by DNHPDCL is wrong. It should re-prepare based on actual approval granted by Hon'ble Commission in its previous Orders.

Petitioner's Response:

The value of Gross Fixed Assets as submitted in the Tariff Petition is based on the actual value of assets in use by the Department and the Asset Register detailing all the assets in use that have been submitted along with the Tariff Petition. Further, the report of third party audit is under finalization and will be submitted to the Hon'ble Commission shortly.

Commission's View:

The Commission has approve the GFA based on approved values of GFA in previous years and the capitalisation as per actuals of FY 2016-17. For FY 2017-18 and FY 2018-19, the Commission has projected the capitalisation based on the submissions of the Petitioner, which will be trued-up later based on actual capitalisation. In case of any variation in the third party report audit on GFA, the same shall be considered appropriately by the Commission.

2.2.2.4. Depreciation

Stakeholder's Comment:

No depreciation should be allowed on the asset created by consumer's contribution. As the DNHPDCL has not submitted the details of consumer contribution, no depreciation should be allowed till details of consumer contribution is made available.

Petitioner's Response:

The depreciation is allowed as a charge in lieu of the wear and tear for the fixed assets. It is one of the components of tariff determination. The Depreciation for the FY 2016-17 has been sought for by applying category-wise assets depreciation rates (as per CERC Regulations) on the opening balance of Gross Fixed Assets and average of the addition during the year.

Commission's View:

The Commission has noted the concern of the Stakeholder. The Commission has discussed this issue while Truing Up of FY 2016-17, APR of FY 2017-18 and ARR of FY 2018-19. During the Technical Validation Session, the Petitioner has confirmed that some of the assets have been created by consumer contribution. However, the Petitioner failed to submit the details of the same. The Commission has currently considered the entire GFA towards depreciation and will reduce the depreciation in future, once the details of the consumer contribution is made available. The Commission directs the Petitioner to submit detailed scheme wise consumer contributions, the impact of which shall be accounted by the Commission in future Tariff Orders.

2.2.2.5. Interest on long term /capital loans

Stakeholder's Comment:

While, the SBI Prime Lending Rate (PLR) is reduced to 13.85 % from April 2017, DNHPDCL has considered interest rate of 14.05% as claimed by them to be the prevailing SBI PLR.

Petitioner's Response:

The Interest on Loan has been considered on a normative basis. The rate of interest has been considered equal to the SBI PLR.

Commission's View:

The Commission would like to highlight that as per the provisions of the 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 Multi Year Distribution Tariff Regulations, 2014.

2.2.2.6. Interest on working capital borrowings

Stakeholder's Comments:

Petitioner has considered Working Capital interest rate of 9.30 % which is much higher.

Petitioner's Response:

The Interest on Working Capital has been computed based on the normative principles outlined by the Hon'ble Commission in the JERC (Multi Year Distribution Tariff) Regulations, 2014.

Commission's View:

The Commission has noted the submission of the Stakeholder. The Commission has followed the normative principles as outlined in the MYT Regulations, 2014.

2.2.2.7. Return on Equity

Stakeholder's Comments:

The Return on Equity is considered @ 16% which is on higher side particularly considering substantial reductions in Prime Lending Rates and Bank Loan rates since/after 2014. Moreover, the Utilities in the neighboring states like Gujarat have Return on Equity Rate as 14 % and therefore 16% RoE rate in case of DNHPDCL is not justified and should be less than 14%.

Petitioner's Response:

As per the JERC (Multi Year Distribution Tariff) Regulations, 2014, DNHPDCL is entitled for a Return on Equity (RoE), which has been computed on normative basis. The rate of return has been taken as 16% as per the MYT Regulations. Hence, it is requested to allow the return on equity for the FY 2017-18 as submitted in the Tariff Petition.

Commission's View:

The Commission has noted the submission of the Stakeholder. 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 MYT Regulations, 2014 only.

2.2.2.8. Aggregate Revenue Requirement

Stakeholder's Comment:

The Power Purchase Cost component of ARR computation comes out to Rs. 2360.84 Cr as compared to Petitioner's submission of Rs. 2390.36.

Petitioner's Response:

The power purchase cost as submitted in the Tariff Petition is the actual cost incurred by the DNHPDCL in procurement of power from the various generating stations allocated to it by the Ministry of Power. Moreover, there is no own generation of DNHPDCL, and hence, the DNHPDCL has to rely on power scheduled from the capacity of the generating stations allocated to it.

Commission's View:

The Commission has noted the concern of the Stakeholder. The approved power purchase cost with respect to APR for FY 2017-18 has been analysed and verified before its consideration in the ARR. The same is discussed in detail in Chapter 4 of this Order.

2.2.2.9. Revenue from Existing Tariff

Stakeholder's Comments:

Details of actual revenue for the first six months and the basis for arriving at revised estimate figures are not furnished. The Commission is requested to look into it.

Petitioner's Response:

The actual revenue and sales figures for the first six months have been shared with the Commission. Further, revenue surplus of the previous years has been taken into account while computing the revenue gap/surplus for the FY 2017-18.

Commission's View:

The Petitioner has submitted the detailed calculation of revenue at existing tariffs as part of the regulatory formats submitted along with the Petition. The Commission has estimated revenue for FY 2017-18 based on actual data for first eight months of FY 2017-18. The detailed computation of revenue for FY 2017-18 has been discussed in Chapter 4 of this Order.

2.2.2.10. Revenue Gap/Surplus at the end of FY 2017-18

Stakeholder's Comments:

While working out gap/surplus, the DNHPDCL has considered revenue from open access @ 57 paisa/unit. It is submitted that the formula being followed by Hon'ble JERC for additional surcharge is under appeal.

Petitioner's Response:

The revenue gap has been arrived at after considering the revised estimates of costs and revenue during the FY 2017-18.

Commission's View:

The Commission has noted the concern raised by the Stakeholders. The matter is pending with Hon'ble Appellate Tribunal of Electricity, and no stay has been granted as of the date of issue of this Order.

2.2.3. Review of ARR for FY 2018-19

2.2.3.1. Power Purchase Cost

Stakeholder's Comment:

The Petitioner should avoid purchasing higher quantum of expensive power from Mauda.

Petitioner's Response:

The power purchase cost as submitted in the Tariff Petition is based upon the allocation of capacity of the various generating stations made by the Ministry of Power. Moreover, there is no own generation of DNHPDCL, hence, DNHPDCL has to rely on power scheduled from the capacity of the generation stations allocated to it. It is therefore requested that the Hon'ble Commission may approve the power purchase cost projected for the FY 2018-19 as submitted in the Tariff Petition.

Commission's View:

The Commission has noted the Stakeholder's concern. The Commission directs the Petitioner to look for cheaper alternative sources of power such as through IEX/Bilateral to reduce the burden of Power Purchase Costs. However, the Commission also recognizes that the Petitioner has to honour the long term PPA's signed with generating stations and the opportunity for the Petitioner to save the variable cost of these generating stations is limited.

2.2.3.2. Load growth

Stakeholder's Comments:

Load growth projected by the DNHPDCL is higher and actual load will not grow more than 3%.

Petitioner's Response:

The load growth has been projected category wise based on the growth witnessed during the past years. The category wise load has been projected based on the past years CAGR and the anticipated addition of connections to the various consumer categories during the FY 2018-19. Hence, it is submitted that the Hon'ble Commission may approve the category wise load as submitted in the Tariff Petition for the FY 2018-19.

Commission's view:

The Commission has noted the concern of the Stakeholder. The projection methodology for growth in connected load and energy sales has been discussed in Chapter 5 while determining ARR of FY 2018-19.

2.2.3.3. Energy sales and requirement

Stakeholder's Comments:

Energy sales projections by the DNHPDCL @ 10.3% is on the higher side. Loss should be determined separately for each voltage level.

Petitioner's Response:

The DNHPDCL has noted the observations regarding sales and distribution losses. It is submitted that the energy sales have been projected on past years CAGR and anticipated growth in the no. of consumers during the FY 2018-19.

Commission's View:

The Commission has noted the concern of the Stakeholder. The projection methodology for growth in connected load and energy sales has been discussed in Chapter 5 while determining ARR of FY 2018-19. The Commission directs the Petitioner to capture voltage wise losses separately for each voltage level.

2.2.3.4. Energy requirement

Stakeholder's Comments:

IEX prices for peak hours of almost all days of the year are much above the unit variable cost and the current full day annual average is as high as Rs.3.15/unit. Hence, DNHPDCL has a strong arbitrage gain opportunity by selling surplus power in IEX.

Petitioner's Response:

The DNHPDCL has noted the observations regarding energy required.

Commission's View:

The Commission has noted the suggestion of the Stakeholder. However, the Commission is of the opinion that comparing average variable cost of the DNHPDCL with the peak exchange prices will be wrong. The plants with the cheapest variable costs are scheduled under Merit Order for the state's consumption under merit order despatch principle. The opportunity should be evaluated with respect to the marginal variable cost of the plants which are not getting schedule under merit order despatch. The Commission directs the Petitioner to explore such arbitrage opportunity of selling power at IEX, which will help in reducing the power purchase cost.

2.2.3.5. Gross Fixed Assets and Depreciation

Stakeholder's Comments:

Compelling the consumers to pay for the depreciation on an asset built and transferred at value by them to DNHPDCL will be grossly unfair and wrong and hence ample clarity and confirmation of action taken is sought.

Petitioner's Response:

The report of third party audit is under finalization and will be submitted to the Hon'ble Commission shortly.

Commission's View:

The Commission has noted the concern of the Stakeholder. The Commission has discussed this issue while Truing Up of FY 2016-17, APR of FY 2017-18 and ARR of FY 2018-19. During the Technical Validation Session, the Petitioner confirmed that some of the assets have been created by consumer contribution however the Petitioner couldn't submit the details for the same. The Commission has currently considered entire GFA towards depreciation and will reduce the depreciation in future, once the details of consumer contribution is made available. The Commission directs the Petitioner to submit detailed scheme wise consumer contributions, the impact of which shall be accounted by Commission in future Tariff Orders.

2.2.3.6. Interest on long term/capital loans

Stakeholder's Comments:

While, the SBI PLR is reduced to 13.85 % from April 2017, DNHPDCL has considered interest rate of 14.05% as claimed by them to be the prevailing SBI PLR.

For calculation of interest liability it is the Debt portion i.e. 70% of the Capital expenditure of Rs.67.10 Cr equaling to Rs.46.97 Cr to be considered. ARR has to be worked on capitalisation amount rather than the capital expenditure amount which needs to be corrected.

Petitioner's Response:

DNHPDCL would like to submit that the Interest on Loan has been considered on a normative basis. The rate of interest has been considered equal to the SBI Prime Lending Rate.

Commission's View:

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 Multi Year Distribution Tariff Regulations, 2014. Further, the determination of expenses constituting the ARR is done on the basis of actual capitalisation rather than capital expenditure taken up by the Petitioner.

2.2.3.7. Interest on working capital borrowings

Stakeholder's Comments:

DNHPDCL conducts business from its sale receipts and does not use / negligibly uses working capital limits. The Commission is requested to conduct in-depth verification and accordingly change the norms for working capital for ARR estimation.

Petitioner's Response:

The DNHPDCL would like to submit that DNHPDCL has computed the Interest on Working Capital for the Control Period based on normative principles outlined by the Hon'ble Commission in the JERC (Multi Year Distribution Tariff) Regulations, 2014. Hence, it is requested to allow the interest on working capital for the FY 2017-18 as submitted in the Tariff Petition.

Commission's View:

The Commission has noted the concern of the Stakeholder. The Commission follows the normative principles as outlined in the JERC (Multi Year Distribution Tariff) Regulations, 2014.

2.2.3.8. Return on Equity

Stakeholder's Comments:

The Return on Equity is considered @ 16 %, which is on higher side particularly considering the substantial reductions in Prime Lending Rates and Bank Loan rates since/after 2014.

Petitioner's Response:

As per the JERC (Multi Year Distribution Tariff) Regulations, 2014, DNHPDCL is entitled for a Return on Equity (RoE). Return on equity has been computed on normative basis. The rate of return has been taken as 16% as per the MYT Regulations. Hence, it is requested to allow the return on equity for the FY 2018-19 as submitted in the Tariff Petition.

Commission's View:

The Commission has noted the submission of the Stakeholder. 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 MYT Regulations, 2014 only.

2.2.3.9. Power factor incentive @0.50% on energy charges

Stakeholder's Comments:

The proposal of the DNHPDCL to reduce the power factor incentive from 1% to 0.5% is wrong. Higher power factor not only helps in reduction of losses but also helps in averting need to install capacitors by DNHPDCL to that extent.

Petitioner's Response:

The DNHPDCL has noted the observation regarding power factor incentive @0.50% on energy charges.

Commission's View:

The Commission has noted the concern of the Petitioner. The Commission has thus introduced kVAh Tariff for LT and HT categories, which should address the concerns of the stakeholder.

2.2.3.10. Calculation of Wheeling Charges

Stakeholder's Comment:

Wheeling charges should be levied on consumers connected to the distribution network and utilizing the assets of the same. In case of EHT consumers, they are already connected to the transmission system and paying the notified transmission charges, any further charges for wheeling of energy will result in dual charging for the same energy.

Petitioner's Response:

The methodology followed for computation of wheeling charges is the same as approved by the Hon'ble Commission in its Tariff Order dated 9th June, 2017.

Commission's View:

The Commission has noted the concerns of the Stakeholders. The methodology adopted by the Commission for calculation of wheeling charge is detailed in the Chapter 7 of this Order. The Commission would like to highlight that the methodology adopted by the Commission is in alignment with the approach adopted by the other Regulatory Commissions for computation of wheeling charges.

2.2.3.11. Calculation of Additional Surcharge

Stakeholder's Comment:

The methodology proposed by the DNHPDCL for calculation of additional surcharge is not in line with the methodology approved by the Hon'ble Commission in Tariff Order for FY 2017-18. It is further submitted that any cost towards network charges cannot be recovered through Additional Surcharge. Hon'ble Commission is requested to rectify the methodology of calculation of Additional Surcharge and exclude PGCIL cost in calculation.

Petitioner's Response:

While computing the additional surcharge, it has considered the fixed charges projected in the ARR of FY 2018-19. Further, the rationale behind proposing Additional Surcharge for open access consumers is that the DNHPDCL will have to pay the fixed charges to the generating stations with whom it has entered into long term PPA agreements for the full capacity allocated to it (even if some capacity is stranded due to open access). The fixed charges payable to the generators companies and ISTS charges works out to Rs. 1.97/unit (only HT consumers considered). However, the fixed charges being recovered from the consumers as per the Tariff Order for the FY 2017-18 dated 9th June, 2017 is Rs. 0.76/unit. Hence, the under recovery of the fixed charges Rs. 1.21/unit from the open access consumers leads to recovery of the same from non-open access consumers through FPPCA charges (as the FPPCA is levied on non-open access sales). This results in an undesirable scenario of non-open access consumers bearing this additional burden for no fault of theirs.

Commission's View:

The Commission has noted the concerns of the Stakeholders. The methodology adopted by the Commission for calculation of additional surcharge is detailed in the Chapter 7 of this Order. The Commission would like to highlight that the methodology adopted by the Commission is in alignment with the approach adopted by the other Regulatory Commissions for computation of wheeling charges.

2.2.4. Other Important Issues

2.2.4.1. FPPCA

Stakeholder's Comment:

The FPPCA formula used by the Hon'ble Commission has resulted in high FPPCA charges in the past resulting in MSME becoming unviable. THE FPPCA formulae should consider power purchase cost as actually incurred.

Petitioner's Response:

DNHPDCL has noted the observations regarding the FPPCA.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission has revised the FPPCA formula in this Order. The methodology adopted by the Commission for calculation of FPPCA is detailed in the Chapter 9 of this Order.

2.2.4.2. JERC/CGRF proceedings to be online

Stakeholder's Comments:

In this era of `on-line' status of cases before CGRF should be visible on line, including Orders passed. Orders of Hon'ble JERC are available on line, but not of CGRF. Hon'ble JERC should direct CGRF to have the facility of allowing registration of grievances, and status / Orders in case on line.

Petitioner's Response:

The ERP software is being implemented. As soon as the ERP is implemented the proceedings of JERC/CGRF shall be made available online.

Commission's View:

The Commission has noted the concern of the Stakeholder and would like the Petitioner to expedite the implementation of ERP software to facilitate uploading of CGRF documents online.

2.2.4.3. Performance standards reports to be uploaded on website

Stakeholder's Comment:

It has been learnt from the Petition that Petitioner submits the Performance standard report to Hon'ble Commission on quarterly basis. Objector suggests that it should be displayed on Petitioner's website also.

Petitioner's Response:

DNHPDCL would like to submit that the ERP software is being implemented. As soon as the ERP is implemented the SOP shall be made online.

Commission's View:

The Commission notes the concern of the Stakeholder. It thus directs the Petitioner to upload the performance standards reports on its website.

3. Chapter 3: True-up for FY 2016-17

3.1. Background

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014 (hereinafter referred to as "MYT Regulations, 2014") on 30th June 2014, applicable for a three year Control Period starting from FY 2015-16 to FY 2017-18. The Commission subsequently notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) (First Amendment) Regulations, 2015 on 10th August 2015 wherein the MYT Control Period was shifted an year ahead and was notified as FY 2016-17 to FY 2018-19. Under the MYT regime, Order on Aggregate Revenue Requirement (ARR) for 1st MYT Control Period (FY 2016-17 to FY 2018-19) and Wheeling & Retail Supply Tariff for FY 2016-17 was issued on 7th April 2016 (hereinafter referred to as the "MYT Order"). Subsequently, the Commission issued the Tariff Order for FY 2017-18, determining the Aggregate Revenue Requirement (ARR) and tariff for FY 2017-18, true-up for FY 2015-16 and Annual Performance review (APR) of FY 2016-17 on 9th June 2017 (hereinafter referred to as the "APR Order").

The Commission now in this Chapter carries out the true-up of FY 2016-17, the first year of the Control Period in accordance with the principles laid down in the MYT Regulations, 2014.

3.2. Energy Sales

Petitioner's Submission

The Petitioner has submitted the total quantum of energy sales for FY 2016-17 as 3752.91 MU as against an approved energy sales quantum of 4176.18 MU in the APR Order.

Commission's Analysis

The MYT Regulations, 2014 stipulates that the variation in sales constitutes "uncontrollable factors" that are beyond the control of the Petitioner and cannot be mitigated. Regulation 9.1 of the MYT Regulations stipulates the following:

The "uncontrollable factors" shall comprise of the following factors which were beyond the control of, and could not be mitigated by the applicant:

(a) *Force Majeure events, such as acts of war, fire, natural calamities, etc.*
(b) *Change in law;*
(c) *Taxes and Duties;*
(d) *Variation in sales; and*
(e) *Variation in the cost of power generation and/or power purchase due to the circumstances specified in these Regulations;*

The Commission had approved energy sales of 4176.18 MU in the APR Order, against which actual energy sales of 3752.91 MU have been submitted by the Petitioner now. The Commission, in the Technical Validation Session (TVS) held in the Commission's office sought justifications for the decrease in energy sales, against which, the Petitioner submitted that there was a decrease in sales on account of various consumers from the HT/EHT category opting for Open Access.

The Commission observed that the Petitioner had not submitted the energy sales for Low Income Group (LIG) consumers. Despite repeated reminders, the Petitioner couldn't submit the sales quantum. The Commission in absence of any information has considered no sales against the consumers of the LIG sub category.

The Petitioner along with the Petition submitted the energy audit report for FY 2016-17. The quantum of energy sales was verified from the energy audit report submitted by the Petitioner.

The table below provides the energy sales approved by the Commission in the APR Order, the Petitioner's submission and quantum of energy sales now trued up by the Commission.

Table 7: Energy Sales (MU) trued up by the Commission

S. No	Category	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
(i)	*0-50 units*	*0.18*	*21.08*	*21.08*
(ii)	*51-200 units*	*13.83*	*37.31*	*37.31*
(iii)	*201 - 400 units*	*11.45*	*18.24*	*18.24*
(iv)	*401 and above*	*77.36*	*27.82*	*27.82*
(v)	*Low Income Group (LIG)*	*1.25*	-	-
1	**Domestic**	**104.07**	**104.46**	**104.46**
(i)	*1- 100 units*	*13.27*	*5.01*	*5.01*
(ii)	*101 and above units*	*19.90*	*25.38*	*25.35*
2	**Commercial**	**33.17**	**30.36**	**30.36**
(i)	*Up to 10 HP*	*3.52*	*5.55*	*5.55*
(ii)	*Above 10 HP*	*1.55*	*0.65*	*0.65*
3	**Agriculture**	**5.06**	**6.20**	**6.20**
(i)	*Up to 20 HP*	*215.41*	*5.59*	*5.59*
(ii)	*Above 20 HP*	*2.29*	*206.11*	*206.11*
4	**LTP Industry**	**217.70**	**211.70**	**211.70**
5	**Public Lighting**	**6.56**	**8.28**	**8.28**
6	**Public Water Works**	**4.03**	**4.55**	**4.55**
(i)	*Up to 66 kV*	*2,932.38*	*2,639.52*	*2,639.52*
(ii)	*Above 66 kV*	*565.76*	*446.49*	*446.49*
7	**High Tension (A)**	**3498.14**	**3086.00**	**3086.00**
8	**High Tension (B)**	**304.19**	**298.17**	**298.17**
9	**Hoardings/ Signboards**	**0.00**	**0.00**	**0.00**
10	**Temporary**	**3.27**	**3.20**	**3.20**
	Gross Total	**4,176.18**	**3,752.91**	**3,752.91**

The Commission approves 3,752.91 MU as sale of energy for FY 2016-17.

3.3. Open Access Sales and Purchase

Petitioner's Submission

The Petitioner submitted the total Open Access Sales for FY 2016-17 as 1984.08 MU against an approved Sales quantum of 2028.27 MU in the APR Order. The actual Open Access purchase as 2042.50 against an approved purchase of 2091.00 MU.

Commission's Analysis

The Energy Audit Report submitted by the Petitioner stipulates the Open Access Sales of 1984.08 MU and Open Access Purchase of 2050.49 MU. The Commission finds the sales and purchase quantum provided in the report to be accurate and has considered the same here.

The following table provides the Open Access sales and purchase approved by the Commission in the APR Order, the Petitioner's submission and now trued-up by the Commission.

Table 8: Open Access sales (MU) and purchase trued up by the Commission

S. No	Category	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Open Access Sales	2028.27	1984.08	1984.08
2	Open Access Purchase	2091.00	2042.50	2050.49

The Commission approves Open Access sales of 1984.08 MU and purchase of 2050.45 MU in the true-up of FY 2016-17.

3.4. Inter-State transmission loss

Petitioner's submission

The Petitioner has submitted the Inter-State transmission loss of 3.99% against a loss of 3.69% approved in the APR Order for FY 2016-17.

Commission's analysis

The Energy Audit Report submitted by the Petitioner for FY 2016-17 stipulates the Inter-State transmission loss of 4.16%.

The Petitioner was directed to submit a detailed working of the Inter-State losses based on the week wise losses published by PGCIL. The Petitioner, however couldn't submit the same and in the absence of such information, the Commission now considers the Inter-State transmission losses as stipulated in the Energy Audit Report.

The table below provides the Inter-State distribution loss submitted and now approved by the Commission

Table 9: Inter-State transmission loss (%)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Inter-State Transmission Losses	3.69%	3.99%	4.16%

3.5. Intra- State distribution loss

Petitioner's submission

The Petitioner has submitted that it achieved an Intra-State distribution loss of 4.68% in FY 2016-17 against an approved loss of 4.70%.

Commission's analysis

As per the Energy Audit Report submitted by the Petitioner the Intra-State distribution loss is stipulated as 4.73%. The Commission inquired about the discrepancy from the Petitioner to which the Petitioner acceded that the figure from Energy Audit report may be considered as final. Accordingly, the Commission has considered the Intra-State distribution loss as per the Energy Audit Report. Since, the Petitioner has achieved a higher Intra-State distribution loss than approved during the year the disincentive for the same has to be shared among the consumers and the Petitioner in accordance with the MYT Regulations, 2014. The calculation of the same has been discussed in detail in the "Section 3.20.: Incentive/Disincentive towards over/under achievement of norms of distribution losses section" of this Order.

The table in next page provides the Intra-State distribution loss submitted and now approved by the Commission

Table 10: Intra-State distribution loss (%)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	T&D Losses (%)	4.70%	4.68%	4.73%

The Commission approves Intra-State distribution loss at 4.73% for FY 2016-17.

3.6. Power Purchase Quantum & Cost

Petitioner's submission

The Petitioner has submitted that it primarily procures power from the following sources:

a. National Thermal Power Corporation Limited (NTPC) stations

b. NSPCL (NTPC-SAIL Power Company Ltd)

c. Nuclear Power Corporation of India Limited (NPCIL) stations

d. Independent Power Producer's

e. IEX/ Bilateral sources

f. Renewable energy sources – Solar and Non-Solar

The plant wise details of the power purchase quantum and total power purchase cost incurred has been provided in the Petition. The Power Purchase bills for verification of the total cost incurred have been provided along with the Petition.

The Petitioner has submitted that against the power purchase cost of Rs. 2093.24 Cr. approved by the Commission in the APR Order, it has incurred a cost of Rs. 1997.61 Cr. (inclusive of cost incurred towards meeting the Renewable Purchase Obligation). In the Annual Accounts for FY 2016-17 submitted to the Commission, power purchase cost is reflected as Rs. 2031.69 Cr. From this cost, Rs. 37.63 Cr. (considered in the other income head of Annual Accounts) pertaining to early payment rebate on power purchase bills has been deducted. An amount of Rs. 3.39 Cr. has been reduced from the power purchase cost on account of stores and spares consumed by the DNHPDCL during FY 2016-17. Further, an amount of Rs. 6.93 Cr. given under the finance charges has been included in the power purchase cost as the same pertains to interest levied by the generators on previous year's bills due to a revision in the power purchase cost.

DNHPDCL also requested to allow the UI purchase during FY 16¬17 as the same is marginal and has already been incurred. The total UI over-drawal is 25.29 MU during FY16-17 against which a penalty of Rs. 0.84 Cr. has been paid by the Petitioner.

The Petitioner further has considered the revenue from surplus power sale/ UI under-drawl as a revenue item and has deducted the same from the total ARR to derive the Net ARR. The power purchase quantum and cost for FY 2016-17, as incurred by the Petitioner has been shown in the table below:

Table 11: Power Purchase cost submitted by the Petitioner (in Rs. Cr.)

S. No.	Particulars	Energy Units (MU)	Fixed Charges (Rs. Cr.)	Variable Charges (Rs. Cr.)	Other Charges (Rs. Cr.)	Total Charges (Rs. Cr.)	Per Unit (Rs./kwh)
	NTPC Stations						
1	KSTPS	403.53	20.25	58.56	12.62	91.42	2.27
2	KSTPS III	183.39	23.95	26.91	0.56	51.42	2.80
3	VSTPP-I	228.90	19.43	41.21	12.44	73.08	3.19

S. No.	Particulars	Energy Units (MU)	Fixed Charges (Rs. Cr.)	Variable Charges (Rs. Cr.)	Other Charges (Rs. Cr.)	Total Charges (Rs. Cr.)	Per Unit (Rs./kwh)
4	VSTPP-II	226.95	14.69	38.69	5.30	58.68	2.59
5	VSTPP- III	242.05	26.62	40.90	8.14	75.66	3.13
6	VSTPP- IV	276.15	49.39	46.78	5.19	101.35	3.67
7	KGPP	118.59	47.73	25.34	14.11	87.18	7.35
8	GGPP	121.49	39.71	25.93	8.44	74.08	6.10
9	Sipat-I	695.53	85.35	96.83	10.10	192.28	2.76
10	Sipat-II	253.90	27.75	36.72	8.03	72.50	2.86
11	Mauda	45.70	61.15	11.94	(1.66)	71.44	15.63
12	VSTPS-V	175.88	26.54	30.02	1.35	57.91	3.29
13	Mauda II	0.00	5.03	0.00	0.00	5.03	0.00
14	KHSTPP-II	22.77	2.36	5.13	(0.00)	7.49	3.29
	Others				(6.28)	(6.28)	
	Subtotal - NTPC	**2994.83**	**449.95**	**484.96**	**78.35**	**1013.25**	**3.38**
15	**NSPCL - Bhilai**	**162.90**	**121.55**	**26.17**	**(20.03)**	**127.70**	**7.84**
	NPCIL						
16	KAPS	1.15	0.00	0.23	0.00	0.23	1.98
17	TAPS	317.27	0.00	95.72	0.00	95.72	3.02
	Subtotal- NPCIL	**318.42**	**0.00**	**95.95**	**0.00**	**95.95**	**3.01**
	Others						
18	RGPPL	0.03	2.60	0.00	(0.32)	2.28	718.69
19	EMCO Energy Ltd. (GMR Group)	739.39	467.28	134.11	(5.66)	595.73	8.06
	Subtotal- Others	**739.42**	**469.88**	**134.11**	**(5.98)**	**598.01**	**8.09**
	Power purchase from Other Sources						
20	IEX/Bilateral	0.00	0.00	0.00	0.00	0.00	0.00
21	UI Under-drawal/ Over-drawal	25.29	0.00	0.84	0.00	0.84	0.33
22	Solar	0.00	0.00	19.77	0.00	19.77	0.00
23	Non Solar	0.00	0.00	18.07	0.00	18.07	0.00
	Subtotal- Other Sources	**25.29**	**0.00**	**38.68**	**0.00**	**38.68**	**15.29**
	Total Power Purchase Cost (At DNH Periphery)	**4240.86**	**1041.38**	**779.87**	**52.34**	**1873.59**	**4.42**
24	PGCIL CHARGES	-	-	-	-	135.71	0.00
25	POSOCO	-	-	-	-	0.47	0.00
26	WRPC	-	-	-	-	0.00	0.00
27	Reactive charges	-	-	-	-	0.18	0.00
28	MSTCL	-	-	-	-	0.00	0.00
29	Intra-State transmission charges (DNH-T)	-	-	-	-	25.31	0.00

S. No.	Particulars	Energy Units (MU)	Fixed Charges (Rs. Cr.)	Variable Charges (Rs. Cr.)	Other Charges (Rs. Cr.)	Total Charges (Rs. Cr.)	Per Unit (Rs./kwh)
30	**Revenue from surplus power sale/UI**	-	-	-	-	(17.23)	
31	**Rebate on Power Purchase**	-	-	-	-	(37.63)	
	Grand Total of Charges	4240.86	1041.38	779.87	52.34	1980.39	4.67

Commission's analysis

The MYT Regulations, 2014 stipulates that any variation in the cost of power generation and/or power purchase shall be treated as uncontrollable factor. Regulation 9.1 of the MYT Regulations stipulates the following:

The "uncontrollable factors" shall comprise of the following factors which were beyond the control of, and could not be mitigated by the applicant:

(a) Force Majeure events, such as acts of war, fire, natural calamities, etc.
(b) Change in law;
(c) Taxes and Duties;
(d) Variation in sales; and
(e) Variation in the cost of power generation and/or power purchase due to the circumstances specified in these Regulations;

The Petitioner procures power mainly from NTPC Stations, NPCIL stations, and IPP's. No power has been purchased through IEX/ Bilateral Purchase etc. The Petitioner submitted the overall power purchase cost as Rs. 1997.61 Cr. inclusive of transmission cost but exclusive of revenue due to sale of surplus power.

Upon scrutiny of the power purchase cost submitted by the Petitioner, various data gaps were observed by the Commission. For instance the Power Purchase Cost consisted of expense items namely "RRAS settlement" and "Credit/Debit of URS", the nature of which were unknown. Further, the nature of the amount of Rs. 3.39 Cr. deducted from the total power purchase cost as reflected in the annual accounts was also not known. All these data gaps were communicated to the Petitioner. The Petitioner was also asked to submit the power purchase bills for each of the sources.

The Petitioner submitted that the expenses are on account of Reserves Regulation Ancillary Services (RRAS) which are incidental in nature and are submitted as per actually incurred during the year. The Commission on detailed scrutiny has found these costs legitimate and has accordingly considered them in the power purchase cost approved for FY 2016-17.

The Petitioner, further submitted that the amount of Rs. 3.39 Cr. claimed in the Repair & Maintenance Cost has been inadvertently included in the Power Purchase Cost and hence is deducted from the present Power Purchase cost.

The Commission has verified the power purchase quantum and cost as per the monthly and station-wise bills submitted by the Petitioner for each source. The cost has been reconciled with the audited annual accounts of FY 2016-17. As per the submissions of the Petitioner, the Commission has also considered the rebate due to early payments of power purchase bills and the interest cost booked under the finance charges in the annual accounts as part of the power purchase cost. Further, the Central and State transmission charges along with the POSOCO charges have been considered in accordance with the supporting bills submitted by the Petitioner.

The revenue on account of surplus power sale/UI has been reduced by the Commission from the power purchase to arrive at net power purchase cost. The Commission has also approved the cost on account of UI Over-drawal as submitted by the Petitioner along with the Power Purchase Cost.

Further, the Commission has also reduced the rebate due to early payment of power purchase bills from the power purchase cost.

The Petitioner submitted that the total power purchase cost is inclusive of the cost incurred towards compliance of Renewable Purchase Obligation (RPO) target for the FY 2016-17. The compliance status of RPO has been discussed in detail in the subsequent section. The Commission has considered the total cost of Rs. 37.84 Cr. as per actuals towards compliance of RPO target, in the total power purchase cost approved for FY 2016-17. The table below provides the summary of the power purchase quantum and the cost approved by the Commission during FY 2016-17.

Table 12: Power Purchase Quantum (MU) and cost (Rs. Cr.) approved by the Commission

S. No.	Particulars	Energy Units (MU)	Fixed Charges (Rs. Cr.)	Variable Charges (Rs. Cr.)	Other Charges (Rs. Cr.)	Total Charges (Rs. Cr.)	Per Unit (Rs./kwh)
	NTPC Stations						
1	KSTPS	403.53	20.25	58.56	12.62	91.42	2.27
2	KSTPS III	183.39	23.95	26.91	0.56	51.42	2.80
3	VSTPP-I	228.90	19.43	41.21	12.44	73.08	3.19
4	VSTPP-II	226.95	14.69	38.69	5.30	58.68	2.59
5	VSTPP- III	242.05	26.62	40.90	8.14	75.66	3.13
6	VSTPP- IV	276.15	49.39	46.78	5.19	101.35	3.67
7	KGPP	118.59	47.73	25.34	14.11	87.18	7.35
8	GGPP	121.49	39.71	25.93	8.44	74.08	6.10
9	Sipat-I	695.53	85.35	96.83	10.10	192.28	2.76
10	Sipat-II	253.90	27.75	36.72	8.03	72.50	2.86
11	Mauda	45.70	61.15	11.94	(1.66)	71.44	15.63
12	VSTPS-V	175.88	26.54	30.02	1.35	57.91	3.29
13	Mauda II	0.00	5.03	0.00	0.00	5.03	0.00
14	KHSTPP-II	22.77	2.36	5.13	(0.00)	7.49	3.29
	Others				(6.28)	(6.28)	
	Subtotal - NTPC	**2994.83**	**449.95**	**484.96**	**78.35**	**1013.25**	**3.38**
15	**NSPCL - Bhilai**	**162.90**	**121.55**	**26.17**	**(20.03)**	**127.70**	**7.84**
	NPCIL						
16	KAPS	1.15	0.00	0.23	0.00	0.23	1.98
17	TAPS	317.27	0.00	95.72	0.00	95.72	3.02
	Subtotal- NPCIL	**318.42**	**0.00**	**95.95**	**0.00**	**95.95**	**3.01**
	Others						
18	RGPPL	0.03	2.60	0.00	(0.32)	2.28	718.69
19	EMCO Energy Ltd. (GMR Group)	739.39	467.28	134.11	(5.66)	595.73	8.06
	Subtotal- Others	**739.42**	**469.88**	**134.11**	**(5.98)**	**598.01**	**8.09**
	Power purchase from Other Sources						
20	IEX/Bilateral	0.00	0.00	0.00	0.00	0.00	0.00

S. No.	Particulars	Energy Units (MU)	Fixed Charges (Rs. Cr.)	Variable Charges (Rs. Cr.)	Other Charges (Rs. Cr.)	Total Charges (Rs. Cr.)	Per Unit (Rs./kwh)
21	UI Under-drawal/ Over-drawal	25.29	0.00	0.84	0.00	0.84	0.33
22	Solar	0.00	0.00	19.77	0.00	19.77	0.00
23	Non Solar	0.00	0.00	18.07	0.00	18.07	0.00
	Subtotal- Other Sources	**25.29**	**0.00**	**38.68**	**0.00**	**38.68**	**15.29**
	Total Power Purchase Cost (At DNH Periphery)	**4240.86**	**1041.38**	**779.87**	**52.34**	**1873.59**	**4.42**
24	PGCIL CHARGES	-	-	-	-	135.71	0.00
25	POSOCO	-	-	-	-	0.47	0.00
26	WRPC	-	-	-	-	0.00	0.00
27	Reactive charges	-	-	-	-	0.18	0.00
28	MSTCL	-	-	-	-	0.00	0.00
29	Intra-State transmission charges (DNH-T)	-	-	-	-	25.31	0.00
30	**Revenue from surplus power sale/UI**	**-**	**-**	**-**	**-**	**(17.23)**	
31	**Rebate on Power Purchase**	**-**	**-**	**-**	**-**	**(37.63)**	
	Grand Total of Charges	**4240.86**	**1041.38**	**779.87**	**52.34**	**1980.39**	**4.67**

The Commission approves power purchase quantum of 4240.86 MU and cost of Rs. 1980.39 Cr. in the true up of FY 2016-17.

3.7. Renewable Purchase Obligation (RPO)

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 revised the RPO targets, according to which the Petitioner had to purchase 4.85% of its total consumption (including 1.65% from Solar) from renewable sources for FY 2016-17.

The Petitioner was directed 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 relevant extract of the Order is provided 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."

In the Tariff Order for FY 17-18, while performing the APR Order for FY 2016-17, the Commission directed the Petitioner to clear all the backlog prior to FY 2016-17 in FY 2016-17 along with the standalone year target. The Commission in this regard approved the cost of RPO compliance as Rs. 57.41 Cr. comprising of actual purchase of Rs 28.00 Cr. for the Solar RECs and Rs 19.50 Cr. for the non-solar RECs and a provision for Rs 9.91 Cr. to clear the backlog (Rs 3.19 Cr. in shortfall of Solar REC and Rs. 6.72 Cr. for shortfall in Non-Solar RECs) at the rate of Rs 3500/MWh for Solar REC and Rs 1500/MWh for Non-Solar REC.

For the FY 2016-17, the Petitioner had a standalone target of 182.02 MU quantum of energy comprising of 61.92 MU solar and 120.09 MU Non Solar. Against the target, the Petitioner has purchased 0.87 MU of physical solar power and REC's equivalent to 60 MU of solar power and 150 MU Non Solar Power. Although, the Petitioner couldn't clear the backlog, it has over achieved the standalone target for FY 2016-17 by 28.86 MU. The Commission appreciates the Petitioner's efforts in overachieving the year's target and reducing the past years backlog however takes cognizance of the fact the Petitioner has not been able to clear the backlog in FY 2016-17 as directed by the Commission in the Order.

Based on the above, the Commission has computed the cumulative RPO compliance at the end of the FY 2016-17 as shown in the following table:

Table 13: Compliance status of Renewable Purchase Obligation (RPO)

S. No	Particulars	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17
1	Solar Target	0.25%	0.30%	0.40%	0.40%	0.60%	0.85%	1.65%
2	Non Solar Target	0.75%	1.70%	2.60%	2.60%	2.70%	2.70%	3.20%
	Total Target	**1.00%**	**2.00%**	**3.00%**	**3.00%**	**3.30%**	**3.55%**	**4.85%**
3	Sales Within UT	3896.99	4232.02	4591.12	4959.89	5166.02	4772.40	3752.91
	RPO Target (MU)							
5	Solar	9.74	12.70	18.36	19.84	31.00	40.57	61.92
6	Non Solar	29.23	71.94	119.37	128.96	139.48	128.85	120.09
	Total RPO Target	**38.97**	**84.64**	**137.73**	**148.80**	**170.48**	**169.42**	**182.02**
	RPO Compliance (Actual Purchase) (MU)							
7	Solar	0.00	0.00	0.00	0.00	0.14	0.00	0.87
8	Non Solar	0.00	0.00	0.00	0.00	51.36	56.16	0.00
	Total RPO Compliance (Actual Purchase)	**0.00**	**0.00**	**0.00**	**0.00**	**51.50**	**56.16**	**0.87**
	RPO Compliance (REC Certificate Purchase) (MU)							
9	Solar	0.00	0.00	0.00	0.00	30.00	30.00	60.00
10	Non Solar	0.00	58.00	128.00	40.00	65.00	50.00	150.00
	Total RPO Compliance (REC Certificate)	**0.00**	**58.00**	**128.00**	**40.00**	**95.00**	**80.00**	**210.00**
	RPO Compliance (REC+ Actual) (MU)							
11	Solar	0.00	0.00	0.00	0.00	30.14	30.00	60.87
12	Non Solar	0.00	58.00	128.00	40.00	116.36	106.16	150.00

S. No	Particulars	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17
	Total RPO Compliance	**0.00**	**58.00**	**128.00**	**40.00**	**146.50**	**136.16**	**210.87**
	Cumulative Requirement till current year (MU)							
13	Solar	9.74	22.44	40.80	60.64	91.64	132.20	194.13
14	Non Solar	29.23	101.17	220.54	349.50	488.98	617.84	737.93
	Total	**38.97**	**123.61**	**261.34**	**410.14**	**580.62**	**750.04**	**932.06**
	Cumulative Compliance till current year (MU)							
15	Solar	0.00	0.00	0.00	0.00	30.14	60.14	121.01
16	Non Solar	0.00	58.00	186.00	226.00	342.36	448.52	598.52
	Total	**0.00**	**58.00**	**186.00**	**226.00**	**372.50**	**508.66**	**719.53**
	Net Shortfall in RPO Compliance till current year (MU)							
17	Solar	9.74	22.44	40.80	60.64	61.50	72.06	73.11
18	Non Solar	29.23	43.17	34.54	123.50	146.62	169.32	139.41
	Total	**38.97**	**65.61**	**75.34**	**184.14**	**208.12**	**241.38**	**212.52**

As mentioned above, the Petitioner has failed to comply with the directive of the Commission of fulfilling all the RPO shortfall prior to FY 2016-17 (for the FY 2014-15, FY 2015-16 and FY 2016-17) by 31st March 2017. The Commission notes that there is a net shortfall in RPO compliance till FY 2016-17 of 212.52 MU (73.11 MU – Solar and 139.41 MU – non Solar). The Commission has dealt with the cost associated for fulfilling the shortfall in RPO in the APR for FY 2017-18. As mentioned in the previous section, the cost of RPO compliance has been considered in the total power purchase cost. The table below provides the cost towards compliance of RPO approved in FY 2016-17.

Table 14: Cost towards compliance of Renewable Purchase Obligation (In Rs. Cr.)

Description	RPO (MU)	Total Cost (Rs. Cr.)
Solar	60.87	19.77
Own Generation	*0.87*	-
REC	*60.00*	*19.77*
Non-solar REC	150.00	18.07
Total	**210.87**	**37.84**

The Commission approves Rs. 37.84 Cr. towards compliance of RPO in the true up of the FY 2016-17.

3.8. Energy Balance

Petitioner's submission

The Petitioner has submitted the energy balance as shown in the following table.

Table 15: Energy Balance (MU) submitted by Petitioner

Particulars	Approved in APR Order	Petitioner's Submission
Sales	4,176.19	3,752.91
Open Access Sales	2,028.27	1,984.08

Particulars	Approved in APR Order	Petitioner's Submission
Less: Energy Savings	(5.77)	0.00
Total Sales	**6,198.69**	**5,736.99**
Add: Losses	305.71	281.42
T&D Losses	**4.70%**	**4.68%**
Energy Required at Periphery	**6504.40**	**6018.41**
Add: Sales to common pool consumer	52.89	95.40
Less: Own Generation	0.00	0.88
Less: Open Access Purchase	2091.00	2042.50
Total Energy Required at Periphery	**4466.29**	**4070.43**
Transmission loss	171.08	169.01
Transmission loss (%)	3.69%	3.99%
Total Energy to be purchased	**4,637.37**	**4,239.44**
Power Purchase from tied up sources	6,728.36	6,281.94

Commission's analysis

As discussed in the previous sections the Commission has examined the information on power purchase quantum, UI over/ under drawl, IEX/ Bilateral purchase etc. and the energy audit report as submitted by the Petitioner and accordingly has derived the energy balance for FY 2016-17. The following table provides the energy balance approved in the APR Order, submitted by the Petitioner and now approved by the Commission.

Table 16: Energy Balance (MU) approved by Commission

S. No	Particulars	Formula	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Energy sales within the State/UT	a	4176.18	3752.91	3752.91
2	Open Access Sales	b	2028.27	1984.08	1984.08
3	Less: Energy Savings	c	-5.77	-	-
4	Total Sales within the State/UT	d=a+b+c	6198.68	5736.99	5736.99
	Distribution losses				
5	%	e	4.70%	4.68%	4.73%
6	MU	f=g-d	305.71	281.42	284.88
7	Energy required at State Periphery	g=d/(1-e)	6504.39	6018.41	6021.87
	Energy Transactions at Periphery				
8	Add: Sales in Unscheduled Interchange	h	52.89	94.52	93.29
9	Add: Sales in Power Exchanges	i	0.00	0.00	0.00
10	Less: Purchase under UI (MU)	j	0.00	0.00	0.00
11	Less: Purchase from Traders (MU)	k	0.00	0.00	0.00
12	Less: Open Access Purchase (MU)	l	2091.00	2042.50	2050.49

S. No	Particulars	Formula	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
13	Total energy scheduled at State Periphery from Tied-up Sources (MU)	m=g+h+i-j-k-l	4466.28	4070.43	4064.67
	Transmission losses				
14	%	n	3.69%	3.99%	4.16%
15	MU	o=p-m	171.08	169.16	176.33
16	Total requirement from Tied-up sources at generator end (MU)	p=m/(1-n)	4637.37	4239.59	4241.00
17	**Total requirement from Tied-up sources at generator end & UI/ Traders/Banking/within State (MU)**	**q=p+j+k+l**	**6728.36**	**6281.94**	**6291.49**

3.9. Operation & Maintenance Expenses

The Operation & Maintenance Expenses basically comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). The MYT Regulations, 2014 reckons the variation of O&M Expenses to be controllable. Regulation 9.2 of the MYT Regulation, 2014 states the following:

"9.2 Some illustrative variations or expected variations in the performance of the applicant, which may be attributed by the Commission to controllable factors include, but are not limited to the following:

(a)Variations in capital expenditure on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;

(b)Variations in Transmission and Distribution Losses (T&D) losses in case of bundled utilities and Distribution losses in case of unbundled utilities which shall be measured as the difference between the units input into the distribution system and the units supplied and billed;

(c)Depreciation and working capital requirements;

(d)Failure to meet the standards specified in the Joint Electricity Regulatory Commission (Standards of Performance) Regulations, 2009 except where exempted;

(e)Variation in operation & maintenance expenses, except those attributable to directions of the Commission;

(f)Variation in Wires Availability and Supply Availability;

(g)Variation on account of inflation;"

Therefore, any variation in O&M Expenses is attributable to the Petitioner and is not passed on in the ARR, other than any cost which is beyond the control of the Petitioner.

3.9.1. Employee Expenses

Petitioner's submission

The Petitioner has submitted employee expenses of Rs. 12.50 Cr. against an approved expenses of Rs. 10.34 Cr. in the APR Order. The employee expenses submitted by the Petitioner, comprises of salaries, dearness allowance, bonus, terminal benefits in the form of pension and gratuity, leave encashment and staff welfare expenses.

Commission's analysis

As per the audited annual accounts submitted by the Petitioner, the employee expenses during FY 2016-17 are reflected as Rs. 12.50 Cr. The Commission while analyzing the employee expenses, observed abnormal increase in some of the cost items vis-à-vis FY 2015-16.

Table 17: Breakup of Employee Expenses (In Rs Cr.)

S. No.	Particulars	FY 2015-16 (Rs. Cr.)	FY 2016-17 (Rs. Cr.)	Increase (%)
1	Salaries & Wages	9.61	11.20	16.54%
2	Leave Salary	0.14	0.36	157.14%
3	Bonus	0.22	0.39	77.27%
4	Pension	0.21	0.52	147.61%

The Commission directed the Petitioner to provide the explanation for such high variation. In response, the Petitioner submitted that the increase in salaries and wages is on account of 7th Pay Commission, while expenditure on leave salary, bonus and pension are incidental expenses and are not in control of the Petitioner.

The Commission is of the opinion that increase in salaries and wages on account of recommendations of 7th Pay Commission is an uncontrollable expenditure, hence any increase on account of 7th Pay Commission recommendation should be a pass through.

The MYT Regulations, 2014 stipulates the variation in operation and maintenance expenditure to be a controllable factor. Thus, in accordance with the MYT Regulation, the Commission doesn't allow any deviation in the employee expenses against approved in the APR Order and considers the same Employee Expenses as approved in the APR Order for FY 2016-17. Additionally, the Commission approves an expense of Rs. 0.61 Cr. on account of 7th Pay Commission in the true up of FY 2016-17.

Table 18: Employee Expenses approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Employee Expenses	10.34	12.50	10.34
2	Impact of 7th Pay Commission	0.00	0.00	0.61
3	**Total Employee Expenses**	**10.34**	**12.50**	**10.95**

The Commission approves Employee Expenses of Rs. 10.95 Cr. for FY 2016-17

3.9.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted the actual A&G expenses of Rs. 6.44 Cr. against an approved expenses of Rs. 4.87 Cr. in the APR Order.

Commission's analysis

A&G expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, other debits. As per the audited annual accounts submitted by the Petitioner the A&G expenses during FY 2016-17 are reflected as Rs. 6.44 Cr. The Commission on analysis of the various costs under the A&G cost head observed abnormal increase in some of the cost items vis-à-vis FY 2015-16. The cost items that rendered an abnormal increase are provided in the table below:

Table 19: Itemized cost under A&G Expenses showing abnormal increase (In Rs Cr.)

S. No.	Particulars	FY 2015-16 (Rs. Cr.)	FY 2016-17 (Rs. Cr.)	Increase (%)
1	Audit Fees	0.12	0.08	55%
2	Consultancy Fees	0.45	0.20	126%
3	Director Sitting Fees	0.06	0.02	260%
4	Electricity Charges	0.22	0.04	491%
5	Other Admin Expenses	0.24	0.12	104%
6	Refreshment Expenses	0.02	0.00	3587%
7	Security Services	0.15	0.09	65%
8	Transaction Charges	0.06	0.02	203%

In reply to the query raised by the Commission the Petitioner submitted that these are incidental expenses which the utility is bound to incur for smooth functioning of the operations.

As variation in O&M expenses is controllable, the Commission approves the same A&G expenses as approved in the APR Order.

Table 20: A&G Expenses approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Administration & General Expenses (A&G)	4.87	6.44	4.87

The Commission approves the Administrative & General (A&G) expenses of Rs. 4.87 Cr. in the true-up of FY 2016-17.

3.9.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner submitted the actual R&M expenses of Rs. 4.75 Cr. against an approved expenses of Rs. 7.03 Cr. in the APR Order. R&M expenses are incurred towards day to day maintenance of the distribution network of the DNHPDCL and form an integral part of the company's efforts towards reliable and quality power supply as also in the reduction of losses in the system.

Commission's analysis

Similar to the approach followed while approving the Employee expenses and A&G expenses above, the Commission approves the same R&M Expenses as approved in the APR Order.

Table 21: R&M Expenses approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Repair & Maintenance Expenses (R&M)	7.03	4.75	7.03

The Commission approves the Repair & Maintenance (R&M) expenses of Rs. 7.03 Cr. in the true-up of FY 2016-17.

3.9.4. Total Operation and Maintenance Expenses (O&M)

The Commission approves total Operation & Maintenance Expenses of Rs. 22.85 Cr. against submitted of Rs. 23.69 Cr.

Table 22: O&M Expenses approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Employee Expenses	10.34	12.50	10.95
2	Administrative & General Expenses (A&G)	4.87	6.44	4.87
3	Repair & Maintenance Expenses	7.03	4.75	7.03
	Total Operation & Maintenance Expenses	**22.24**	**23.69**	**22.85**

3.10. Capital Expenditure and Capitalisation

Petitioner's submission

The Petitioner submitted the actual capital expenditure incurred for the FY 2016-17 as Rs. 34.06 Cr. and capitalisation achieved during the year as Rs. 33.89 Cr.

Commission's analysis:

The Commission observed that the capital expenditure and capitalisation achieved by the Petitioner is much lower, almost one- third, than approved by the Commission in the APR Order. The Commission here notes the fact that the Petitioner from the last three financial years has been continuously achieving lower capital expenditure and capitalisation than approved. The table below compares the approved capital expenditure and capitalisation vis-à-vis the actual achieved by the Petitioner.

Table 23: Capital Expenditure undertaken by Petitioner in previous years (In Rs Cr.)

S. No	Particulars	FY 2014-15	FY 2015-16	FY 2016-17
1	Approved by the Commission in Tariff Orders of respective years (a)	75.30	26.00	136.60
2	Actual capitalisation during the year (b)	57.18	13.21	34.06
	Variation (b-a)	**(18.12)**	**(12.79)**	**(102.54)**

Table 24: Capitalisation undertaken by Petitioner in previous years (In Rs Cr.)

S. No	Particulars	FY 2014-15	FY 2015-16	FY 2016-17
1	Approved by the Commission in Tariff Orders of respective years (a)	25.29	15.60	94.36
2	Actual capitalisation during the year (b)	3.33	3.71	33.89
	Variation (b-a)	**(21.96)**	**(11.89)**	**(60.47)**

Lower capital expenditure signifies that not enough efforts have been undertaken in enhancing the reliability of supply to consumers. In addition, lower capital expenditure may also signify that significant measures aren't being taken to provide supply to un-electrified areas and equipping the distribution infrastructure with the growing demand. Accordingly, the Commission directs the Petitioner to increase its efforts towards undertaking capital expenditure activities necessary for improving the service quality and targeting 24x7 supply to all consumers.

The Commission examined the fixed asset register (FAR) as submitted by the Petitioner in detail and accordingly approves the capital expenditure and capitalisation as shown in the table below.

Table 25: Capital Expenditure and Capitalisation approved by Petitioner (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Capital Expenditure	136.60	34.06	34.06
2	Capitalisation	94.36	33.89	33.89

The Commission approves Capital expenditure and capitalisation of Rs. 34.06 Cr. and Rs. 33.89 Cr. respectively in the true up of FY 2016-17

3.11. Capital Structure

Petitioner's Submission

The Petitioner has submitted that the entire capital deployment at DNHPDCL is through equity for the FY 2016-17.

Commission's analysis

In the Technical Validation Session held at the Commission's office, the Petitioner acknowledged that some of the assests are created out of consumer contribution. The Commission directed the Petitioner to submit the details of these assets. However, the Petitioner failed to do so. In absence of such information, no assets have been assumed to be funded from consumer contribution. The impact of the same shall be accounted for by the Commission in future Tariff Orders once the Petitioner submits such information.

The MYT Regulations 2014, specify that 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. Regulation 24 of the MYT Regulations, states the following:

(a) The Distribution Licensee shall provide detailed loan-wise, project-wise and utilization-wise details of all of the pending loans

(b) If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans.

In accordance with the MYT Regulations, 2014, the Commission has determined the Capital Structure for FY 2016-17 as follows:

Table 26: GFA addition approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Gross Fixed Assets	393.48	393.48	393.48
2	Addition During the FY	94.36	33.89	33.89
3	Adjustment/Retirement During the FY	-	-	-
4	Closing Gross Fixed Assets	487.84	427.37	427.37

Table 27: Normative Loan addition (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	45.56	46.65	45.56
2	Add: Normative Loan During the year	66.05	23.72	23.72

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
3	Less: Normative Repayment equivalent to Depreciation	22.41	13.91	21.44
4	Closing Normative Loan	89.20	56.46	47.85

Table 28: Normative Equity addition (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	80.00	80.00	80.00
2	Additions on account of new capitalisation	28.31	10.17	10.17
3	Closing Equity	108.31	90.17	90.17

3.12. Depreciation

Petitioner's submission

The Petitioner has submitted the actual depreciation of assets as per the audited annual accounts of FY 2016-17. The depreciation as claimed by the Petitioner has been tabulated below:

Table 29: Depreciation submitted by Petitioner (In Rs Cr.)

S. No	Particulars	Petitioner's Submission
1	Opening Gross Fixed Assets	393.48
2	Addition During the FY	33.89
3	Adjustment/Retirement During the FY	-
4	Closing Gross Fixed Assets	427.37
5	Average Gross Fixed Assets	410.43
6	Rate of Depreciation (%)	3.39%
	Depreciation	**13.91**

Commission's analysis

Regulation 23 of the MYT Regulations, states the following:

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

(b) *Depreciation shall not be allowed on assets funded by capital subsidies, consumer contributions or grants.*

(c) *Depreciation shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation. The same shall be as specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014. (The same may vary as notified by CERC from time to time.)*

(d) *The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset.*
Provided that Land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

(e) *Depreciation shall be charged from the first year of operation of the asset.*
Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis.

(f) *A provision of replacement of assets shall be made in the capital investment plan."*

In the TVS session held at the Commission office, the Petitioner clarified that the depreciation has been considered as per actuals reflected in the annual accounts and is calculated on the basis of the accounting policy followed by the Petitioner.

As per the norms specified in the MYT Regulations, the Commission has verified the asset wise capitalisation of the Petitioner and has accordingly derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in the CERC Tariff Regulations, 2014, provided in the table below:

Table 30: Depreciation Rate (%)

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

Based on the above deprecation rates stipulated in the CERC Tariff Regulations, 2014 and the actual asset addition during the year the weighted average deprecation rate is coming out to be 5.22% against a rate of 5.09% approved in the APR Order.

The Commission has calculated the deprecation on average Gross Fixed Assets (GFA) with the opening GFA considered equivalent to the opening GFA approved in the APR of FY 2016-17. The net addition during the year has been calculated after deducting the value of retired assets. The following table provides the calculation of depreciation during the year FY 2016-17

Table 31: Depreciation approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Gross Fixed Assets	393.48	393.48	393.48
2	Addition During the FY	94.36	33.89	33.89
3	Adjustment/Retirement During the FY	-	-	-
4	Closing Gross Fixed Assets	487.84	427.37	427.37
5	Average Gross Fixed Assets	440.66	410.43	410.43
6	Rate of Depreciation (%)	5.09%	3.39%	5.22%
	Depreciation	**22.41**	**13.91**	**21.44**

The Commission approves depreciation of Rs. 21.44 Cr. in the true-up of FY 2016-17

3.13. Interest on Loan

Petitioner's submission

The Petitioner has determined the Interest on Loan on normative basis. The opening balance of loans for FY 2016-17 is considered same as approved by the Commission in the APR Order. The normative loan addition in FY 2016-17 has been computed as 70% of the capitalisation for FY 16-17 which works out to Rs. 23.72 Cr. The capitalisation for FY 2016-17 is Rs. 33.89 Cr. as per the annual accounts for FY 2016-17.

The repayment of loans has been considered equal to the depreciation during the FY 2016-17.

Further the rate of interest has been considered as State Bank of India Prime Lending Rate (SBI PLR) of 14.05% (rate as on 1st April 2016).

Commission's analysis:

The MYT Regulations, 2014 stipulates that the rate of interest to be considered while determining the ARR shall be the weighted average interest rate of the actual loan portfolio. Regulation 24 of the MYT Regulations, states the following:

(a) *The Distribution Licensee shall provide detailed loan-wise, project-wise and utilization-wise details of all of the pending loans*

(b) *If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.*

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans.

(c) *Actual loan or normative loan, if any, shall be referred as gross normative loan in this Regulation.*

(d) *The normative loan outstanding as of 1st April of control period shall be computed by deducting the cumulative repayment as approved by the Commission (basis as mentioned below) up to 31st March of current period (a year before control period) from the gross normative loan.*

(e) *The repayment for the control period shall be deemed to be equal to the depreciation allowed for the year.*

(f) *Notwithstanding any moratorium period availed by the Distribution Licensee, the repayment of the loan shall be considered from the first year of the control period as per annual depreciation allowed.*

(g) *The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the control period, in accordance with terms and conditions of relevant loan agreements, or bonds or non-convertible debentures.*

Provided that if no actual loan is outstanding but normative loan is still outstanding, the last available weighted average rate of interest shall be applicable.

Provided further that the interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

Provided also that exception shall be made for the existing loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects.

(h) *The Distribution Licensee shall make every effort to refinance the loan as long as it results in net benefit to the consumers.*

Provided that the cost associated with such refinancing shall be eligible to be passed through in tariffs and the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Distribution Licensee and the consumers.

Provided further that the Distribution Licensee shall submit the calculation of such benefit to the Commission for its approval. •

(i) *(The Distribution Licensee shall enable tracking of the loans converted into grants under schemes, like APDRP by providing information and data regularly to the Commission and for ensuring that the interest on these loans which has been passed on to the consumers inappropriately in the earlier years shall be recovered from the Distribution Licensee."*

The Petitioner in the Technical Validation Session (TVS) submitted that the complete capitalisation during the year has been funded by Petitioner's equity and no loan has been taken against any of the capitalised assets.

As per the 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. Further, the Commission has considered the actual capitalisation of assets as approved in the foregoing paragraphs. The Commission for the purpose of funding of the capitalisation has considered the normative debt equity ratio of 70:30. Repayment has been considered equivalent to depreciation allowed during the year

The Commission for the purpose of calculation of Interest on Loan has considered interest rate equivalent to SBI PLR @ 14.05%, as on 1st April 2016. Further, in accordance with the MYT Regulations, 2014, the interest has been calculated on the average loan during the year with opening loan considered equivalent to the opening loan approved in the APR of FY 2016-17. The addition in loan has been considered as explained above and the repayment is considered same as depreciation during the year.

The following table provides the Interest on Loan approved by the Commission

Table 32: Interest on Loan approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	45.56	46.65	45.56
2	Add: Normative Loan During the year	66.05	23.72	23.72
3	Less: Normative Repayment= Depreciation	22.41	13.91	21.44
4	Closing Normative Loan	89.20	56.46	47.85
5	Average Normative Loan	67.38	51.56	46.70
6	Rate of Interest (%)	14.05%	14.05%	14.05%
	Interest on Loan	**9.47**	**7.93**	**6.56**

The Commission approves Interest of Loan of Rs. 6.56 Cr. in the true up of FY 2016-17

3.14. Return on Equity (RoE)

Petitioner's submission

The Petitioner submitted the RoE in accordance with the MYT Regulations 2014, RoE is computed on 30% of the capital base. The Petitioner has considered the equity as per the audited accounts for the FY 2016-17 and has considered added equity to the tune of 30% of assets capitalized during the year. Accordingly, DNHPDCL has computed the Return on Equity at 16% on post tax basis.

Commission's analysis:

According to the Regulation 27 of the MYT Regulations, 2014,

(a) the Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower:

Provided that assets funded by consumer contribution, capital subsidies/grants and corresponding depreciation shall not form part of the capital base. Actual equity infused in the Distribution Licensee as per book value shall be considered as perpetual and shall be used for computation in this Regulation.

(b) The return on the equity invested in working capital shall be allowed from the date of start of commercial operation.

(c) 16% post-tax return on equity shall be considered irrespective of whether the Distribution Licensee has claimed return on equity in the ARR petition"

As mentioned above, the complete asset capitalisation during the year has been funded by equity. The Commission for the purpose of equity addition during the year, has limited it to 30% of total capitalisation as prescribed in the MYT Regulations, 2014. The RoE has been calculated on the average of opening and closing of equity during the year @ 16% on post-tax basis with opening equity considered same as approved in the APR Order. The following table provides the return on equity trued-up for the year

Table 33: RoE approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	80.00	80.00	80.00
2	Additions on account of new capitalisation	28.31	10.17	10.17
4	Closing Equity	108.31	90.17	90.17
5	Average Equity	94.16	85.09	85.08
6	Return on Equity (%)	16.00%	16.00%	16.00%
	Return on Equity	**15.06**	**13.61**	**13.61**

The Commission approves Return on Equity of Rs. 13.61 Cr. in the true up of FY 2016-17

3.15. Interest on Security Deposits

Petitioner's submission

The Petitioner submitted that the payments of Rs. 2.35 Cr. were released to the consumers towards interest on security deposits during the FY 2016-17. The opening security deposit for the FY 2016-17 was Rs. 35.08 Cr. and the closing security deposit was Rs. 32.96 Cr.

The Petitioner further submitted that the security deposit was transferred from the erstwhile Electricity Department through approved transfer scheme to DNHPDCL. During the transfer, service connections for some of the consumers remain unidentified and untraceable. Security deposit for such consumers amounts to Rs. 3.39 Cr. and the interest accrues to be Rs. 0.26 Cr. for FY 2016-17. The Petitioner requested that the same is not provided for and no TDS has been deducted or deposited on this amount. The same may turn into a liability in the future, on claim by such consumers. Hence, the Petitioner has requested the Commission to approve this amount of Rs. 0.26 Cr. along with interest on security deposit of Rs. 2.35 Cr. in the true up of 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 approves the actual interest on security deposit disbursed to the consumers in their bills, as reflected in the audited annual accounts of FY 2016-17. The Commission, further disallows Rs.0.26 Cr. as the amount hasn't been paid by the Petitioner yet. The same shall be allowed as per actuals in case it has been paid by the Petitioner. The following table provides the interest on security deposit as approved in the APR Order, the Petitioner's submission and the interest now approved by the Commission:

Table 34: Interest on Consumer Security Deposits approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Security Deposit	35.08	-	-
2	Add: Deposits During the year	0.00	-	-

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
3	Less: Deposits refunded	0.00	-	-
4	Closing Security Deposit	35.08	-	-
5	Average Security Deposit	35.08	-	-
6	Rate of Interest (%)	7.75%	-	-
	Interest on Security Deposit	**2.72**	**2.62**	**2.35**

The Commission approves interest on security deposit as Rs. 2.35 Cr. in the true up of FY 2016-17

3.16. Interest on Working Capital

Petitioner's submission

The Petitioner submitted that interest on working capital has been calculated based on the normative principles outlined by the Hon'ble Commission in the JERC (Multi Year Distribution Tariff) Regulations, 2014.

The working capital requirement for the Control Period has been computed considering the following parameters:

(a) Receivables of two months of billing

(b) Less power purchase cost of one month

(c) Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit

(d) Inventory for two months based on annual requirement for previous year

DNHPDCL has computed interest on working capital at 9.30% (SBI base rate as on 05th October 2015). The Interest on Working Capital as claimed by the Petitioner has been shown in the table below:

Table 35: Interest on Working Capital submitted by Petitioner (In Rs Cr.)

S. No	Particulars	Petitioner's Submission
1	Receivables of two months of billing	312.95
2	Less: Power Purchase Cost for one month	166.47
3	Inventory Based on Annual Requirement for Previous FY for 2 months	0.61
4	Total Working Capital Requirement	147.09
5	Less: Security Deposit excluding BG/FDR	32.96
6	Net Working Capital	114.13
7	Rate of Interest (%)	9.30%
	Interest on Working Capital	**10.61**

Commission's analysis:

The computation of working capital requirements and the rate of interest to be considered as stipulated in the MYT Regulations. Regulation 25 of the MYT Regulations states the following:

Working capital for retail supply activity of the licensee shall consist of:

(i) Receivables of two months of billing

(ii) Less power purchase cost of one month

(iii) Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt

(iv) Inventory for two months based on annual requirement for previous year.

The rate of interest on working capital shall be equal to the base rate for the State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan worked out on the normative figures.

The Commission for determination of working capital requirements of the Petitioner during the year has considered the receivables as Net ARR for 2 months, the net power purchase cost after adjusting the rebate in power purchase bills, the consumer security deposit and the inventory for two months as per the audited annual accounts of FY 2016-17.

With regards to the interest rate, the Commission has considered the SBI Base rate as on 1st April 2016, as stipulated in the MYT Regulations.

Accordingly, the interest on working capital has been calculated, as shown in the table below:

Table 36: Interest on Working Capital approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Receivables of two months of billing	286.91	312.95	330.75
2	Less: Power Purchase Cost for one month	169.65	166.47	165.03
3	Inventory Based on Annual Requirement for Previous FY for 2 months	0.42	0.61	0.61
4	Total Working Capital Requirement	117.68	147.09	166.33
5	Less: Security Deposit excluding BG/FDR	35.08	32.96	32.96
6	Net Working Capital	82.60	114.13	133.36
7	Rate of Interest (%)	9.30%	9.30%	9.30%
	Interest on Working Capital	**7.68**	**10.61**	**12.40**

The Commission approves the Interest on Working Capital as Rs. 12.40 Cr. in the true up of FY 2016-17

3.17. Income Tax

Petitioner's submission

The Petitioner submitted that as per the JERC (Multi Year Distribution' Tariff) Regulations, 2014, Income Tax, if any, on the Licensed business of the Distribution Licensee shall be treated as expense and shall be recoverable from consumers through tariff. DNHPDCL did not pay any income tax during the FY 2016-17. Hence, the income tax liability for the FY 2016-17 is considered as nil.

Commission's analysis:

Regulation 28 of the MYT Regulations, 2014, states the following:

(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."*

As the Regulation above stipulates that the income tax shall be approved as per actuals the Commission considers the income tax payable for the year as nil.

Table 37: Income Tax approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Return on Capital Base	15.06	-	-
2	Rate of Income Tax (%)	33.99%	-	-
3	Gross up return on Capital Base	22.82	-	-
	Income Tax	**7.76**	**0.00**	**0.00**

The Commission approves Income Tax liability as nil for FY 2016-17

3.18. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner hasn't considered any provision for bad and doubtful debts for the year

Commission's analysis:

As per Regulation 29 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."

It is observed that as per the audited accounts, the licensee has not written off any amount in the FY 2016-17. Therefore, the Commission does not approve any amount under the provision for bad and doubtful debts.

3.19. Non-Tariff Income (NTI)

Petitioner's submission

The Petitioner has submitted the actual Non-Tariff Income of Rs.74.54 Cr. for FY 2016-17. Out of the Rs. 74.54 Cr., Rs. 33.73 Cr. is on account of Interest on Fixed Deposits & Others. Earlier, before the corporatization of the department all the revenue used to be transferred to the Government Treasury and therefore the department was not getting any interest on the fixed deposits. Post corporatization, the funds are transferred to the bank account and the department is getting interest on the fixed deposits.

The remaining Rs. 40.81 Cr. is on account of various other components like delayed payment surcharge, meter testing charges etc.

Commission's analysis:

The Commission has authenticated the submission of the Petitioner from the audited accounts and found the same to be correct. The NTI approved in the APR Order, Petitioner's submission and now approved by the Commission is shown in the table below:

Table 38: Non- Tariff Income approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Delayed Payment Charges	11.44	9.13	9.13
2	Reactive Charges Receivables	0.20	0.32	0.32
3	Capacitor Charges	0.04	0.00	0.00
4	Interest on FD and Others	46.46	33.73	33.73
5	Meter Testing Charges	0.06	0.04	0.04
6	Other Charges (Indirect)	0.80	0.98	0.98
7	Reconnection Charges	0.01	0.01	0.01
8	Registration Fees	0.28	0.23	0.23
9	Service Connection Charges	0.21	0.29	0.29
10	Supervision Charges	1.65	1.28	1.28
11	Tender Fees	0.02	0.02	0.02
12	Penalty Charges	0.03	0.01	0.01
13	STOA Application Receivables	14.45	25.75	25.75
14	Recovery of Doubtful Debts	2.71	1.99	1.99
15	Others	-	0.77	0.77
	Gross Total	**78.36**	**74.54**	**74.54**

The Commission approves Non-Tariff Income of Rs. 74.54 Cr. in FY 2016-17

3.20. Incentive/Disincentive towards over/under achievement of norms of distribution losses

Petitioner's submission:

No submission has been made in this regard.

Commission's analysis:

In the APR for FY 2016-17, 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 discussed earlier, the Commission has approved the actual Intra-State T&D loss level of 4.73% against approved of 4.70%. The Commission, in accordance with Regulation 9 of the JERC Tariff Regulations, 2009 (reproduced below) determines the disincentive towards underachievement of target of Intra-State distribution loss for FY 2016-17 as follows:

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."

The dis-incentive has been considered at Rs. 4.87/kWh, which is the rate of net power purchase at the periphery of the Petitioner arrived at after deducting revenue from UI and the rebate due to early payments and dividing it by the energy required at the periphery for sale to retail consumers

The assessment of disincentive for higher distribution losses is shown in the following table:

Table 39: Disincentive towards underachievement of Intra-State distribution loss (In Rs Cr.)

S. No	Particulars	Petitioner's Submission	Trued-up by Commission
1	Retail Sales	3,752.91	3,752.91
2	T&D Loss (%)	4.73%	4.70%
3	Power Purchase at State/UT Periphery	3,939.24	3,938.00
4	Gain/(Loss) (MU)		(1.24)
5	Average Power Purchase Cost (APPC)		4.87
6	Gain/ (Loss) (Rs. Cr.)		(0.60)
	Sharing (30% to DNH in case of gain and 100% in case of loss) (Rs. Cr.)		(0.60)

The Commission determines and approves Rs. 0.60 Cr. as disincentive for underachieving the Intra-State Distribution Loss target for FY 2016-17

3.21. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the Petitioner submitted the net aggregate revenue requirement of Rs. 1978.25 Cr. in the true up of 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 in the True up of FY 2016-17 as given in the following table:

Table 40: Aggregate Revenue Requirement approved by Commission for FY 2016-17 (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Power Purchase Cost	2,026.51	1,980.39	1,980.39
2	Provision for RPO Compliance	57.41		
3	Operation & Maintenance Expenses	22.24	23.68	22.85
4	Depreciation	22.41	13.91	21.44
5	Interest and Finance charges	9.47	7.93	6.56
6	Interest on Working Capital	7.68	10.61	12.40
7	Interest on Security Deposit	2.72	2.62	2.35
8	Return on Equity	15.06	13.61	13.61
9	Provision for Bad Debt	0.00	0.00	0.00
10	Income Tax	7.76	0.00	0.00
11	Incentive/ (Disincentive)on achievement of norms	0.00	0.00	(0.60)
12	**Total Revenue Requirement**	**2,171.26**	**2,052.78**	**2,059.03**
13	Less: Non-Tariff Income	78.35	74.54	74.54
	Net Revenue Requirement	**2,092.91**	**1,978.25**	**1,984.50**

The Commission approves net Aggregate Revenue Requirement of Rs 1,984.50 Cr. in the True-up of the FY 2016-17.

3.22. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner submitted actual revenue for the FY 2016-17 as Rs. 1877.71 Cr. (including the amount received on account of FPPCA charges) as against Rs. 2174.10 Cr. approved by the Commission in the APR Order. 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 2016-17 has also been submitted by the Petitioner.

Commission analysis

The Commission, in order to check the authenticity of the revenue and energy sales figures, analysed the sales and revenue figures for each category and sub-category by imposing various levels of checks. Various discrepancies were observed and were communicated to the Petitioner via the discrepancy notes issued by the Commission. The Petitioner provided the reconciled figures in replies against the discrepancy notes. The Commission has now re-verified all the figures provided in the revised submissions and found them to be accurate. The category-wise revenue as submitted by the Petitioner and approved by the Commission is shown in the following table:

Table 41: Revenue at existing tariff approved by Commission for FY 2016-17 (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
(i)	*0-50 units*	*10.95*	*2.53*	*2.53*
(ii)	*51-200 units*	*1.16*	*6.72*	*6.72*
(iii)	*201 - 400 units*	*1.17*	*4.01*	*4.01*
(iv)	*401 and above*	*8.98*	*7.09*	*7.09*
(v)	*Low Income Group (LIG)*	*0.09*	*0.17*	*0.17*
1	**Domestic**	**22.35**	**20.52**	**20.52**
(i)	*1- 100 units*	*6.97*	*1.28*	*1.28*
(ii)	*101 and above units*	*3.34*	*8.50*	*8.50*
2	**Commercial**	**10.31**	**9.78**	**9.78**
(i)	*Up to 10 HP*	*0.33*	*0.39*	*0.39*
(ii)	*Above 10 HP*	*0.08*	*0.07*	*0.07*
3	**Agriculture**	**0.41**	**0.45**	**0.45**
(i)	*Up to 20 HP*	*75.73*	*1.93*	*1.93*
(ii)	*Above 20 HP*	*0.44*	*74.45*	*74.45*
4	**LTP Industry**	**76.17**	**76.38**	**76.38**
5	**Public Lighting**	**2.11**	**2.48**	**2.48**
6	**Public Water Works**	**1.51**	**1.69**	**1.69**
(i)	*HT-A - I (Up to 66 kV)*	*1,426.84*	*1,089.70*	*1,089.70*
(ii)	*HT-A - II (Above 66 kV)*	*117.92*	*191.85*	*191.85*
(iii)	*HT Ferro*	*62.51*	*113.50*	*113.50*
7	**High Tension**	**1607.27**	**1395.05**	**1395.05**
8	**Hoardings/ Signboards**	**0.00**	**0.00**	**0.00**
9	**Temporary**	**1.29**	**1.34**	**1.34**
10	**Total Revenue from Retail Tariff**	**1,721.42**	**1,507.70**	**1,507.70**
11	**FPPCA Charges**	336.05	267.40	267.40

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
12	**Total Revenue**	**2,057.47**	**1,775.10**	**1,775.10**
13	**OA Charges**	116.63	102.61	102.61
14	**Total Revenue inclusive of OA Charges**	**2,174.10**	**1,877.71**	**1,877.71**

The Commission approves the revenue from sale of power as Rs. 1877.71 Cr. in the True-up of the FY 2016-17.

3.23. Standalone Revenue Gap/ Surplus

Petitioner's submission

Based on the ARR submitted and the revenue from retail tariff, the Petitioner has submitted the standalone revenue gap of Rs. 100.51 Cr. in the true up of FY 2016-17

Commission analysis

The Commission based on the approved ARR and retail tariff has approved the Revenue Gap/Surplus as follows:

Table 42: Standalone Revenue Gap/ Surplus for FY 2016-17 (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Net Revenue Requirement	2092.90	1978.25	1984.50
2	Revenue from Retail Sales at Existing Tariff	1,721.42	1,507.70	1,507.70
3	FPPCA Charges	336.05	267.40	267.40
4	Cross-Subsidy Surcharge and wheeling charge	68.96	102.61	102.61
5	Additional Surcharge	47.66		
6	**Net Gap / (Surplus)**	**(81.20)**	**100.51**	**106.79**

The Commission, in the True-up of FY 2016-17 approves a standalone gap of Rs. 106.79 Cr. This standalone gap has been carried over in the subsequent years and has been dealt with while determining the tariff for FY 2018-19.

4. Chapter 4: Annual Performance Review for the FY 2017-18

4.1. Background

The Tariff Order for FY 2017-18 was issued by the Commission on 9th June 2017 approving the Aggregate Revenue Requirement (ARR) and tariff for FY 2017-18. This Chapter covers the Annual Performance Review (APR) for the FY 2017-18 vis-à-vis the cost parameters approved by the Commission in the Order for FY 2017-18. The Annual Performance Review for the FY 2017-18 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:

"(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 2017-18

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 on long term loans, interest on working capital loans, depreciation etc. The Annual Performance Review for the FY 2017-18 has been done based on actual data of first 8 months of the FY 2017-18 of Power Purchase Quantum and Cost, energy sales, capitalisation etc. depending on which the revised estimates have been made for the remaining 4 months of the financial year. The various cost elements constituting the Aggregate Revenue Requirement have been approved based on the actual information submitted by the Petitioner, the MYT Regulations, 2014 and on the basis of the norms approved in the MYT Order dated 07th April 2016.

4.3. Energy Sales

Petitioner's Submission

The Petitioner has submitted a revised estimate of energy sales as 5600.10 MU for the FY 2017-18, based on the actual energy sales for the first 6 months of the financial year. The Petitioner has assumed that the energy sales for the remaining 6 months shall be same as during the first 6 months of the financial year.

The Petitioner further submitted that the overall energy sales are significantly dependent upon HT/EHT Industries which constitute around 94% of the total energy sales. During the period April, 2017 to June, 2017, HT consumers having a combined connected load of 320 MW opted for open access. During this period 220.84 MUs of power has been purchased by way of open access. However, presently none of the consumers has been scheduling power through open access.

Commission's Analysis

The Commission has noted the audited figures for FY 2016-17 and provisional information provided by the Petitioner for the first 8 months of the FY 2017-18. For all the categories excluding the Low Income Group (LIG) and HT/EHT category, the Commission has estimated the proportion of actual energy sales till the month of November over total energy sales during the financial year, for the last three years. Using these proportion of sales, the Commission has determined the sales till the month of November and accordingly extrapolated the sales to determine the energy sales for FY 2017-18

The Commission for the purpose of estimation of energy sales for Low Income Group (LIG) consumers has assumed an average monthly consumption of 35 units as per the information provided by the Petitioner. Since, this sub- category falls under the Domestic category, the energy sales for the same have been included in the overall consumption of the Domestic category.

For the HT/EHT category, since there has been observed an intermittent consumption pattern during the last two years on account of many consumers opting for open access, a different approach has been followed for projection of energy sales in the future years. Since the HT/EHT category constitutes approx. 94% of the total energy sales of the Petitioner, slight variations have direct impact on the overall revenues of the company. Further, in the past years huge month on month variations have been observed as consumers have been constantly switching towards open access. Therefore, it is very important to accurately project the energy sales on scientific basis for safeguarding the interests of the Petitioner. The Petitioner confirmed that all the open access consumers returned to its system starting from June 2017. Using this piece of information the actual energy sales from July 2017 to November 2017 have been considered for the purpose of projection of energy sales for the remaining 4 months of the year. The monthly consumption inclusive of open access sales during the FY 2016-17 has been observed to be constant. On the basis of this observation, the average energy sales per day in the months of July to November 2017 has been computed. Using this, the energy sales for the remaining months have been computed based on the number of days in a month with the assumption that no consumers will go for open access in the remaining months of the FY 2017-18.

The table below provides the energy sales approved by the Commission in the ARR Order, the Petitioner's submission and quantum of energy sales now approved by the Commission.

Table 43: Energy Sales (MU) approved by the Commission

S. No.	Category	Approved in ARR Order	Petitioner's Submission	Now Approved
1	Domestic	117.72	122.29	121.45
2	Commercial	33.93	33.89	32.19
3	LT Industrial (Motive Power)	234.04	204.01	207.09
4	LT Public Water Works	4.44	4.72	5.25
5	HT/EHT	3,821.10	5217.97	5,210.59
6	Agriculture & Poultry	5.80	6.22	6.36
7	Public Lighting	7.39	7.62	8.43
8	Temp. Supply	3.74	3.38	3.24
	Total	**4,228.16**	**5600.10**	**5,594.59**

The Commission, now approves energy sales of 5,594.49 MU in the APR for the FY 2017-18.

4.4. Open Access Sales and Purchase

Petitioner's Submission

The Petitioner submitted the open access consumers have scheduled total power of 220.84 MU during the first 8 months of the FY 2017-18. Further, the Petitioner submitted the actual energy purchase of 227.35 MU. The Petitioner has not projected any energy sales/purchase under open access in the remaining months of FY 2017-18 with the assumption that no consumer will avail power through open access in the remaining period.

Commission's Analysis

The Commission also has not estimated any energy sales/purchase via open access route in the remaining months of FY 2017-18. However, the actual energy sales and purchase till the month of November 2017, as submitted by the Petitioner have been considered on actual basis.

The table below provides the open access sales and purchase approved by the Commission in the ARR Order, the Petitioner's submission and now approved by the Commission.

Table 44: Open Access sales (MU) and purchase approved by the Commission

S. No	Category	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Open Access Sales	2,129.68	220.84	220.84
2	Open Access Purchase	2,195.55	227.35	227.35

The Commission now approves open access sales of 220.84 MU and purchase of 227.35 MU in the APR for the FY 2017-18.

4.5. Inter-State transmission loss

Petitioner's submission

The Petitioner has considered the same Inter-State transmission loss of 3.66% as approved by the Commission in the MYT Order.

Commission's analysis

The Commission in the ARR Order for FY 2017-18 revised the Inter-State distribution loss to 3.69% based on latest information available, against an approved loss of 3.66% in the MYT Order. The Commission has continued with the same loss levels as considered previously.

The table below provides the Inter-State transmission loss submitted and now approved by the Commission

Table 45: Inter-State transmission loss (%)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Now Approved
1	Inter-State Transmission Losses	3.69%	3.66%	3.69%

The Commission now approves Inter-State transmission loss of 3.69% for the APR of FY 2017-18.

4.6. Intra-State distribution loss

Petitioner's submission

The Petitioner has submitted an Intra-State distribution loss of 4.70%, same as approved in the APR Order.

Commission's analysis

The Commission approves the Intra-State distribution loss of 4.70% as approved in the MYT and the APR Order

The table below provides the Intra-State distribution loss approved in the ARR Order, Petitioners submission and now approved by the Commission.

Table 46: Intra-State distribution loss (%)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Now Approved
1	Intra state distribution loss	4.70%	4.70%	4.70%

4.7. Energy Requirement at State/UT Periphery

Petitioner's submission

The Petitioner has submitted the Energy Requirement at State/ UT Periphery as follows:

Table 47: Energy Requirement (MU) submitted by Petitioner

Particulars	Petitioners submission
Sales	5,600.10
Open Access Sales	220.84
Less: Energy Savings	(5.77)
Total Sales	**5,815.17**
Add: Losses	*286.79*
T&D Losses	4.70%
Energy Required at Periphery	**6,101.96**
Add: Sales to common pool consumer	84.77
Total energy requirement at State periphery	6,186.73
Less: Energy Purchased through UI at Periphery	48.68
Less: Purchase from Traders	0.00
Less: Open Access Purchase	227.35
Total Energy Required at Periphery	**5,910.70**

Commission's analysis:

The energy requirement at State/UT Periphery is derived based on the energy sales estimate and the Intra-State transmission losses and Intra-State distribution losses approved for FY 2017-18.

Table 48: Energy Requirement approved by Commission (MU)

Particulars	Formula	Approved in ARR Order	Petitioner's Submission	Now Approved
Energy Requirement				
Energy sales within the State/UT	a	4228.16	5600.1	5594.59
Open Access Sales	b	2129.68	220.84	220.84

Particulars	Formula	Approved in ARR Order	Petitioner's Submission	Now Approved
Less: Energy Savings	c	5.77	5.77	0.00
Total Sales within the State/UT	d=a+b-c	6352.07	5815.17	5815.43
Distribution losses				
%	e	4.70%	4.70%	4.70%
MU	f=g-d	313.27	286.79	286.81
Energy required at State Periphery	g=d/(1-e)	6665.34	6101.96	6102.24
Energy Transactions at Periphery				
Add: Sales in Unscheduled Interchange	h	0.00	0.00	0.00
Add: Sales in Power Exchanges	i	0.00	84.77	84.77
Less: Purchase under UI (MU)	j	0.00	48.68	48.68
Less: Open Access Purchase (MU)	k	2195.55	227.35	227.35
Total energy requirement at State/UT Periphery	**l=g+h+i-j-k**	**4469.79**	**5910.70**	**5910.97**

The Commission approves Total Energy Requirement at State/UT Periphery as 5,910.97 MU in the APR for the FY 2017-18.

4.8. Power Purchase Quantum & Cost

Petitioner's submission:

Dadra & Nagar Haveli has no generating stations of its own and relies on the firm and infirm allocation of power from Central Generating Stations like Korba, Vindhyachal, Kahalgaon, Kawas, Sipat, Tarapur, Kakrapar etc. to meet its energy requirement.

The DNHPDCL for the purpose of estimation of the power availability during FY 2017-18 has considered the following sources of power:

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

The Petitioner has allocation from Western as well as Eastern regions from coal, gas and nuclear power stations. However, for meeting the supply-demand gap during the peak hours, the Petitioner has relied on energy exchange and over-drawal from the Grid. The table below provides the Energy allocation of the Petitioner with respect to each station.

Table 49: Energy Allocation as submitted by the Petitioner (MW)

Name of Plant	Weighted average infirm allocation (MW)	Weighted Average Firm Allocation (MW)	Weighted Average Total Allocation (MW)
KSTPP	51.30	0.00	51.30
KSTPS -3	20.12	2.20	22.32
VSTPP-I	37.60	5.00	42.60
VSTPP-II	28.36	4.00	32.36
VSTPP- III	28.36	6.00	34.36
VSTPP- IV	40.22	5.55	45.77
KAWAS	56.24	25.00	81.24
GGPP	56.75	2.00	58.75
Sipat - I	79.65	9.00	88.65
Sipat - II	26.89	4.00	30.89
KHSTPP - II	3.50	0.00	3.50
Mauda I (MSTPS)	40.22	5.55	45.77
VSTPP-V	20.12	5.55	25.67
Mauda II	53.10	8.60	61.70
NPCIL - KAPS	14.90	2.00	16.90
NPCIL - TAPP 3&4	36.52	7.00	43.52
Total	**593.85**	**91.45**	**685.30**
NSPCL Bhilai		100.00	100.00
RGPPL		38.00	38.00
EMCO Energy Ltd. (GMR Group)		200.00	200.00

The Petitioner has used the data for six months of actual power purchase for projection of the energy availability for FY 2017-18. For projection of the remaining six months of power purchase for FY 2017-18, firm and infirm allocation from various generating stations has been considered as per the allocation specified in the latest allocation Order of Western Region Load Despatch Centre (WRLDC) for the month of October. The detailed methodology for projecting the power availability from various sources, as submitted by the Petitioner has been summarized below:

- Per unit variable cost, fixed cost and other charges have been considered at the same level as actual from April to September 2017.

- Power purchase arrear for the remaining six months has been considered as nil as DNHPDCL has no prior information of arrear bills from the generators and transmission companies.

- The Government of India, Ministry of Power has allocated 2% (38 MW) power to the Petitioner on a long term basis from RGPPL. The Petitioner has executed PPA with RGPPL and Transmission Service Agreement (TSA) with Maharashtra State Electricity Transmission Company Limited (MSETCL) for transmission of above allocated power of RGPPL. The State of Maharashtra has 95% share allocation from RGPPL and they are not scheduling power due to non-availability of natural gas to this project. Due to non-availability of technical minimum schedule to run the plant, presently there is no generation from the plant. Therefore, for the period from October 2017 to March 2018, the Petitioner has not considered any power purchase from RGPPL. The Petitioner has further not considered fixed charges for the period October 2017 to March 2018 as the RGGPL is scheduling power to Indian Railways under some specific scheme of the Ministry of Power.

- During the first six months of FY 2017-18, there has been no generation from the Kakrapar atomic power station. Hence, the Petitioner has not considered any purchase of energy from Kakrapar during the period from October 2017 to March 2018.

- As per the revised RPO targets, the Petitioner has to purchase 140 MUs of solar energy and 235.20 MUs of non-solar energy during the FY 2017-18. The Petitioner has proposed to fulfill this target through purchase of Renewable Energy Certificates (REC's).

Based on the actual power purchase cost of the first six months of FY 2017-18 and the remaining six months projection, the revised estimated power purchase cost for FY 2017-18 as submitted by the Petitioner has been presented in the following table:

Table 50: Power Purchase quantum (MU) and cost (In Rs. Cr.) submitted by the Petitioner

Source	Units Purchased (MU)	Fixed Charges (Rs. Cr.)	Variable Charges (Rs. Cr.)	Other Charges (Rs. Cr.)	Total Charges (Rs. Cr.)	Per Unit Cost (Rs./kwh)
NTPC Stations						
KSTPS	387.22	24.89	54.15	1.86	80.90	2.09
KSTPS 3	158.43	22.96	21.18	0.66	44.80	2.83
VSTPP-I	309.88	24.88	48.90	0.72	74.50	2.40
VSTPP-II	234.73	16.15	34.76	0.71	51.62	2.20
VSTPP- III	258.47	26.50	39.42	0.71	66.63	2.58
VSTPP- IV	324.61	51.59	48.23	2.01	101.84	3.14
KGPP	351.99	49.79	79.21	2.36	131.36	3.73
GGPP	291.06	44.82	68.10	8.74	121.66	4.18
Sipat-I	609.68	84.98	82.57	1.58	169.12	2.77
Sipat-II	220.21	28.42	31.36	0.12	59.89	2.72
Mauda	169.31	63.62	46.56	1.62	111.80	6.60
VSTPS-V	190.87	30.06	30.62	0.48	61.16	3.20
Mauda 2	225.07	17.62	69.72	(0.06)	87.28	3.88
KHSTPP-II	17.24	2.32	4.16	(0.01)	6.47	3.75
Subtotal - NTPC	**3748.76**	**488.61**	**658.92**	**21.51**	**1169.04**	**3.11**
NSPCL Bhilai	**701.39**	**117.36**	**148.46**	**(2.59)**	**263.24**	**3.75**
NPCIL						
KAPS	0.00	0.00	0.00	0.00	0.00	0.00
TAPS	188.55	0.00	66.41	0.00	66.41	3.52
Subtotal	**188.55**	**0.00**	**66.41**	**0.00**	**66.41**	**3.52**
Others						
RGPPL	0.00	0.00	0.00	0.00	0.00	0.00
EMCO Energy	1495.63	481.83	270.66	0.16	752.65	5.03
Subtotal	**1495.63**	**481.83**	**270.66**	**0.16**	**752.65**	**5.03**
Power Purchases from Other Sources						
IE Exchange/ Bilateral	0.00	0.00	0.00	0.00	0.00	0.00
UI	48.68	0.00	11.68	0.00	11.68	2.40
Solar	0.00	0.00	0.00	0.00	0.00	0.00
Non Solar	0.00	0.00	0.00	0.00	0.00	0.00
Solar REC	0.00	0.00	21.00	0.00	21.00	0.00
Non Solar REC	0.00	0.00	35.28	0.00	35.28	0.00
Subtotal	48.68	0.00	67.96	0.00	67.96	13.96

Source	Units Purchased (MU)	Fixed Charges (Rs. Cr.)	Variable Charges (Rs. Cr.)	Other Charges (Rs. Cr.)	Total Charges (Rs. Cr.)	Per Unit Cost (Rs./kwh)
Total Power Purchase	**6183.02**	**1087.81**	**1212.41**	**19.08**	**2319.30**	**3.75**
Availability at ED-DNH Periphery	**6183.02**	**1087.81**	**1212.41**	**19.08**	**2319.30**	**3.75**
PGCIL Charges					142.43	
POSOCO					0.62	
WRPC					0.00	
Reactive Charges					0.18	
MSTCL					0.00	
Intra-State Transmission Charges					29.21	
Grand Total of Charges					2491.74	4.03
Rebate received from NTPC					(100.09)	
Credit/ Debit URS					(1.29)	
Grand Total of Charges after deduction of rebate	**6183.02**	**1087.81**	**1212.41**	**19.08**	**2390.36**	**3.87**

Commission's Analysis:

The Commission for projecting the availability of power and cost for FY 2017-18 has considered the actual plant wise power purchase quantum and cost for April – November 2017. Further, the firm and infirm allocation from various generating stations has also been considered while estimating the source wise availability. The source wise methodology followed for projection of quantum and cost of power procurement has been detailed as follows:

4.8.1. Availability of power

Availability of power from NTPC & NTPC-SAIL Bhilai:

- The power purchase quantum for 8 of the total fifteen NTPC plants has been estimated based on the past 2 years average of quantum of energy scheduled in FY 2015-16 and FY 2016-17.
- For Vindhyachal Phase I, energy scheduled in FY 2015-16 has been considered, due to irregular scheduling of power during major part of FY 2016-17.
- For Vindhyachal Phase V, the availability of power for remaining months has been projected based on the average PLF achieved by the plant during the last five years
- For Mauda Phase I & NSPCL Bhilai, the availability of power has been projected based on the average PLF achieved by the plants during the last 2-3 years
- For Kawas and Gandhar gas power plants average PLF achieved during the first 8 months of FY 2017-18 till November 2017 has been considered for projecting the power purchase quantum in the remaining months.
- For Mauda Phase II, since the plant was operational only in August 2017, the energy availability has been projected on the basis of average PLF of last 5 years of similar plant for instance Mauda Phase I.
- The availability of power from new station Solapur thermal which began operations in October, 2017 has been projected assuming normative PLF of 85% and other relevant parameters as prescribed in CERC

Tariff Regulations, 2014. The Petitioner hasn't projected any power from this plant while estimating the overall power purchase availability and cost for FY 2017-18.

Availability from NPCIL plants:

- The Tarapur and Kakrapara atomic plants are two of the NPCIL plants that supply energy to Dadra Nagar & Haveli (DNH). For Kakrapara plant no energy has been scheduled from April-November 2017. Further, as the Petitioner submitted that the plant is shutdown for maintenance, therefore, no power is projected to be scheduled in the remaining FY 2017-18.

- DNH has steady purchase of energy from Tarapur atomic plant, the energy projected to be scheduled in remaining months of FY 2017-18 has been estimated based on the 2 years average of quantum of energy scheduled in FY 2015-16 and FY 2016-17.

Availability from RGPPL & EMCO Plants:

- The State of Maharashtra (which has 95% share allocation from RGPPL) is not scheduling power because of non-availability of natural gas and hence non-availability of technical minimum schedule to run the plant. For the period from April-November 2017, no power was purchased. Therefore, the Commission has not assumed any availability of power from this station.

- The availability of power from EMCO Warora has been estimated based on the average PLF achieved by the plant during the last five years

Availability of power from Open Market/Unscheduled Interchange

- The energy deficit for the FY 2017-18, as discussed in the section of energy balance has been assumed to be procured from open market.

- No power has been projected under UI for the remaining months of FY 2017-18. The UI Overdrawal/ Underdrawal in the first 8 months of FY 2017-18 has been considered as per actuals submitted by the Petitioner.

4.8.2. Power Purchase Cost

Variable Charges:

- The per unit variable costs have been computed by taking the average of the actual per unit variable cost as per bills of September 2017 to November 2017 for all the stations.

- For procurement of power from Open Market, the Average Round the Clock (RTC) rate for western region during the calendar year 2017 has been considered.

- The cost towards UI Overdrawal/ Underdrawal has been considered as per actuals incurred by the Petitioner in first 8 months of FY 2017-18

Fixed Charges:

- The Fixed costs have been considered based on the tariff Orders issued by the CERC for respective Central Generating Stations,

- For Mauda II, since the tariff Order has not been issued yet, fixed cost as per the latest power purchase bill has been considered.

- The Fixed cost has been apportioned on the basis of DNHPDCL's share in each station and average annual plant availability factor achieved during the last five years by the plant.

Other Charges:

No other charges have been considered for the FY 2017-18.

4.8.3. Transmission Charges

The Commission has projected the transmission charges payable to PGCIL based on the total capacity allocation of the Petitioner of the transmission network.

The transmission charges are determined based on the latest quarterly Point of Connection (PoC) rates approved by the Central Electricity Regulatory Commission (CERC) in accordance with Regulation 17(2) of Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010

The following table provides the quantum of energy availability and the power purchase cost approved by the Commission for FY 2017-18:

Table 51: Power Purchase Quantum (MU) and cost (Rs. Cr.) approved by the Commission

Details of the stations	Power Purchase at Generator Periphery (MU)	Power Purchas at UT periphery (after adjusting ISTS Losses) (MU)	Variable Charges (Rs. Cr.)	Fixed charges (Rs. Cr.)	Total (Rs.Cr.)	Avg. Rate (@ State Periphery) (Rs./kwh)
NTPC						
KSTPS	404.05	389.15	47.01	24.57	71.58	1.84
KSTPS 3	170.18	163.90	19.46	24.00	43.46	2.65
VSTPP-I	325.51	313.50	48.39	24.32	72.71	2.32
VSTPP-II	250.60	241.36	34.89	15.79	50.68	2.10
VSTPP- III	269.21	259.28	37.48	26.01	63.49	2.45
VSTPP- IV	310.07	298.63	43.30	47.89	91.18	3.05
KGPP	310.71	299.24	110.61	49.79	160.40	5.36
GGPP	256.22	246.76	103.00	44.83	147.83	5.99
Sipat-I	681.50	656.35	79.28	84.06	163.34	2.49
Sipat-II	260.86	251.23	31.13	27.12	58.25	2.32
Mouda	169.02	162.79	42.59	62.11	104.71	6.43
VSTPS-V	196.76	189.50	27.61	29.29	56.91	3.00
Mouda 2	153.56	147.89	37.78	32.95	70.72	4.78
SLP	96.71	93.14	27.90	56.02	83.92	9.01
KHSTPP-II	18.85	18.15	4.05	2.31	6.36	3.51
Subtotal - NTPC	**3873.81**	**3730.87**	**694.48**	**551.06**	**1245.54**	**3.34**
NSPCL Bhillai	**646.03**	**622.19**	**117.84**	**124.62**	**242.46**	**3.90**
NPCIL						
KAPS	0.00	0.00	0.00	0.00	0.00	0.00
TAPS	208.76	201.06	58.91	0.00	58.91	2.93
Subtotal	**208.76**	**201.06**	**58.91**	**0.00**	**58.91**	**2.93**
Others						
RGPPL	0.00	0.00	0.00	0.00	0.00	0.00
EMCO Energy Ltd. (GMR Group)	1296.71	1248.86	237.69	376.78	614.47	4.92
Subtotal	**1296.71**	**1248.86**	**237.69**	**376.78**	**614.47**	**4.92**

Details of the stations	Power Purchase at Generator Periphery (MU)	Power Purchas at UT periphery (after adjusting ISTS Losses) (MU)	Variable Charges (Rs. Cr.)	Fixed charges (Rs. Cr.)	Total (Rs.Cr.)	Avg. Rate (@ State Periphery) (Rs./kwh)
Unscheduled Interchange (UI) Overdrawal/Underdrawal		48.68	11.68		11.68	2.40
Open Market Purchase		107.11	31.81		31.81	2.97
Open Market Sale		84.77	29.67		29.67	3.50
Total	**6025.31**	**5874.01**	**1122.74**	**1052.46**	**2175.20**	**3.70**
Renewable Purchase Obligation (RPO)						
Solar			31.81		31.81	
Non Solar			56.16		56.16	
Subtotal			**87.97**		**87.97**	
Transmission Charges						
PGCIL Charges					174.10	
DNH Transmission Charges					28.18	
Subtotal					**202.27**	
Total	**6025.31**	**5874.01**	**1210.71**	**1052.46**	**2465.44**	**4.20**

The Commission approves the revised quantum of power purchase of as 5874.01 MU at State/ UT Periphery with total cost of Rs, 2465.44 Cr. in the APR for the FY 2017-18.

4.9. Renewable Purchase Obligations (RPOs)

Petitioner's submission:

The Petitioner submitted that solar power of 140 MU and Non Solar Power of 235.20 MU has to be procured as per the energy sales projected by the Petitioner.

Commission's analysis:

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 212.52 MU (Solar – 73.11 MU and Non Solar – 139.41 MU) upto the FY 2016-17, as discussed in the true up Chapter.

The Petitioner in a written submission also agreed to fulfill the backlog and the RPO target for FY 2017-18 by 31st March 2018. Hence, in accordance with the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010 and the Petitioner's submission, the Commission has determined the following Renewable Purchase Obligation for the Petitioner for FY 2017-18, the table has been provided in the next page.

Table 52: Summary of Renewable Purchase Obligation (RPO) (MU)

Description	FY 2017-18
Sales within State (MU)	5594.59
RPO obligation (in %)	**6.70%**
Solar	2.50%
Non-solar	4.20%
RPO obligation for the year (in MU)	**374.84**
Solar	139.86
Non-solar	234.97
Backlog upto FY 2016-17	**212.52**
Solar	73.11
Non Solar	139.41
Total RPO to be fulfilled for the year	**587.35**
Solar	212.97
Non Solar	374.38
RPO compliance (actual purchase)	**0.88**
- Solar	0.88
-Non-solar	-
RPO compliance (REC certificate purchase)	**586.47**
- Solar	212.09
-Non-solar	374.38

The Commission has assumed the rate of purchase for solar and non-solar REC as Rs.1.50/ kWh due to non – availability of solar REC's.

The Commission has computed the cost towards compliance of RPO as shown in the table below. The cost has already been considered in the total power purchase cost approved by the Commission in the previous section:

Table 53: Cost towards compliance of Renewable Purchase Obligation (RPO) (In Rs. Cr.)

Description	RPO (MU)	Total Cost (Rs. Cr.)	Avg. Rate (Rs./kWh)
Solar	212.09	31.81	1.50
Non-solar	374.38	56.16	1.50
Total	**586.47**	**87.97**	**1.50**

4.10. Energy Balance

Petitioner's submission

The Petitioner has submitted the energy balance as shown in the table below:

Table 54: Energy Balance (MU) submitted by Petitioner

Particulars	Petitioners submission
Sales	5,600.10
Open Access Sales	220.84
Less: Energy Savings	(5.77)
Total Sales	**5,815.17**
Add: Losses	*286.79*
T&D Losses	4.70%
Energy Required at Periphery	6,101.96
Add: Sales to common pool consumer	84.77
Less: Own Generation	0.88
Total energy requirement at State periphery	6,185.85
Less: Energy Purchased through UI at Periphery	48.68
Less: Purchase from Traders	0.00
Less: Open Access Purchase	227.35
Total Energy Required at Periphery	5,909.82
Transmission loss	224.52
Transmission loss (%)	3.66%
Total Energy to be purchased	6,134.34
Total Energy requirement from tied up sources & UI at generator end	6,183.02
Total Energy requirement in UT including Open Access	6,410.37

Commission's analysis

Based on the revised estimates of energy sales and Power purchase quantum, the Commission approves the balance as shown in the following table:

Table 55: Energy Balance (MU) approved by Commission

Particulars	Formula	Approved in ARR Order	Petitioner's Submission	Now Approved
Energy Requirement				
Energy sales within the State/UT	a	4228.16	5600.1	5594.59
Open Access Sales	b	2129.68	220.84	220.84
Less: Energy Savings	c	5.77	5.77	0.00
Total Sales within the State/UT	d=a+b-c	6352.07	5815.17	5815.43
Distribution losses				
%	e	4.70%	4.70%	4.70%
MU	f=g-d	313.27	286.79	286.81
Energy required at State Periphery	g=d/(1-e)	6665.34	6101.96	6102.24

Particulars	Formula	Approved in ARR Order	Petitioner's Submission	Now Approved
Energy Transactions at Periphery				
Add: Sales in Unscheduled Interchange	h	0.00	0.00	0.00
Add: Sales in Power Exchanges	i	0.00	84.77	84.77
Less: Purchase under UI (MU)	j	0.00	48.68	48.68
Less: Open Access Purchase (MU)	k	2195.55	227.35	227.35
Total energy scheduled at State Periphery from Tied-up Sources (MU)	l=g+h+i-j-k	4469.79	5910.70	5910.97
Energy Available at State periphery from firm sources	m	4469.79	5909.82	5802.98
Own Generation	n	0.00	0.88	0.88
Deficit/(Surplus)	**u=l-m-n**	**0.00**	**0.00**	**107.11**

In the ARR Order for FY 2017-18, the Commission did not approve any deficit of power and estimated that the complete requirement shall be met from firm sources. However, now in the APR for FY 2017-18, the Commission has estimated a deficit of 107.11 MU and directs the Petitioner to procure this power from IEX/ Bilateral Exchange etc. rather than from costlier power stations, as is the approach followed by the Petitioner in the previous years. The cost towards procurement of this deficit power has been discussed in the previous section while estimating the total power purchase cost.

4.11. Operation & Maintenance Expenses

The Operation & Maintenance Expenses basically comprises of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). The MYT Regulations, 2014 recognises the variation of O&M Expenses to be controllable. Regulation 9.2 of the MYT Regulation, 2014 states the following:

"9.2 Some illustrative variations or expected variations in the performance of the applicant, which may be attributed by the Commission to controllable factors include, but are not limited to the following:

(a)Variations in capital expenditure on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;

(b)Variations in Transmission and Distribution Losses (T&D) losses in case of bundled utilities and Distribution losses in case of unbundled utilities which shall be measured as the difference between the units input into the distribution system and the units supplied and billed;

(c)Depreciation and working capital requirements;

(d)Failure to meet the standards specified in the Joint Electricity Regulatory Commission (Standards of Performance) Regulations, 2009 except where exempted;

(e)Variation in operation & maintenance expenses, except those attributable to directions of the Commission;

(f)Variation in Wires Availability and Supply Availability;

(g)Variation on account of inflation;"

4.11.1. Employee Expenses

Petitioner's submission

The Petitioner has submitted employee expenses of Rs. 12.62 Cr. against an approved expenses of Rs. 10.84 Cr. in the ARR Order. The employee expenses are determined in accordance with the MYT Regulations and the methodology prescribed by the Commission in the ARR Order for FY 2017-18. The employee expenses of FY 2016-17 has been considered as base, which are inclusive of any impact of 7^{th} Pay Commission, for projecting the employee expenses for FY 2017-18. The employee expenses submitted by the Petitioner, comprises of salaries, dearness allowance, bonus, terminal benefits in the form of pension and gratuity, leave encashment and staff welfare expenses.

Commission's analysis

The MYT Regulations, 2014 stipulates the Operation and Maintenance expenditure to be controllable. The Regulation 9.2 has been presented below:

"9.2 Some illustrative variations or expected variations in the performance of the applicant, which may be attributed by the Commission to controllable factors include, but are not limited to the following:

(a)Variations in capital expenditure on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;

(b)Variations in Transmission and Distribution Losses (T&D) losses in case of bundled utilities and Distribution losses in case of unbundled utilities which shall be measured as the difference between the units input into the distribution system and the units supplied and billed;

(c)Depreciation and working capital requirements;

(d)Failure to meet the standards specified in the Joint Electricity Regulatory Commission (Standards of Performance) Regulations, 2009 except where exempted;

(e)Variation in operation & maintenance expenses, except those attributable to directions of the Commission;

(f)Variation in Wires Availability and Supply Availability;

(g)Variation on account of inflation;"

As discussed, while approving the employee expenses for FY 2016-17, the Commission is of the opinion that increase in salaries and wages on account of recommendations of 7^{th} Pay Commission is an uncontrollable expenditure, hence any increase on account of 7^{th} Pay Commission recommendation should be a pass through.

The MYT Regulations, 2014 stipulates the variation in operation and maintenance expenditure to be a controllable factor. Thus, in accordance with the MYT Regulation, the Commission doesn't allow any deviation in the employee expenses against approved in the APR Order and considers the same Employee Expenses as approved in the APR Order for FY 2017-18. Additionally, the Commission approves an expense of Rs. 0.80 Cr. on account of 7^{th} Pay Commission.

Table 56: Employee Expenses approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	10.84	12.62	10.84
2	Impact of 7^{th} Pay Commission	0.00	0.00	0.80
3	**Total Employee Expenses**	**10.84**	**12.62**	**11.64**

The Commission now approves employee expenses of Rs. 11.64 Cr. in the APR for the FY 2017-18.

4.11.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted a revised estimate of A&G expenses, calculated in accordance with the MYT Regulations and the methodology prescribed by the Commission in the ARR Order considering revised inflation numbers. A&G expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.

Commission's analysis

The MYT Regulations, 2014 stipulate the O&M expenses to be controllable. Therefore, in accordance with the MYT Regulations the Commission now approves the same A&G Expenses as approved in the ARR Order for FY 2017-18

Table 57: A&G Expenses approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Administration & General Expenses (A&G)	5.10	6.50	5.10

The Commission now approves the Administrative & General (A&G) expenses of Rs. 5.10 Cr. in the APR for FY 2017-18.

4.11.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner, similar to the A&G expense, has submitted a revised estimate of R&M expenses in accordance with the MYT Regulations and the methodology prescribed by the Commission in the ARR Order considering revised inflation numbers. The Petitioner has considered the R&M expenses of FY 2016-17 as base for projecting the R&M expenses for FY 2017-18.

Commission's analysis

The Commission in a similar approach adopted while approving the employee expenses and A&G expenses above, has considered the same R&M expenses as approved by the Commission in the ARR Order.

The table below provides the R&M expenses, approved by the Commission in the ARR Order, Petitioners submission and R&M expenses now approved by the Commission.

Table 58: R&M Expenses approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Repair & Maintenance Expenses (R&M)	8.71	5.67	8.71

The Commission now approves the Repair & Maintenance (R&M) expenses of Rs. 8.71 Cr. in the APR for FY 2017-18.

4.11.4. Total Operation and Maintenance Expenses (O&M)

The Commission approves total Operation & Maintenance Expenses of Rs. 25.45 Cr. against submitted of Rs. 24.79 Cr.

Table 59: O&M Expenses approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	10.84	12.62	11.64
2	Administrative & General Expenses (A&G)	5.10	5.67	5.10
3	Repair & Maintenance Expenses	8.71	6.50	8.71
	Total Operation & Maintenance Expenses	**24.65**	**24.79**	**25.45**

4.12. Capital Expenditure & Capitalisation

Petitioner's submission

The Petitioner as per the Petition has submitted the capital expenditure and capitalisation during FY 2017-18 same as approved by the Commission in the ARR Order.

Commission's analysis:

The Commission with regard to the capital expenditure and capitalisation proposed to be undertaken during the year, directed the Petitioner to submit the scheme wise Detailed Project Reports (DPR) and the copy of the Technical Sanctions accorded to each scheme. The Petitioner in response, submitted the supporting documents w.r.t the scheme wise capital expenditure and capitalisation along with the copy of the technical sanctions. Against an approved capex and capitalisation of 107.30 Cr. and 119.02 Cr. respectively, the Petitioner could manage to provide the requisite documents for capital expenditure and capitalisation totaling to 7.22 Cr only.

Table 60: Capital Expenditure and Capitalisation approved by Petitioner (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Capital Expenditure	107.30	107.30	7.22
2	Capitalisation	119.02	119.02	7.22

The Commission now approves the capital expenditure and capitalisation of Rs.7.22 Cr. in the APR for FY 2017-18.

4.13. Capital Structure

Petitioner's Submission

The Petitioner as per the Petition submitted that the entire capital deployment at DNHPDCL shall be through equity for the FY 2017-18.

Commission's analysis

The MYT Regulations 2014, specifies 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. Regulation 24 of the MYT Regulation, the excerpt of the Regulation states the following:

(c) *The Distribution Licensee shall provide detailed loan-wise, project-wise and utilization-wise details of all of the pending loans*

(d) *If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.*

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans.

In accordance with the MYT Regulations, 2014, the Commission has determined the Capital Structure for FY 2017-18 as follows:

Table 61: GFA addition approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved
1	Opening Gross Fixed Assets	487.84	427.37	427.37
2	Addition During the FY	119.02	119.02	7.22
3	Adjustment/Retirement During the FY	-	-	-
4	Closing Gross Fixed Assets	606.86	546.39	434.59

Table 62: Normative Loan addition (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	89.20	56.46	47.85
2	Add: Normative Loan During the year	83.31	83.31	5.05
3	Less: Normative Repayment equivalent to Depreciation	28.04	23.15	22.51
4	Closing Normative Loan	144.47	116.62	30.39

Table 63: Normative Equity addition (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	108.31	90.17	90.17
2	Additions on account of new capitalisation	35.71	35.71	2.17
3	Closing Equity	144.01	125.88	92.33

4.14. Depreciation

Petitioner's submission

For computation of Depreciation, the Petitioner has considered the opening balance of the GFA for FY 2017-18 same as the closing balance of FY 2016-17 and subsequently added the proposed capitalisation during the FY 2017-18. The Depreciation rate has been considered at the same level as was approved in the ARR Order for the FY 2017-18.

Commission's analysis

Regulation 23 of the MYT Regulations, 2014 stipulates the following:

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

(b) *Depreciation shall not be allowed on assets funded by capital subsidies, consumer contributions or grants.*
(c) *Depreciation shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation. The same shall be as specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014. (The same may vary as notified by CERC from time to time.)*
(d) *The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset.*
Provided that Land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.
(e) *Depreciation shall be charged from the first year of operation of the asset.*
Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis.
(f) *A provision of replacement of assets shall be made in the capital investment plan."*

In the ARR Order, the Commission approved the following asset wise depreciation rate as per the CERC Tariff Regulations, 2014 as provided in the table below:

Table 64: Depreciation Rate (%)

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

The Petitioner was directed to submit the asset wise capitalisation schedule for the period on the basis of proposed capitalisation. The Petitioner however failed to submit the same and in the absence of such information the Commission has considered the same weighted average depreciation rate as approved in the true up of FY 2016-17. The deprecation has been calculated on the average Gross Fixed Assets (GFA) with the opening GFA considered equivalent to closing GFA of FY 2016-17 as approved in the true-up. The net addition during the year has been considered equivalent to capitalisation as approved above. The following table provides the calculation of deprecation during the year FY 2017-18.

Table 65: Depreciation approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved
1	Opening Gross Fixed Assets	487.84	427.37	427.37
2	Addition During the FY	119.02	119.02	7.22
3	Adjustment/Retirement During the FY	-	-	-
4	Closing Gross Fixed Assets	606.86	546.39	434.59
5	Average Gross Fixed Assets	547.35	486.88	430.98
6	Rate of Depreciation (%)	5.12%	5.12%	5.22%
	Depreciation	**28.04**	**23.15**	**22.51**

The Commission now approves depreciation of Rs. 22.51 Cr. in the APR for FY 2017-18.

4.15. Interest on Loan

Petitioner's submission

The Petitioner has determined the Interest on Loan on normative basis according to the MYT Regulations, 2014. The opening balance of loans for FY 2017-18 is considered same as closing balance of FY 2016-17. The normative loan addition in FY 2017-18 has been computed as 70% of the capitalisation proposed during FY 2017-18.

The repayment of loans has been considered equivalent to the depreciation during FY 2017-18.

Further the rate of interest has been considered as SBI PLR @ 14.05%.

Commission's analysis:

The Petitioner in the Technical Validation Session (TVS) submitted that the complete capitalisation during the year shall be funded by Petitioner's equity and no loan shall be borrowed during the year.

As per the 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. Further, the Commission has considered the actual capitalisation of assets as approved earlier. The Commission for the purpose of funding of the capitalisation has considered the normative debt equity ratio of 70:30. Repayment has been considered equivalent to depreciation allowed during the year.

The Commission, in the ARR Order, approved the interest on long term loans equivalent to the prevailing SBI Prime Lending Rate (PLR) of 13.85%. The Commission, similar to the approach followed in the true up of FY 2016-17, has considered the rate of interest as SBI PLR as on 1st April 2017 @ 13.85%.

Further, in accordance with the MYT Regulations, 2014, the Interest on Loan has been calculated on the average loan during the year with opening loan considered equivalent to the closing loan approved in the true-up of 2016-17. The net addition in overall loan portfolio has been considered on normative basis as explained above and the repayment is considered equivalent to depreciation during the year.

The following table provides the Interest on Loan approved by the Commission

Table 66: Interest on Loan approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	89.20	56.46	47.85
2	Add: Normative Loan During the year	83.31	83.31	5.05
3	Less: Normative Repayment equivalent to Depreciation	28.04	23.15	22.51
4	Closing Normative Loan	144.47	116.62	30.39
5	Average Normative Loan	116.83	86.54	39.12
6	Rate of Interest (%)	13.85%	14.05%	13.85%
	Interest on Loan	**16.18**	**12.16**	**5.42**

The Commission approves Interest on Loan of Rs. 5.42 Cr. in the APR for FY 2017-18.

4.16. Return on Equity (RoE)

Petitioner's submission

The Petitioner has computed the Return on Equity (RoE) in accordance with the MYT Regulations 2014, RoE is computed on 30% of the capital base. The Petitioner has considered the opening equity equivalent to closing equity for FY 2016-17 and has considered added equity to the tune of 30% of assets proposed to be capitalized during the year. Accordingly, DNHPDCL has computed the Return on Equity at 16% on post tax basis.

Commission's analysis:

As mentioned above, the complete asset capitalisation during the year has been funded by equity, the Commission for the purpose of equity addition during the year has limited it to 30% of total capitalisation as prescribed in the MYT Regulations, 2014. The RoE has been calculated on the average of opening and closing of equity during the year at rate of 16% (on post-tax basis) with opening equity considered equivalent to closing equity of FY 2016-17 approved in the true up. The following table provides the return on equity approved for the year.

Table 67: RoE approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	108.31	90.17	90.17
2	Additions on account of new capitalisation	35.71	35.71	2.17
4	Closing Equity	144.01	125.88	92.33
5	Average Equity	126.16	108.023	91.25
6	Return on Equity (%)	16%	16%	16.00%
	Return on Equity	**20.19**	**17.28**	**14.60**

The Commission now approves the Return on Equity of Rs. 14.60 Cr. in the APR for FY 2017-18.

4.17. Interest on Security Deposits

Petitioner's submission

The Petitioner submitted that it has a made a provision Rs. 2.62 Cr. towards payment of interest on consumer security deposits during the FY 2017-18, same as per actuals in FY 2016-17.

Commission's analysis:

The Commission has calculated the Interest on security deposits in accordance with the MYT Regulations, based on average of opening and closing consumer security deposits during the year. As approved in the ARR Order, the Commission has not considered any additions in consumer security deposits during the year. The same shall be considered as per actuals in the true up of FY 2017-18. The rate of interest has been considered equivalent to RBI Bank rate as on 1st April 2017 in accordance with the MYT Regulations. The table below provides the calculation of interest on consumer security deposits for the year.

Table 68: Interest on Security Deposits approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Security Deposit	35.08	-	32.96
2	Add: Deposits During the year	0.00	-	0.00
3	Less: Deposits refunded	0.00	-	0.00
4	Closing Security Deposit	35.08	-	32.96

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Now Approved by Commission
5	Average Security Deposit	35.08	-	32.96
6	Rate of Interest (%)	6.50%	-	6.50%
	Interest on Security Deposit	**2.28**	**2.62**	**2.14**

The Commission now approves Interest on Security Deposit as Rs. 2.14 Cr. in the APR for FY 2017-18.

4.18. Interest on Working Capital

Petitioner's submission

The Petitioner submitted that interest on working capital has been calculated based on the normative principles outlined by the Hon'ble Commission in the JERC (Multi Year Distribution Tariff) Regulations, 2014.

The working capital requirement for the Control Period has been computed considering the following parameters:

(a) Receivables of two months of billing

(b) Less power purchase cost of one month

(c) Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit

(d) Inventory for two months based on annual requirement for previous year

DNHPDCL has computed Interest on Working Capital at Rate of Interest of 9.30% as approved by the Commission the ARR Order

Commission's analysis:

The Commission for determination of working capital requirements of the Petitioner during the year has considered the receivables as Net ARR for 2 months, the revised power purchase cost of FY 2017-18 as determined above and the consumer security deposit. The inventory for two months has been considered on the same levels as per the audited annual accounts of FY 2016-17

With regards to the interest rate, the Commission has considered the SBI Base rate as on 1st April 2017, as stipulated in the MYT Regulations.

Accordingly, the interest on working capital has been calculated, as shown in the table below:

Table 69: Interest on Working Capital approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Now Approved by Commission
1	Receivables of two months of billing	293.67	352.27	417.24
2	Less: Power Purchase Cost for one month	172.33	199.20	205.45
3	Inventory Based on Annual Requirement for Previous FY for 2 months	0.42	0.61	0.61
4	Total Working Capital Requirement	121.76	153.68	212.40

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Now Approved by Commission
5	Less: Security Deposit excluding BG/FDR	35.08	32.96	32.96
6	Net Working Capital	86.68	120.72	179.44
7	Rate of Interest (%)	9.10%	9.30%	9.30%
	Interest on Working Capital	**7.89**	**11.23**	**16.69**

The Commission now approves the Interest on Working Capital as Rs. 16.69 Cr. in the APR for FY 2017-18.

4.19. Income Tax

Petitioner's submission

The Petitioner submitted that as per the JERC (Multi Year Distribution' Tariff) Regulations, 2014, Income Tax, if any, on the Licensed business of the Distribution Licensee shall be treated as expense and shall be recoverable from consumers through tariff. DNHPDCL for the year has not projected any income tax due to net overall loss projected to be incurred in the year.

Commission's analysis:

The Commission, for FY 2017-18 has not computed any income tax liability due to net overall revenue gap proposed to be incurred during the year.

Table 70: Income tax approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Return on Capital Base	20.19	-	-
2	Rate of Income Tax (%)	33.99%	-	-
3	Gross up return on Capital Base	30.58	-	-
	Income Tax	**10.39**	**0.00**	**0.00**

4.20. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner has not earmarked any provision for bad and doubtful debts for the year.

Commission's analysis

The Commission also has not considered any provision for Bad & Doubtful Debts. The same shall be accounted for as per actuals in the true up of FY 2017-18.

4.21. Non-Tariff Income

Petitioner's submission

The Petitioner, for estimating the non-tariff income for the FY 2017-18, ha considered an increase of 5% over the actual non-tariff income of the FY 2016-17, excluding the interest on fixed deposits and others. The Petitioner submitted that in the ARR Order for FY 2017-18, the Commission approved Non-tariff Income of Rs.82.27 Cr. Out of this, Rs. 48.79 Cr. was on account of interest on fixed deposits and Rs.15.18 Cr. on account of receivable against Short Term Open Access (STOA) applications. The Petitioner has not considered any receivables against

STOA application as no open access sales has been assumed by the Petitioner for the remaining period. Further, the interest on fixed deposits comprises of two components, interest on grant/corpus fund of the Government and interest on consumer surplus. Since the interest on grant/corpus is not created from the distribution business of the Petitioner, the interest earned on the same has not been included in the Non- Tariff Income, to be eventually be passed on to consumers. To segregate the income from interest on Govt. Grant and from consumer surplus, the existing ratio of the amount of Govt. Grant and the Working Capital requirement is determined using which the interest income from consumer surplus is calculated as Rs. 11.38 Cr., which is considered as part of the Non-Tariff Income.

Commission's analysis:

As discussed in the earlier sections, the Commission also has not considered any income on account of receivable against STOA applications. With regards to all the other heads constituting the NTI, the same amount as per actuals of FY 2016-17 has been considered. The same shall be considered on actual basis in the true up of FY 2017-18. The NTI approved in the ARR Order, Petitioner's submission and now approved by the Commission is shown in the table below:

Table 71: Non-Tariff Income approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Now Approved by Commission
1	Delayed Payment Charges	12.01	9.58	9.13
2	Reactive Charges Receivables	0.21	0.34	0.32
3	Capacitor Charges	0.04	0.00	0.00
4	Interest on FD and Others	48.79	11.38	33.73
5	Meter Testing Charges	0.06	0.04	0.04
6	Other Charges (Indirect)	0.84	1.03	0.98
7	Reconnection Charges	0.01	0.01	0.01
8	Registration Fees	0.29	0.24	0.23
9	Service Connection Charges	0.22	0.31	0.29
10	Supervision Charges	1.73	1.34	1.28
11	Tender Fees	0.02	0.02	0.02
12	Penalty Charges	0.03	0.01	0.01
13	STOA Application Receivables	15.18	0.00	0.00
14	Recovery of Doubtful Debts	2.85	2.08	1.99
15	Others	0.00	0.77	0.77
	Gross Total	**82.27**	**26.81**	**48.79**

The Commission now approves Non-Tariff Income of Rs. 48.79 Cr. in the APR for FY 2017-18

4.22. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the Petitioner submitted the net aggregate revenue requirement of Rs. 2,425.11 Cr. after adjusting the Non -Tariff Income for 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 in the APR for FY 2017-18 as provided in the next page:

Table 72: Aggregate Revenue Requirement approved by the Commission for FY 2017-18 (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved
1	Net Power Purchase Cost (inclusive of cost towards RPO and sale of surplus power)	2,102.43*	2,360.69*	2465.44*
2	Operation & Maintenance Expenses	24.65	24.79	25.45
3	Depreciation	28.04	23.15	22.51
4	Interest and Finance charges	16.18	12.16	5.42
5	Interest on Working Capital	7.89	11.23	16.69
6	Interest on Security Deposit	2.28	2.62	2.14
7	Return on Equity	20.19	17.28	14.60
8	Income Tax	10.39	0.00	0.00
9	**Total Revenue Requirement**	**2,212.05**	**2,451.92**	**2,552.25**
10	Less: Non-Tariff Income	82.27	26.81	48.79
11	**Net Revenue Requirement**	**2,129.77**	**2,425.11**	**2,503.46**

**Inclusive of revenue from sale of surplus power*

The Commission now approves the net ARR of Rs 2,503.46 Cr. in the APR for FY 2017-18.

4.23. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the revenue from sale of power at existing tariff as Rs. 2113.62 Cr. determined on the basis of energy sales in the territory for FY 2017-18. The estimated revenue for FY 2017-18 is based on the six month actual revenue at the existing tariff. The revenue for remaining six months of FY 2017-18 has been computed based on the retail tariff notified by the Commission in the Tariff Order for the FY 2017-18 dated 9th June, 2017. The following table provides the category wise revenue determined by the Petitioner for FY 2017-18.

Table 73: Revenue at existing tariff submitted by Petitioner (In Rs. Cr.)

S.No.	Category	Demand Charges (Rs. Cr.)	Energy Charges (Rs. Cr)	Total Revenue (Rs. Cr.)	ABR (Rs./kwh)
1	**Domestic**				
	Up to 50 units	-	2.96	2.96	1.20
	51-200 units	-	7.86	7.86	1.80
	201-400 units	-	4.70	4.70	2.20
	401 units and above	-	8.30	8.30	2.55
	Total Domestic		**23.83**	**23.83**	**1.95**
	Low Income Group (LIG)	**0.01**		**0.01**	**-**
2	**Commercial**				
	0-100 units		1.42	1.42	2.55
	above 100 units		9.48	9.48	3.35
	Total Commercial		**10.91**	**10.91**	**3.22**
3	**Public Lighting**	**0.00**	**2.29**	**2.29**	**3.00**
4	**Public Water Work**	**0.06**	**1.75**	**1.80**	**3.82**
	For the category	0.06	1.75		**0.00**
5	**Industrial**				
a)	HT				

S.No.	Category	Demand Charges (Rs. Cr.)	Energy Charges (Rs. Cr)	Total Revenue (Rs. Cr.)	ABR (Rs./kwh)
i)	**11KV Upto 1MW**	**96.84**	**503.78**	**600.62**	**3.87**
	For all units		503.78		
ii)	**11KV Above 1MW**	**92.75**	**401**	**493.62**	**3.88**
	For all units		400.87		
iii)	**66KV**	**122.02**	**454.10**	**576.12**	**3.93**
	For all units		454.10		
iv)	**220KV**	**87.19**	**284**	**370.96**	**3.99**
	For all units		283.78		
	Total HT Industrial	**398.79**	**1642.53**	**2041.33**	**3.91**
b)	**LT**	**2.60**	**70.38**	**72.98**	**3.58**
	upto 20HP	0.00	1.86	1.86	3.45
	above 20HP	2.60	68.52	71.13	3.58
	Total HT+LT Industrial	**401.39**	**1712.92**	**2114.31**	**3.90**
6	**Agriculture Consumption**		**0.49**	**0.49**	0.79
	Upto 10 HP		0.30		0.00
	Beyond 10 HP		0.19		0.00
7	**Temporary**				
	All units		0.84	**0.84**	2.49
	Power Factor (Incentive)/ Disincentive			**(40.86)**	
	Total	**401.46**	**1753.02**	**2113.63**	**3.77**

Commission analysis

The Commission has determined the category wise/ sub category wise and slab wise revenue at retail tariff as per the tariff rates applicable for FY 2017-18. The revenue from demand charges and the energy charges have been projected for each category/ sub category and slab. The Commission has not projected any revenue from Power factor initiative etc. and the same shall be considered as per actuals while truing up of FY 2017-18. The revenue from category/ sub category/ slab wise revenue as computed by the Commission for FY 2017-18 has been shown in the table below:

Table 74: Revenue at existing tariff computed by Commission (In Rs. Cr.)

S. No.	Category	Fixed Charges (Rs Cr.)	Energy charges (Rs Cr.)	Total (Rs. Cr.)	ABR (Rs./unit)
1	**Domestic**	**0.18**	**23.67**	**23.84**	**1.96**
(i)	0-50 units	0.00	2.94	2.94	1.20
(ii)	51-200 units	0.00	7.81	7.81	1.80
(iii)	201-400 units	0.00	4.67	4.67	2.20
(iv)	401 and above	0.00	8.25	8.25	2.55
(v)	Low Income Group	0.18	-	0.18	0.29
2	**Commercial**	**0.00**	**10.36**	**10.36**	**3.22**
(i)	0-100 units	0.00	1.35	1.35	2.55
(ii)	101 Units and Above	0.00	9.00	9.00	3.35
3	**LT Industrial**	**0.54**	**73.39**	**73.92**	**3.48**
(i)	LTP Motive Power (For All Units)	0.53	71.45	71.97	3.48

S. No.	Category	Fixed Charges (Rs Cr.)	Energy charges (Rs Cr.)	Total (Rs. Cr.)	ABR (Rs./unit)
	Up to 20 HP	0.00	1.89	1.89	3.45
	Above 20 HP	0.53	69.56	70.09	3.48
(ii)	LT Public Water Works (For all units)	0.01	1.94	1.95	3.72
	Up to 20 HP	0.00	1.70	1.70	3.70
	Above 20 HP	0.01	0.25	0.26	3.87
4	**HT/EHT**	**432.21**	**1628.61**	**2060.83**	**3.96**
(i)	11 kV- Load upto 1 MW	85.57	252.39	337.96	4.35
(ii)	11 kV- 1 MW and above	114.23	452.38	566.61	3.95
(iii)	66 kV	137.93	588.44	726.37	3.83
(iv)	220 kV	94.49	335.41	429.90	3.91
5	**Agriculture and Poultry**	**0.00**	**0.46**	**0.46**	**0.73**
(i)	For sanctioned load upto 10 HP	0.00	0.40	0.40	0.70
(ii)	Beyond 10 HP and up to 99 HP sanctioned load	0.00	0.07	0.07	1.00
6	**Public Lighting**	**0.00**	**2.53**	**2.53**	**3.00**
(i)	For all units		2.53	2.53	3.00
7	**Hoardings/Signboards**	**0.00**	**0.00**	**0.00**	**-**
(i)	For all units		0.00	0.00	-
8	**Temporary**	**0.00**	**1.62**	**1.62**	**4.99**
(i)	For all units		1.62	1.62	4.99
	Total	**432.93**	**1740.63**	**2173.56**	**3.89**

The Commission, has determined revenue from sale of power at existing tariff as Rs. 2,173.56 Cr. in the APR for FY 2017-18.

4.24. Revenue from open access consumers

Petitioner's submission

The Petitioner submitted the revenue from open access consumers as per actuals collected in the first 8 months of FY 2017-18. Further, since the Petitioner has not projected any sales through open access in the remaining months of the year, therefore no revenue has been projected for this period.

Commission analysis

The Commission also has not considered any sales though open access in the remaining months of FY 2017-18 therefore no revenue has been projected for the remaining months. The revenue from open access consumers has been approved as per actuals as submitted by the Petitioner for the first 8 months of FY 2017-18.

Table 75: Revenue from open access approved by Commission (In Rs Cr.)

Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved
Revenue from Open Access	167.01	14.61	14.61

4.25. Standalone Revenue Gap/Surplus

Petitioner's submission

Based on the ARR submitted and the revenue from retail tariff and open access, the Petitioner has submitted a standalone revenue gap of Rs. 296.87 Cr. in the APR for FY 2017-18.

Commission analysis

The Commission based on the approved ARR and retail tariff has approved the Revenue Gap/Surplus as follows:

Table 76: Standalone Revenue Gap/ Surplus at existing tariff (In Rs Cr.)

S. No	Particulars	Approved in ARR Order	Petitioners submission	Now Approved
1	Net Revenue Requirement	2,129.78	2,425.11	2503.46
2	Revenue from Retail Sales at Existing Tariff	1,776.69	2,113.62	2,173.56
3	Revenue from Open Access Charges	167.01	14.61	14.61
4	**Total Revenue**	**1943.70**	**2,128.23**	**2188.17**
5	**Net Gap /(Surplus)**	**186.07**	**296.87**	**315.29**

The standalone gap at existing retail tariff is Rs.315.29 Cr. for FY 2017-18. The estimated gap is carried over to the next year and has been considered while determining the tariff for FY 2018-19.

5. Chapter 5: Determination of Aggregate Revenue Requirement for the FY 2018-19

5.1. Background

The ARR for FY 2018-19 was approved in the MYT Order issued for the 1st Control Period (FY 2016-17 to FY 2018-19). In this Chapter the Commission determines the Aggregate Revenue Requirement for the FY 2018-19 based on the actual audited information available and the various norms defined in the MYT Order. The determination of Aggregate Revenue Requirement for the FY 2018-19 is to be carried out as per the following provisions of Regulation 6 of the JERC for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014:

"6.ARR Forecast

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

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

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

(a) Estimates of quantum of electricity to be supplied to consumers and wheeled on behalf of Distribution System Users for each financial year within the Control Period; and

(b) Prevailing tariff as at the date of making the application."

5.2. Approach for determination of ARR for the FY 2018-19

This Chapter analyses the individual elements constituting the Aggregate Revenue Requirement for the FY 2018-19, approved in the MYT Order dated 07th April, 2016 and re-computes the same considering the actual information available of various parameters for the FY 2016-17 as per the audited accounts and the provisional information available for first 8 months of the FY 2017-18. The revised ARR and revenue at existing tariff is determined for the FY 2018-19 to arrive at the revised revenue gap/surplus for the year.

5.3. Projection of Number of consumers, Connected Load and Energy Sales

Petitioner's Submission

The Petitioner has estimated the energy sales, connected load and number of consumers for the year based on the historical trends observed in the last five years (FY 2012-13 to FY 2016-17) and the actual data for the first 6 months of FY 2017-18.

Commission's Analysis

The Commission for projecting the number of consumers, connected load and energy sales for each category has observed the historical trends in the past 6 years (FY 2011-12 to FY 2016-17) and the actual data provided by the Petitioner for the first 8 months of FY 2017-18. The Commission has calculated the Combined Annual Growth Rate (CAGR) and the year on year (y-o-y) increase for each category and using appropriate growth rate has estimated the category wise consumers, connected load and energy sales. The tables below provides the trends observed in the growth of number of consumers, connected load and energy sales for the Petitioner.

Table 77: Growth in No. of consumers

Category	y-o-y growth					CAGR				
	FY13/ FY12	FY14/F Y13	FY15/ FY14	FY16/ FY15	FY17/ FY16	5 year	4 year	3 year	2 year	1 year
Domestic	4.35%	4.59%	4.49%	4.63%	5.06%	4.62%	4.69%	4.73%	4.84%	5.06%
LIG	-1.70%	1.64%	0.89%	-5.48%	8.63%	0.69%	1.30%	1.18%	1.33%	8.63%
Commercial	2.26%	0.90%	-1.19%	4.58%	3.83%	2.06%	2.00%	2.38%	4.21%	3.83%
LT Industrial (Motive Power)	-19.08%	2.47%	4.65%	1.85%	1.23%	-2.20%	2.54%	2.57%	1.54%	1.23%
LT Public Water Works	-	-	-	10.75%	5.29%	0.00%	0.00%	0.00%	7.99%	5.29%
HT/EHT	3.49%	1.51%	1.72%	0.23%	0.67%	1.52%	1.03%	0.87%	0.45%	0.67%
Agriculture & Poultry	2.77%	4.46%	4.80%	2.71%	4.29%	3.80%	4.06%	3.93%	3.50%	4.29%
Public Lighting	4.41%	15.61%	13.14%	4.52%	8.02%	9.05%	10.24%	8.50%	6.26%	8.02%
Temp. Supply	-	49.40%	27.09%	4.70%	3.89%	11.65%	19.88%	11.40%	4.30%	3.89%
Total	**1.67%**	**3.55%**	**3.64%**	**2.26%**	**5.46%**	**3.31%**	**3.72%**	**3.78%**	**3.85%**	**5.46%**

Table 78: Growth in Connected Load

Category	y-o-y growth					CAGR				
	FY13/ FY12	FY14/ FY13	FY15/ FY14	FY16/ FY15	FY17/ FY16	5 year	4 year	3 year	2 year	1 year
Domestic	26.03%	12.80%	24.84%	-11.47%	2.44%	9.99%	6.31%	4.22%	-4.77%	2.44%
Commercial	6.83%	28.94%	25.89%	-31.10%	5.16%	4.67%	4.14%	-3.02%	-14.88%	5.16%
LT Industrial (Motive Power)	-31.46%	17.04%	22.11%	3.35%	2.87%	0.82%	11.03%	9.09%	3.11%	2.87%
LT Public Water Works	-	-	-	14.02%	8.26%	0.00%	0.00%	0.00%	11.10%	8.26%
HT/EHT	3.92%	19.69%	4.16%	1.79%	-0.33%	5.62%	6.05%	1.86%	0.73%	-0.33%
Agriculture & Poultry	-2.25%	15.49%	20.47%	5.02%	2.03%	7.82%	10.50%	8.88%	3.51%	2.03%
Public Lighting	-26.61%	35.40%	40.09%	5.08%	8.10%	9.60%	21.16%	16.75%	6.58%	8.10%
Temp. Supply	-	183.89%	45.08%	-35.58%	0.01%	-7.42%	27.63%	-2.23%	-19.74%	0.01%
Total	**1.32%**	**19.35%**	**7.56%**	**-0.02%**	**0.25%**	**5.44%**	**6.50%**	**2.54%**	**0.11%**	**0.25%**

Table 79: Growth in Energy Sales

Category	y-o-y growth					CAGR				
	FY13/ FY12	FY14/ FY13	FY15/ FY14	FY16/ FY15	FY17/ FY16	5 year	4 year	3 year	2 year	1 year
Domestic	30.50%	14.99%	15.49%	9.01%	2.89%	14.22%	10.47%	9.01%	5.91%	2.89%
Commercial	-3.38%	10.87%	-9.21%	6.41%	5.49%	1.77%	3.10%	0.63%	5.95%	5.49%
LT Industrial (Motive Power)	6.22%	9.19%	6.22%	7.12%	5.40%	6.82%	6.97%	6.24%	6.26%	5.40%
LT Public Water Works	-	-	-	9.98%	27.92%	0.00%	0.00%	0.00%	18.61%	27.92%
HT/EHT	8.33%	7.83%	3.85%	-8.66%	-23.46%	-3.24%	-5.94%	-10.12%	-16.39%	-23.46%

Category	y-o-y growth					CAGR				
	FY13/ FY12	FY14/ FY13	FY15/ FY14	FY16/ FY15	FY17/ FY16	5 year	4 year	3 year	2 year	1 year
Agriculture & Poultry	12.00%	30.93%	-2.10%	33.92%	7.50%	15.63%	16.55%	12.12%	19.98%	7.50%
Public Lighting	-13.09%	32.41%	31.73%	-3.84%	10.86%	10.08%	16.77%	11.98%	3.25%	10.86%
Temp. Supply	-	2.02%	29.43%	13.33%	8.71%	0.00%	12.94%	16.83%	11.00%	8.71%
Total	8.48%	8.05%	4.15%	-7.62%	-21.36%	-2.37%	-4.91%	-8.88%	-14.77%	-21.36%

Using the appropriate growth rate from the trends observed above, the number of consumers, connected load and energy sales have been estimated for FY 2018-19. For projecting the sales of the HT/EHT category, a subjective rate of 1.86% has been considered, which is the actual CAGR growth rate observed in connected load during the last three years (FY 2014-15 to FY 2016-17). For all categories, the growth rate is applied over the figures obtained in FY 2017-18, as estimated in the previous Chapter. For HT/EHT category the growth rate is applied over the FY 2017-18 energy sales after considering the open access sales.

The growth rate adopted and the revised number of consumers, connected load and energy for each category have been tabulated below:

Table 80: No. of consumers

Category	Growth Rate		Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
Domestic	2 year CAGR	4.84%	47,153	46,888	47,083
LIG	2 year CAGR	1.33%	14,355	14,805	14,993
Commercial	2 year CAGR	4.21%	7,530	7,901	8,238
LT Industrial (Motive Power)	3 year CAGR	2.57%	2,301	2,274	2,170
LT Public Water Works	2 year CAGR	7.99%	373	395	417
HT/EHT	3 year CAGR	0.87%	1,004	922	911
Agriculture & Poultry	3 year CAGR	3.93%	1,379	1,361	1,364
Public Lighting	3 year CAGR	8.50%	377	386	412
Temp. Supply	2 year CAGR	4.30%	0	383	377
Total			**74,472**	**75,315**	**75,966**

Table 81: Connected Load (kVA)

Category	Growth Rate		Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
Domestic	4 year CAGR	6.31%	157,075	117,115.86	110,245.80
Commercial	4 year CAGR	4.14%	43,203	28,213.89	27,926.88
LT Industrial (Motive Power)	3 year CAGR	9.09%	129,269	124,655.88	134,558.05
LT Public Water Works	1 year CAGR	8.26%	2,406	2,694.09	2,864.12
HT/EHT	3 year CAGR	1.86%	1,449,422	1,275,178.02	1,157,247.37
Agriculture & Poultry	4 year CAGR	10.50%	6,342	6,498.98	6,825.58
Public Lighting	4 year CAGR	21.16%	2,464	2796.00	3,722.62
Temp. Supply	4 year CAGR	27.63%	-	2600.55	3,842.20
Total			**1,790,181**	**1559753.27**	**1,447,232.61**

Table 82: Energy Sales (MU)

Category	Growth Rate		Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
Domestic	2 year CAGR	5.91%	153.86	129.51	128.34
Commercial	2 year CAGR	5.95%	43.98	35.91	34.11
LT Industrial (Motive Power)	3 year CAGR	6.24%	252.27	216.77	220.02
LT Public Water Works	2 year CAGR	18.61%	3.93	5.59	6.22
HT/EHT	Subjective Rate	1.86%	6070.19	5771.28	5,532.29
Agriculture & Poultry	3 year CAGR	12.12%	6.99	6.53	7.13
Public Lighting	3 year CAGR	11.98%	21.53	7.87	9.44
Temp. Supply	Subjective Rate	0.00%	0.00	3.41	3.24
Total			**6552.75**	**6176.87**	**5,940.79**

The Commission approves number of consumer as 75,699, connected load as 1,447,232.61 kVA and energy sales of 5,940.79 MU in the ARR of FY 2018-19.

5.4. Inter-State transmission loss

Petitioner's submission

The Petitioner has considered the same Inter-State transmission loss of 3.66% as approved by the Commission in the MYT Order.

Commission's analysis

The Commission in the APR for FY 2017-18, as discussed in the previous Chapter, has approved the Inter-State transmission loss to 3.69% based on latest information available. The Commission approves the Inter-State transmission loss at same levels of FY 2017-18.

The table below provides the Inter-State distribution loss approved by the Commission.

Table 83: Inter-State transmission loss (%)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved
1	Inter-State Transmission Losses	3.66%	3.66%	3.69%

The Commission approves an Inter-State transmission loss of 3.69% in the ARR of FY 2018-19

5.5. Intra-State distribution loss

Petitioner's submission

The Petitioner has submitted an Intra-State distribution loss of 4.70%, as approved in the MYT Order.

Commission's analysis

The Commission approves the Intra-State distribution loss at same levels as approved in the MYT Order.

The table provided on the next page presents the Intra-State distribution loss approved in the ARR Order, Petitioners submission and now approved by the Commission

Table 84: Intra-State distribution loss (%)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Now Approved
1	Intra-State distribution loss	4.70%	4.70%	4.70%

The Commission approves Intra-State distribution loss of 4.70% in the ARR of FY 2018-19.

5.6. *Energy Requirement at State/UT Periphery*

Petitioner's submission

The Petitioner has submitted the Energy Requirement at State/ UT Periphery as follows:

Table 85: Energy Requirement (MU) submitted by Petitioner

Particulars	FY 2018-19
Sales	6,176.87
Open Access Sales	0.00
Less: Energy Savings	(5.77)
Total Sales	**6,171.10**
Add: Losses	304.35
T&D Losses	**4.70%**
Energy Required at Periphery	**6,475.44**
Add: Sales to common pool consumer	8.13
Total energy requirement at State periphery	6,483.57
Less: Energy Purchased through UI at Periphery	0.00
Less: Purchase from Traders	0.00
Less: Open Access Purchase	0.00
Total Energy Required at Periphery	**6,483.57**

Commission's analysis:

The energy requirement at State/UT Periphery is derived based on the energy sales estimate and the Intra-State transmission losses and Intra-State distribution losses approved for FY 2018-19.

Table 86: Energy Requirement (MU) approved by Commission

Particulars	Formula	Approved in MYT Order	Petitioner's Submission	Now Approved
Energy Requirement				
Energy sales within the State/UT	a	6,552.74	6,176.87	5940.79
Open Access Sales	b	1,301.30	0.00	0.00
Less: Energy Savings	c	(5.77)	(5.77)	0.00
Total Sales within the State/UT	d=a+b-c	7,848.27	6,171.10	5940.79
Distribution losses				
%	e	4.70%	4.70%	4.70%
MU	f=g-d	387.06	304.25	292.99
Energy required at State Periphery	g=d/(1-e)	8,235.33	6,475.44	6233.77
Energy Transactions at Periphery				
Add: Sales in Unscheduled Interchange	h	0.00	0.00	0.00
Add: Sales in Power Exchanges	i	0.00	8.13	0.00

Particulars	Formula	Approved in MYT Order	Petitioner's Submission	Now Approved
Less: Purchase under UI (MU)	j	0.00	0.00	0.00
Less: Open Access Purchase (MU)	k	1,348.10	0.00	0.00
Total Energy Requirement at State Periphery	**l=g+h+i-j-k**	**6,887.23**	**6,483.57**	**6233.77**

The Commission approves Total Energy Requirement at State/UT Periphery as 6233.77 MU in the ARR of FY 2018-19.

5.7. Power Purchase Quantum & Cost

Petitioners Submission

The Petitioner for projecting the energy availability for FY 2018-19 has considered the firm and infirm allocation from various generating stations. Detailed methodology for projecting the power availability to the Petitioner from various sources is summarized below.

Power Purchase:

The Petitioner has firm and infirm allocated share in Central Sector Generating Stations (CSGS) of NTPC, Nuclear Power Corporation of India Ltd (NPCIL), and NTPC Sail Power Company Ltd (NSPCL).

The power availability for the FY 2018-19 has been estimated based on the revised allocation issued by the Western Region Power Committee (WRPC) vide no's. WRPC/Comml-I/6/Alloc/2017/15183 dated 17.10.2017. The energy allocation from various generating stations has been considered same as in FY 2017-18, as discussed in the previous section.

For RGGPL power station, it is expected that the Petitioner will not be getting any power as the MSETCL isn't scheduling any power from this power station due to non-availability of natural gas.

Power purchase quantum from the NTPC stations for the FY 2018-19 has been calculated based on the installed capacity of each plant and by applying the average of previous two years PLF to calculate the plant-wise gross generation. For NSPCL, an average PLF of 90% has been considered

For gas based generating stations i.e. Kawas (KGPP) and Gandhar (GGPP) weighted average PLF of the last two years has been taken into account.

For computing the power availability at the UT periphery, 3.66% external transmission losses have been applied on the gross power purchase for the FY 2018-19.

Power Purchase Cost:

The cost of purchase from the central generating stations for the FY 2018-19 is estimated on the basis of following assumptions:

- Fixed cost for the FY 2018-19 has been projected considering a 5% escalation over the estimated fixed cost for various stations in FY 2017-18.
- Variable cost for each NTPC generating stations for the FY 2018-19 has been projected considering the actual the variable cost incurred during the first six months of FY 2017-18 for various stations.
- No energy charges have been projected for RGPPL plant as no power purchase has been considered in FY 2018-19 from this plant. Fixed charges have also not been considered as RGGPL is scheduling power to Indian Railways under some specific scheme of the Ministry of Power.

- For nuclear plants i.e. KAPP and TAPP single part tariff, the actual average variable cost per unit for the first six months of FY 2017-18 has been considered.

- For NTPC-SAIL Bhilai, fixed charges of FY 2017-18 have been escalated @ 5% to derive the fixed cost for FY 2018-19 and for projecting the variable cost the actual average variable cost per unit for the first six months of FY 2017-18 has been taken into consideration.

- The Petitioner has projected a deficit of 182.00 MU in FY 2018-19 which the Petitioner proposes to procure from open market/ UI at actual rate of Rs. 2.40/unit incurred in FY 2017-18.

- For power purchase from renewable energy sources, for the FY 2018-19, the DNHPDCL has outsourced the maintenance cost of the solar plants to BHEL. For the purchase of solar power from NTPC, the rate of Rs. 3.50/unit has been considered and for purchasing the non-solar renewable certificates the rate of Rs. 1.50/unit has been considered for the FY 2018-19. The Total Power Purchase cost from various sources for the FY 2018-19 is summarized in table below

Table 87: Power Purchase quantum (MU) and Cost (In Rs. Cr.) submitted by Petitioner

Source	Units Purchased (MU)	Fixed Charges (Rs. Cr)	Variable Charges (Rs. Cr.)	Other Charges (Rs. Cr.)	Total Charges (Rs. Cr.)	Per Unit Cost (Rs./kwh)
NTPC Stations						
KSTPS	356.81	26.13	49.90	0.00	76.03	2.13
KSTPS 3	155.22	24.11	20.75	0.00	44.86	2.89
VSTPP-I	299.53	26.13	47.27	0.00	73.39	2.45
VSTPP-II	227.55	16.96	33.70	0.00	50.65	2.23
VSTPP- III	241.61	27.83	36.85	0.00	64.67	2.68
VSTPP- IV	321.87	54.17	47.82	0.00	102.00	3.17
KGPP	417.88	52.28	94.03	0.00	146.32	3.50
GGPP	332.81	47.06	77.87	0.00	124.93	3.75
Sipat-I	522.43	89.22	70.75	0.00	159.98	3.06
Sipat-II	182.02	29.84	25.92	0.00	55.75	3.06
Mauda	194.47	66.80	53.48	0.00	120.28	6.18
VSTPS-V	173.91	31.56	27.90	0.00	59.46	3.42
Mauda 2	196.08	18.50	60.74	0.00	79.24	4.04
KHSTPP-II	19.52	2.44	4.70	0.00	7.14	3.66
Subtotal - NTPC	**3641.69**	**513.04**	**651.67**	**0.00**	**1164.71**	**3.20**
NSPCL Bhilai	**758.93**	**123.23**	**160.64**	**0.00**	**283.87**	**3.74**
NPCIL						
KAPS	123.17	0.00	24.44	0.00	24.44	1.98
TAPS	264.40	0.00	93.13	0.00	93.13	3.52
Subtotal	**387.57**	**0.00**	**117.57**	**0.00**	**117.57**	**3.03**
Others						
RGPPL	0.00	0.00	0.00	0.00	0.00	0.00
EMCO Energy	1529.50	505.92	276.79	0.00	782. 71	5.12
Subtotal	**1529.50**	**505.92**	**276.79**	**0.00**	**782. 71**	**5.12**
Power Purchases from Other Sources						
Indian E. Exchange/ Bilateral	182.00	0.00	43.68	0.00	43.68	2.40
UI	0.00	0.00	0.00	0.00	0.00	0.00
Solar	222.37	0.00	77.83	0.00	77.83	3.50
Non Solar	0.00	0.00	0.00	0.00	0.00	0.00

Source	Units Purchased (MU)	Fixed Charges (Rs. Cr)	Variable Charges (Rs. Cr.)	Other Charges (Rs. Cr.)	Total Charges (Rs. Cr.)	Per Unit Cost (Rs./kwh)
Solar REC	0.00	0.00	0.00	0.00	0.00	0.00
Non Solar REC	0.00	0.00	50.03	0.00	50.03	0.00
Subtotal	**404.37**	**0.00**	**171.54**	**0.00**	**171.54**	**4.24**
Rebate						
Total Power purchase	**6722.06**	**1142.20**	**1378.20**	**0.00**	**2520.40**	**3.75**

Transmission Charges

The Petitioner has projected the transmission charges payable to PGCIL based on the total capacity allocation in the transmission network. For the FY 2018-19 the transmission charges payable to the ED-DNH (Transmission Division) have also been considered by the Petitioner.

For projecting the PGCIL transmission charges for the FY 2018-19, an escalation of 5% over the estimated FY 17-18 transmission charges has been considered in view of the increase in transmission charges.

Table 88: Total Power Purchase Cost submitted by Petitioner (In Rs Cr.)

Particulars	FY 2018-19
Total Power Purchase	252040
PGCIL Charges	149.55
POSOCO	0.65
WRPC	0.00
Reactive Charges	0.19
MSTCL	0.00
Intra-State Transmission Charges	30.67
Total Power Purchase Cost (including Transmission Cost)	**2701.47**

Commission's Analysis

The Commission has projected the power purchase quantum and cost for FY 2018-19 based on the monthly actual data for 8 months for FY 2017-18, actual data for 12 months for FY 2016-17 and FY 2015-16 and annual data for FY 2014-15, as submitted by the Petitioner. For projecting availability of power, firm allocation from various generating stations has been considered. The source wise methodology followed for projection of quantum and cost of power procurement has been detailed as follows:

5.7.1. Availability of power

Availability of power from NTPC & NTPC-SAIL Bhilai:

- The power purchase quantum for 8 of the total fifteen NTPC plants has been estimated based on the 2 years average of quantum of energy scheduled in FY 2015-16 and FY 2016-17.
- For Vindhyachal Phase I, energy availability is considered same as FY 2015-16, due to irregular scheduling of power during major part of FY 2016-17.
- For Vindhyachal Phase V, the availability of power has been projected based on the average PLF achieved by the plants during the last five years
- For Mauda Phase I & NSPCL Bhilai, the availability of power has been projected based on the average PLF achieved by the plants during the last 2-3 years
- For Kawas and Gandhar gas power plants average PLF achieved during the first 8 months of FY 2017-18 till November 2017 has been considered for projecting the power purchase quantum.

- For Mauda Phase II, since the plant was operational only in August 2017, the energy availability has been projected on the basis of average PLF of last 5 years of similar plant such as Mauda Phase I.
- The availability of power from new station Solapur thermal plant which began operations in October 2017 has been projected assuming normative PLF of 85% and other relevant parameters as prescribed in CERC Tariff Regulations, 2014. The Petitioner hasn't projected any power from this plant while estimating the overall power purchase availability and cost for FY 2018-19.

Availability from NPCIL plants:

- From Kakrapara power station, power availability has been assumed to be same as in FY 2015-16 as no power has been scheduled in FY 2016-17 and first 8 months of FY 2017-18
- DNH has steady purchase of energy from Tarapur atomic plant, the energy projected to be scheduled in FY 2018-19 has been estimated based on the 2 years average of quantum of energy scheduled in FY 2015-16 and FY 2016-17.

Availability from RGPPL & EMCO Plants:

- As discussed in the APR for FY 2017-18, the State of Maharashtra is not scheduling power because of non-availability of natural gas and therefore no power purchase has been projected from this source for FY 2018-19.
- The availability of power from EMCO Warora has been estimated based on the average PLF achieved by the plant during the last five years

Availability of power from Open Market

- The energy deficit for the FY 2018-19, as discussed in the section of energy balance has been assumed to be procured from open market.
- No power has been projected under UI for FY 2018-19.

5.7.2. Power Purchase Cost

Variable Charges:

- The per unit variable costs have been computed by taking the average of the actuals per unit variable cost as per bills of September 2017 to November 2017 for all the stations.
- For procurement of power from Open Market, the Average Round the Clock (RTC) rate for western region during the calendar year 2017 has been considered.
- No cost has been projected towards UI Overdrawal/ Underdrawal.

Fixed Charges:

- The fixed costs have been determined based on the tariff Orders issued by the CERC for respective Central Generating Stations,
- For Mauda II since the tariff Order has not been issued, fixed cost as per power purchase bills has been considered.
- The Fixed cost has been apportioned on the basis of DNHPDCL's share in each station and average annual plant availability factor achieved during the last five years by the plant

Other Charges:

No other charges have been considered for the FY 2018-19.

5.7.3. Transmission Charges

The Commission has projected the transmission charges payable to PGCIL based on the total capacity allocation of the Petitioner of the transmission network. The Commission has taken into account the additional capacity share in the new stations while estimating the Inter-State transmission charges for FY 2018-19.

The transmission charges are determined based on the latest quarterly Point of Connection (PoC) rates approved by the Central Electricity Regulatory Commission (CERC) in accordance with Regulation 17(2) of Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010

The energy availability and the power purchase cost approved by the Commission has been shown in the table below:

Table 89: Power Purchase Quantum (MU) and cost (Rs. Cr.) approved by the Commission

Details of the stations	Power Purchase at Generator Periphery (MU)	Power Purchas at UT periphery (after adjusting ISTS Losses) (MU)	Variable Charges (Rs. Cr.)	Fixed charges (Rs. Cr.)	Total (Rs.Cr.)	Avg. Rate (@ State Periphery) (Rs./kwh)
NTPC						
KSTPS	399.12	384.39	46.43	25.65	72.08	1.88
KSTPS 3	172.07	165.72	19.67	23.58	43.25	2.61
VSTPP-I	318.53	306.78	47.36	25.41	72.77	2.37
VSTPP-II	231.84	223.29	32.28	16.26	48.54	2.17
VSTPP- III	252.91	243.58	35.21	25.99	61.21	2.51
VSTPP- IV	296.65	285.71	41.42	47.79	89.21	3.12
KGPP	330.45	318.25	117.64	50.37	168.01	5.28
GGPP	272.49	262.44	109.54	45.10	154.64	5.89
Sipat-I	665.02	640.48	77.36	83.54	160.91	2.51
Sipat-II	250.23	240.99	29.86	26.95	56.81	2.36
Mouda	201.11	193.69	50.68	61.53	112.21	5.79
VSTPS-V	173.43	167.03	24.34	30.10	54.44	3.26
Mouda 2	269.43	259.49	66.28	32.95	99.23	3.82
SLP	261.22	251.58	75.36	56.02	131.38	5.22
KHSTPP-II	22.32	21.50	4.80	2.30	7.10	3.30
Subtotal - NTPC	**4116.83**	**3964.92**	**778.24**	**553.54**	**1331.77**	**3.36**
NSPCL Bhilai	**716.17**	**689.74**	**130.63**	**124.13**	**254.76**	**3.69**
NPCIL						
KAPS	56.49	54.41	12.57	0.00	12.57	**2.31**
TAPS	322.26	310.37	90.94	0.00	90.94	**2.93**
Subtotal	**378.76**	**364.78**	**103.51**	**0.00**	**103.51**	**2.84**
Others						
RGPPL	0.00	0.00	0.00	0.00	0.00	**0.00**
EMCO Energy Ltd. (GMR Group)	1178.95	1135.44	216.10	336.66	552.76	**4.87**
Subtotal	**1178.95**	**1135.44**	**216.10**	**336.66**	**552.76**	**4.87**

Details of the stations	Power Purchase at Generator Periphery (MU)	Power Purchas at UT periphery (after adjusting ISTS Losses) (MU)	Variable Charges (Rs. Cr.)	Fixed charges (Rs. Cr.)	Total (Rs.Cr.)	Avg. Rate (@ State Periphery) (Rs./kwh)
Unscheduled Interchange (UI) Overdrawal/Underdrawal						
Open Market Purchase		78.01	23.17		23.17	**2.97**
Open Market Sale						
Total	**6390.70**	**6232.89**	**1251.65**	**1014.32**	**2265.97**	**3.64**
Renewable Purchase Obligation (RPO)						
Solar			31.95		31.95	
Non Solar			48.12		48.12	
Subtotal			**80.07**		**80.07**	
Transmission Charges						
PGCIL Charges					174.10	
DNH Transmission Charges					42.85	
Subtotal					**216.95**	
Total	**6390.70**	**6232.89**	**1331.71**	**1014.32**	**2562.98**	**4.11**

The Commission approves the quantum of power purchase as 6232.89 MU at State/ UT Periphery with total cost of Rs. 2,562.98 Cr for the FY 2018-19.

5.8. Renewable Purchase Obligations (RPOs)

Petitioner's submission:

The Petitioner submitted that a total of 222.37 MUs of solar energy and 333.55 MUs of non-solar energy has to be purchased during the FY 2018-19. To meet the solar target, the DNHPDCL has proposed to procure solar energy from NTPC at Rs. 3.50/unit. To meet the non-solar target, DNHPDCL has proposed to purchase Renewable Energy Certificates from the Energy Exchange at Rs. 1.50/unit.

Commission's analysis:

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 9.00% of its total consumption (including 3.60% from Solar) from renewable sources for the FY 2018-19.

The Commission has considered the per unit rate of Rs. 1.50/kwh to fulfill the Solar RPO and the same rate for fulfilling the Non Solar RPO. The total cost towards RPO compliance has been considered in the total power purchase cost approved earlier.

In accordance with the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010 the Commission has determined the following Renewable Purchase Obligation for the Petitioner for FY 2018-19:

Table 90: Summary of Renewable Purchase Obligation (RPO) (MU)

Description	FY 2017-18
Sales within State (MU)	**5940.79**
RPO obligation (in %)	**9.00%**
Solar	3.60%
Non-solar	5.40%
RPO obligation for the year (in MU)	**534.67**
Solar	213.87
Non-solar	320.80
RPO compliance (actual purchase)	**0.88**
- Solar	0.88
-Non-solar	-
RPO compliance (REC certificate purchase)	**533.79**
- Solar	212.99
-Non-solar	320.80

The Commission, similar to the methodology has computed the cost towards compliance of RPO as shown in the table below. The cost has already been considered in the total power purchase cost approved by the Commission in the previous section:

Table 91: Cost towards compliance of Renewable Purchase Obligation (RPO) (In Rs. Cr.)

Description	RPO (MU)	Total Cost (Rs. Cr.)	Avg. Rate (Rs./kWh)
Solar	212.99	31.95	1.50
Non-solar	320.80	48.12	1.50
Total	**533.79**	**80.07**	**1.50**

5.9. Energy Balance

Petitioner's submission

The Petitioner has submitted the energy balance as shown in the table below:

Table 92: Energy Balance submitted by Petitioner (MU)

Particulars	FY 2018-19
Sales	6,176.87
Open Access Sales	0.00
Less: Energy Savings	(5.77)
Total Sales	**6,171.10**

Particulars	FY 2018-19
Add: Losses	304.35
T&D Losses	**4.70%**
Energy Required at Periphery	**6,475.44**
Add: Sales to common pool consumer	8.13
Less: Own Generation	0.88
Total energy requirement at State periphery	6,482.69
Less: Energy Purchased through UI at Periphery	0.00
Less: Purchase from Traders	182.00
Less: Open Access Purchase	0.00
Total Energy Required at Periphery	**6,300.69**
Transmission loss	239.37
Transmission loss (%)	3.66%
Total Energy to be purchased	**6,540.06**
Total Energy requirement from tied up sources & UI at generator end	6,722.06
Total Energy requirement in UT including Open Access	6,722.06

Commission's analysis

Based on the revised estimates of energy sales and Power purchase quantum, the Commission approves the following energy balance as shown below:

Table 93: Energy Balance approved by Commission (MU)

Particulars	Formula	Approved in MYT Order	Petitioner's Submission	Now Approved
ENERGY REQUIREMENT				
Energy sales within the State/UT	a	6,552.74	6,176.87	5940.79
Open Access Sales	b	1,301.30	0.00	0.00
Less: Energy Savings	c	(5.77)	(5.77)	0.00
Total Sales within the State/UT	d=a+b-c	7,848.27	6,171.10	5940.79
Distribution losses				
%	e	4.70%	4.70%	4.70%
MU	f=g-d	387.06	304.25	292.99
Energy required at State Periphery	g=d/(1-e)	8,235.33	6,475.44	6233.77
Energy Transactions at Periphery				
Add: Sales in Unscheduled Interchange	h	0.00	0.00	0.00
Add: Sales in Power Exchanges	i	0.00	8.13	0.00
Less: Purchase under UI (MU)	j	0.00	0.00	0.00
Less: Open Access Purchase (MU)	k	1,348.10	0.00	0.00
Total energy scheduled at State Periphery from Tied-up Sources (MU)	l=g+h+i-j-k	6,887.23	6,483.57	6233.77
Energy Available at State periphery from firm sources	m	6,725.45	6300.69	6,154.88
Own Generation	n	0.00	0.88	0.88
Deficit/(Surplus)	**u=l-m-n**	**161.78**	**182.00**	**78.01**

The Commission approved an energy deficit of 78.01 MU in FY 2018-19. The additional cost of procurement has been considered in the total power purchase cost approved for FY 2018-19.

5.10. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprises of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). The MYT Regulations, 2014 considers the variation in O&M Expenses to be controllable. Regulation 9.2 of the MYT Regulation, 2014 states the following:

"9.2 Some illustrative variations or expected variations in the performance of the applicant, which may be attributed by the Commission to controllable factors include, but are not limited to the following:

(a)Variations in capital expenditure on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;

(b)Variations in Transmission and Distribution Losses (T&D) losses in case of bundled utilities and Distribution losses in case of unbundled utilities which shall be measured as the difference between the units input into the distribution system and the units supplied and billed;

(c)Depreciation and working capital requirements;

(d)Failure to meet the standards specified in the Joint Electricity Regulatory Commission (Standards of Performance) Regulations, 2009 except where exempted;

(e)Variation in operation & maintenance expenses, except those attributable to directions of the Commission;

(f)Variation in Wires Availability and Supply Availability;

(g)Variation on account of inflation;"

5.10.1. Employee Expenses

Petitioner's submission

The Petitioner has estimated the employee expenses comprising of basic salary, dearness allowances, medical cost, leave travel allowances, honorarium, etc. The Petitioner has not projected any cost related to leave salary contribution and pension of the employee and has prayed to the Commission that these may be considered at the time of true-up on actual basis.

Employee expenses have been estimated on normative basis, in accordance with the MYT Regulations and the methodology prescribed by the Commission in the MYT Order.

The Petitioner has prayed that the Employee Expenses be treated as uncontrollable expense and the proposed employee expenses may be considered for FY 2018-19.

Commission's analysis

As discussed, in the previous Chapter, any variation in the Operation and Maintenance Expense is controllable except expenses arising due to factors which are beyond the control of the Petitioner. Thus, in accordance with the MYT Regulations, 2014, the Commission approves the same Employee Expenses as approved in the MYT Order along with an additional expense on account of 7th Pay Commission. The additional impact of 7th Pay Commission has been considered same as that for FY 2017-18 and shall be considered on actual basis during true-up of FY 2018-19.

The table below provides the employee expenses approved in the MYT Order, Petitioner's submission and employee expenses now approved by the Commission.

Table 94: Employee Expenses approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	12.41	12.74	12.41
2	Impact of 7th Pay Commission	0.00	0.00	0.80
3	**Total Employee Expenses**	**12.41**	**12.74**	**13.21**

The Commission approves Employee Expenses of Rs. 13.21 Cr. in the ARR of FY 2018-19.

5.10.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted a revised estimate of A&G expenses in accordance with the MYT Regulations, 2014. A&G expenses primarily comprises of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.

Commission's analysis

The MYT Regulations, 2014 stipulate the O&M expenses to be controllable. Therefore, in accordance with the MYT Regulations the Commission now approves the same A&G Expenses as approved in the MYT Order for FY 2018-19

Table 95: A&G Expenses approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Administration & General Expenses (A&G)	5.84	6.56	5.84

The Commission approves the Administrative & General (A&G) expenses of Rs. 5.84 Cr. in the ARR of FY 2018-19.

5.10.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner submitted that the Repairs and Maintenance Expense comprise of expenses incurred by the Petitioner with regard to maintenance and upkeep of the transmission and distribution system. Adequate R&M activities help in reduction of transmission and distribution losses and breakdowns in the system. The R&M Expenses are determined on normative basis, in accordance with the MYT Regulations, 2014

Commission's analysis

The Commission in a similar approach adopted while approving the Employee expenses and A&G Expenses above, has considered the same R&M expenses as approved by the Commission in the MYT Order

The table provided on the next page presents the R&M expenses, approved by the Commission in the ARR Order, Petitioners submission and R&M expenses now approved by the Commission.

Table 96: R&M Expenses approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Repair & Maintenance Expenses (R&M)	9.82	7.25	9.82

The Commission approves the Repair & Maintenance (R&M) expenses of Rs. 9.82 Cr. in the ARR for FY 2018-19.

5.10.4. Total Operation and Maintenance Expenses (O&M)

The Commission approves total Operation & Maintenance Expenses of Rs. 28.87 Cr. against Rs. 26.54 Cr. as submitted by Petitioner.

Table 97: O&M Expenses approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	12.41	12.74	13.21
2	Administrative & General Expenses (A&G)	5.84	6.56	5.84
3	Repair & Maintenance Expenses	9.82	7.25	9.82
	Total Operation & Maintenance Expenses	**28.07**	**26.54**	**28.87**

5.11. Capital Expenditure & Capitalisation

Petitioner's submission

The Petitioner as per the Petition has submitted the capital expenditure and capitalisation during FY 2018-19 same as approved by the Commission in the ARR Order.

Commission's analysis:

The Commission with regard to the capital expenditure and capitalisation proposed to be undertaken during the year, directed the Petitioner to submit the scheme wise Detailed Project Reports (DPR) and the copy of the Technical Sanctions accorded to each project. The Petitioner in response, submitted the scheme wise capital expenditure and capitalisation along with the copy of the technical sanctions of the respective schemes.

The Petitioner submitted the supporting documents for capital expenditure worth Rs. 139.00 Cr. for setting up an underground cabling system with the new 66/11 KV GIS substation in the SMC area. As per the documents submitted, the capital expenditure worth Rs. 60.00 Cr. is proposed to be undertaken in FY 2018-19 and the remaining in FY 2019-20. The project is planned to be capitalised in FY 2019-20. Other than this particular scheme, no scheme has been proposed by the Petitioner that is going to capitalize in FY 2018-19. Therefore, no capitalisation has been approved by the Commission for FY 2018-19. In case, the Petitioner enhances its efforts in carrying out infrastructure works during FY 2018-19, the same shall be considered while undertaking the APR for FY 2018-19.

Table 98: Capital Expenditure and Capitalisation approved by Petitioner (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Capital Expenditure	67.10	67.10	60.00
2	Capitalisation	83.18	83.10	0.00

The Commission approves capital expenditure of Rs. 60.00 Cr. and no capitalisation in the ARR of FY 2018-19.

5.12. Capital Structure

Petitioner's Submission

The Petitioner, as per the Petition submitted, that capitalisation of Rs. 83.18 Cr. shall be undertaken in FY 2018-18. Further, the entire capital deployment at DNHPDCL shall be through equity.

Commission's analysis

As discussed, while determining the capital structure, as the Petitioner has failed to provide the details of the assets created from consumer contributions, no asset has been assumed to be funded through consumer contribution. Further, since the Petitioner submitted that the entire capitalisation is funded through equity, equity higher than 30% of capitalisation has been considered as normative loan. In accordance with the MYT Regulations, 2014, the Commission has determined the Capital Structure for FY 2018-19 as follows:

Table 99: GFA addition approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved
1	Opening Gross Fixed Assets	538.23	546.39	434.59
2	Addition During the FY	83.18	83.19	0.00
3	Adjustment/Retirement During the FY	-	-	0.00
4	Closing Gross Fixed Assets	621.41	629.57	434.59

Table 100: Normative Loan addition (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	151.54	116.63	30.39
2	Add: Normative Loan During the year	58.23	58.23	0.00
3	Less: Normative Repayment equivalent to Depreciation	34.01	28.48	22.70
4	Closing Normative Loan	175.76	146.37	7.69

Table 101: Normative Equity addition (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	148.69	125.88	91.25
2	Additions on account of new capitalisation	24.95	24.95	0.00
3	Closing Equity	173.65	150.83	91.25

5.13. Depreciation

Petitioner's submission

For computation of Depreciation, the Petitioner has considered the opening balance of the GFA for FY 2018-19 same as the closing balance of FY 2017-18 and subsequently added the capitalisation proposed during the FY 2018-19. The Depreciation has been worked out by applying the asset wise rates as prescribed in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014.

Commission's analysis

In the MYT Order, the Commission approved the following asset wise depreciation rate as provided in the table below:

Table 102: Depreciation Rate (%)

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

In absence of any capitalisation proposed during FY 2018-19, the Commission has considered the same weighted average depreciation rate as considered in FY 2017-18. The deprecation has been calculated on the average Gross Fixed Assets (GFA) with the opening GFA considered equivalent to closing GFA of FY 2017-18 as approved in the Chapter for APR above. The net addition during the year has been considered equivalent to capitalisation as approved above. The following table provides the calculation of deprecation during the year FY 2018-19.

Table 103: Depreciation approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved
1	Opening Gross Fixed Assets	538.23	546.39	434.59
2	Addition During the FY	83.18	83.19	0.00
3	Adjustment/Retirement During the FY	-	-	0.00
4	Closing Gross Fixed Assets	621.41	629.57	434.59
5	Average Gross Fixed Assets	579.82	587.98	434.59
6	Rate of Depreciation (%)	5.86%	4.84%	5.22%
	Depreciation	**34.01**	**28.48**	**22.70**

The Commission approves depreciation of Rs. 22.70 Cr. in the ARR of FY 2018-19.

5.14. Interest on Loan

Petitioner's submission

The Petitioner has determined the Interest on Loan on normative basis according to the MYT Regulations, 2014. The opening balance of loans for FY 2018-19 is considered same as closing balance of FY 2017-18. The normative loan addition in FY 2018-19 has been computed as 70% of the capitalisation proposed during FY 2017-18.

The repayment of loans has been considered equal to the depreciation during FY 2018-19. Further the rate of interest has been considered as SBI PLR @ 14.05%.

Commission's analysis:

The Commission has determined the Interest on Loan in accordance with the MYT Regulations. The Commission has considered the actual capitalisation of assets as approved in the foregoing paragraphs. Repayment has been considered equivalent to depreciation allowed during the year.

The Commission, similar to the approach followed in previous years, has considered the rate of interest as prevailing SBI Prime Lending Rate (PLR) of 13.40%. Further, in accordance with the MYT Regulations, 2014, the Interest on Loan has been calculated on the average loan during the year with opening loan considered equivalent to the closing loan approved in APR for FY 2017-18.

The table below provides the Interest on Loan approved by the Commission

Table 104: Interest on loan approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	151.54	116.63	30.39
2	Add: Normative Loan During the year	58.23	58.23	0.00
3	Less: Normative Repayment equal to Depreciation	34.01	28.48	22.70
4	Closing Normative Loan	175.76	146.37	7.69
5	Average Normative Loan	163.65	131.50	19.04
6	Rate of Interest (%)	14.05%	14.05%	13.40%
	Interest on Loan	**22.99**	**18.48**	**2.55**

The Commission approves Interest on Loan as Rs. 2.55 Cr. in the ARR of FY 2018-19.

5.15. Return on Equity (RoE)

Petitioner's submission

The Petitioner has computed the Return on Equity (RoE) in accordance with the MYT Regulations 2014, wherein RoE is computed on 30% of the capital base. The Petitioner has considered the opening equity equivalent to closing equity for FY 2017-18 and has considered added equity to the tune of 30% of assets capitalized during the year. Accordingly, DNHPDCL has computed the Return on Equity at 16% on post tax basis.

Commission's analysis:

The RoE has been calculated on normative basis on the average of opening and closing of equity during the year at rate of 16% (on post-tax basis) with opening equity considered equivalent to closing equity of FY 2017-18. Since no capitalisation has been approved for FY 2018-19, the corresponding addition has been considered as nil. The following table provides the return on equity approved for the year.

Table 105: RoE approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	148.69	125.88	91.25
2	Additions on account of new capitalisation	24.95	24.95	0.00
4	Closing Equity	173.65	150.83	91.25
5	Average Equity	161.17	138.37	91.25
6	Return on Equity (%)	-	16%	16.00%
	Return on Equity	**27.78**	**22.14**	**14.60**

The Commission approves Return on Equity of Rs. 14.60 Cr. in the ARR of FY 2018-19.

5.16. Interest on Security Deposits

Petitioner's submission

The Petitioner submitted that it has a made a provision Rs. 2.62 Cr. towards payment of interest on consumer security deposits, same as in FY 2017-18.

Commission's analysis:

The Commission has calculated the Interest on security deposits in accordance with the MYT Regulations, based on average of opening and closing consumer security deposits during the year. As per the approach followed in the MYT Order, the Commission has not considered any additions in consumer security deposits during the year. The rate of interest has been considered equivalent to prevailing RBI Bank rate. The table below provides the calculation of interest on consumer security deposits for the year.

Table 106: Interest on Security Deposits approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Security Deposit	-	-	32.96
2	Add: Deposits During the year	-	-	0.00
3	Less: Deposits refunded	-	-	0.00
4	Closing Security Deposit	-	-	32.96
5	Average Security Deposit	-	-	32.96
6	Rate of Interest (%)	-	-	6.25%
	Interest on Security Deposit	**3.32**	**2.62**	**2.06**

The Commission approves Interest on Security Deposit as Rs. 2.06 Cr. in the APR for FY 2017-18.

5.17. Interest on Working Capital

Petitioner's submission

The Petitioner submitted that interest on working capital has been calculated based on the normative principles outlined by the Hon'ble Commission in the JERC (Multi Year Distribution Tariff) Regulations, 2014.

The working capital requirement for the Control Period has been computed considering the following parameters:

(a) Receivables of two months of billing

(b) Less power purchase cost of one month

(c) Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit

(d) Inventory for two months based on annual requirement for previous year

DNHPDCL has computed interest on working capital at 9.30% as approved by the Commission in the MYT Order.

Table 107: Interest on Working Capital submitted by Petitioner (In Rs Cr.)

S. No	Particulars	Petitioner's Submission
1	Receivables of two months of billing	392.64
2	Less: Power Purchase Cost for one month	225.12

S. No	Particulars	Petitioner's Submission
3	Inventory Based on Annual Requirement for Previous FY for 2 months	0.61
4	Total Working Capital Requirement	168.13
5	Less: Security Deposit excluding BG/FDR	32.96
6	Net Working Capital	135.16
7	Rate of Interest (%)	9.30%
	Interest on Working Capital	**12.57**

Commission's analysis:

The Commission for determination of working capital requirements of the Petitioner during the year has considered the receivables as Net ARR for 2 months, the revised power purchase cost of FY 2018-19 as shown above and the consumer security deposit. The inventory for two months has been considered same as considered in FY 2017-18.

With regards to the interest rate, the Commission has considered the prevailing SBI Base rate, in accordance with the MYT Regulations.

Accordingly, the interest on working capital has been calculated, as shown in the table below:

Table 108: Interest on Working Capital approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Receivables of two months of billing	482.28	392.64	433.53
2	Less: Power Purchase Cost for one month	225.71	225.12	213.58
3	Inventory Based on Annual Requirement for Previous FY for 2 months	0.28	0.61	0.61
4	Total Working Capital Requirement	256.85	168.13	220.56
5	Less: Security Deposit excluding BG/FDR	42.86	32.96	32.96
6	Net Working Capital	213.99	135.16	187.60
7	Rate of Interest (%)	9.30%	9.30%	8.65%
	Interest on Working Capital	**19.90**	**12.57**	**16.23**

The Commission approves the Interest on Working Capital of Rs. 16.23 Cr. in the ARR of FY 2018-19.

5.18. Income Tax

Petitioner's submission

The Petitioner submitted that as per the JERC (Multi Year Distribution' Tariff) Regulations, 2014, Income Tax, if any, on the Licensed business of the Distribution Licensee shall be treated as expense and shall be recoverable from consumers through tariff. DNHPDCL for the year has not projected any income tax due to net overall loss to be incurred in the year at current tariff.

Commission's analysis:

The Commission, for FY 2018-19 has not computed any income tax liability and will true up based on the actual income tax paid by the Petitioner.

Table 109: Income Tax approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Return on Capital Base	27.78	-	-
2	Rate of Income Tax (%)	33.99%	-	-
3	Gross up return on Capital Base	42.09	-	-
	Income Tax	**14.31**	**0.00**	**0.00**

5.19. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner has not earmarked any provision for bad and doubtful debts for the year.

Commission's analysis

The Commission also has not considered any Provision for Bad & Doubtful Debts. The same shall be accounted for as per actuals in the true up of FY 2018-19.

5.20. Non-Tariff Income

Petitioner's submission

For projecting the non-tariff income for the FY 2018-19, the Petitioner has considered an increase of 5% p.a. over the estimated non-tariff income for FY 2017-18.

Commission's analysis:

The Petitioner has considered the same Non-Tariff Income as approved in the APR for FY 2017-18 for FY 2018-19. The NTI approved in the ARR Order, Petitioner's submission and now approved by the Commission is shown in the table below:

Table 110: Non -tariff Income approved by Commission (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Delayed Payment Charges	-	-	9.13
2	Reactive Charges Receivables	-	-	0.32
3	Capacitor Charges	-	-	0.00
4	Interest on FD and Others	-	-	33.73
5	Meter Testing Charges	-	-	0.04
6	Other Charges (Indirect)	-	-	0.98
7	Reconnection Charges	-	-	0.01
8	Registration Fees	-	-	0.23
9	Service Connection Charges	-	-	0.29
10	Supervision Charges	-	-	1.28
11	Tender Fees	-	-	0.02
12	Penalty Charges	-	-	0.01

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
13	STOA Application Receivables	-	-	0.00
14	Recovery of Doubtful Debts	-	-	1.99
15	Others	-	-	0.77
	Gross Total	**50.45**	**28.15**	**48.79**

The Commission approves Non-Tariff Income of Rs. 48.79 Cr. in the ARR of FY 2017-18

5.21. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the Petitioner submitted the net aggregate revenue requirement of Rs. 2,782.51 Cr. after adjusting the Non -Tariff Income for FY 2018-19.

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 FY 2018-19 as provided in the following table:

Table 111: Aggregate Revenue Requirement approved by Commission for FY 2018-19 (In Rs Cr.)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved
1	Net Power Purchase Cost (inclusive of cost towards RPO and sale of surplus power)	2,708.53*	2699.84*	2,562.98*
2	Operation & Maintenance Expenses	28.07	26.55	28.87
3	Depreciation	34.01	28.48	22.70
4	Interest and Finance charges	22.99	18.48	2.55
5	Interest on Working Capital	19.90	12.57	16.23
6	Interest on Security Deposit	3.32	2.62	2.06
7	Return on Equity	27.78	22.14	14.60
8	Income Tax	14.31	0.00	0.00
9	**Total Revenue Requirement**	**2858.90**	**2810.66**	**2,649.99**
10	Less: Non-Tariff Income	50.45	28.15	48.79
11	**Net Revenue Requirement**	**2808.45**	**2782.51**	**2,601.20**

**Inclusive of revenue sale of surplus power*

The Commission approves net ARR of Rs. 2,601.20 Cr. for FY 2018-19.

5.22. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the revenue from sale of power at existing tariff as Rs. 2355.83 Cr. based on the projected energy sales, connected load and number of consumers. The revenue for FY 2018-19 has been computed based on the retail tariff notified by the Commission in the Tariff Order for the FY 2017-18 dated 9th June, 2017. The table on the next page provided the category wise revenue determined by the Petitioner for FY 2018-19.

Table 112: Revenue submitted by Petitioner (In Rs. Cr.)

S.No.	Category	Demand Charges (Rs. Cr.)	Energy Charges (Rs. Cr.)	Total Revenues (Rs. Cr.)	ABR (Rs./kwh)
1	**Domestic**				
	Up to 50 units		3.14	3.14	1.20
	51-200 units		8.33	8.33	1.80
	201-400 units		4.98	4.98	2.20
	401 units and above		8.80	8.80	2.55
	Total Domestic		**25.24**	**25.24**	1.95
2	**LIGH**				-
	All units	**0.01**		**0.01**	-
3	**Commercial**				-
	0-100 units		1.51	1.51	2.55
	above 100 units		10.05	10.05	3.35
	Total Commercial		**11.56**	**11.56**	**3.22**
3	**Public Lighting**	**0.00**	**2.36**	**2.36**	3.00
4	**Public Water Work**	**0.06**	**2.07**	**2.13**	**3.81**
5	**Industrial**				
a)	HT				
i)	**11KV Upto 1MW**	**100.92**	**557.20**	**658.12**	**3.84**
	For all units		557.20		
ii)	**11KV Above 1MW**	**96.66**	**443**	**540.04**	**3.84**
	For all units		443.38		
iii)	**66KV**	**128.87**	**502.26**	**631.13**	**3.90**
	For all units		502.26		
iv)	**220KV**	**92.09**	**314**	**405.95**	**3.94**
			313.87		
	Total HT Industrial	**418.54**	**1816.71**	**2235.24**	**3.87**
b)	**LT**	**2.73**	**74.78**	**77.52**	**3.58**
	upto 20HP	0.00	1.97	1.97	3.45
	above 20HP	2.73	72.81	75.54	3.58
	Total HT+LT Industrial	**421.27**	**1891.49**	**2312.76**	**3.86**
6	**Agriculture Consumption**		**0.52**	**0.52**	0.79
	Upto 10 HP		0.32		0.00
	Beyond 10 HP		0.20		0.00
7	**Temporary**				
	All units		**1.26**	**1.26**	**3.70**
	Total Revenue	**421.34**	**1934.49**	**2355.83**	**3.81**

Commission analysis

The Commission has determined the category wise/ sub category wise and slab wise revenue at retail tariff as per the applicable tariff rates. The revenue from demand charges and the energy charges have been projected for each category/ sub category and slab. The category/ sub category/ slab wise revenue as computed by the Commission for FY 2018-19 has been shown in the table below:

Table 113: Revenue from existing retail tariff (In Rs. Cr.)

S. No.	Category	Fixed Charges (Rs Cr.)	Energy charges (Rs Cr.)	Total (Rs. Cr.)	ABR (Rs./unit)
1	**Domestic**	**0.18**	**25.01**	**25.19**	**1.96**
(i)	0-50 units	0.00	3.11	3.11	1.20
(ii)	51-200 units	0.00	8.25	8.25	1.80
(iii)	201-400 units	0.00	4.93	4.93	2.20
(iv)	401 and above	0.00	8.72	8.72	2.55
(v)	Low Income Group	0.18	-	0.18	0.29
2	**Commercial**	**0.00**	**10.98**	**10.98**	**3.22**
(i)	0-100 units	0.00	1.44	1.44	2.55
(ii)	101 Units and Above	0.00	9.54	9.54	3.35
3	**LT Industrial**	**0.56**	**78.21**	**78.77**	**3.48**
(i)	LTP Motive Power	0.55	75.91	76.46	3.48
	Up to 20 HP	0.00	2.00	2.00	3.45
	Above 20 HP	0.55	73.90	74.45	3.48
(ii)	LT Public Water Works	0.01	2.30	2.31	3.72
	Up to 20 HP	0.00	2.01	2.01	3.70
	Above 20 HP	0.01	0.29	0.30	3.85
4	**HT/EHT**	**432.12**	**1729.17**	**2161.28**	**3.91**
(i)	11 kV- Load upto 1 MW	87.60	267.97	355.57	4.31
(ii)	11 kV- 1 MW and above	115.71	480.31	596.02	3.91
(iii)	66 kV	138.85	624.77	763.62	3.79
(iv)	220 kV	89.96	356.12	446.07	3.82
5	**Agriculture and Poultry**	**0.00**	**0.52**	**0.52**	**0.73**
(i)	For sanctioned load upto 10 HP	0.00	0.45	0.45	0.70
(ii)	Beyond 10 HP and up to 99 HP sanctioned load	0.00	0.07	0.07	1.00
6	**Public Lighting**	**0.00**	**2.83**	**2.83**	**3.00**
(i)	For all units		2.83	2.83	3.00
7	**Hoardings/Signboards**	**0.00**	**0.00**	**0.00**	**-**
(i)	For all units		0.00	0.00	-
8	**Temporary**	**0.00**	**1.62**	**1.62**	**4.99**
(i)	For all units		1.62	1.62	4.99
	TOTAL	**432.86**	**1848.32**	**2281.19**	**3.84**

The Commission has determined revenue from sale of power at existing tariff as Rs. 2,281.19 Cr. for FY 2018-19.

5.23. Standalone Revenue Gap/ Surplus

Petitioner's submission

Based on the ARR submitted and the revenue from retail tariff, the Petitioner has submitted a standalone revenue gap of Rs. 426.70 Cr. for FY 2018-19.

Commission analysis

The Commission based on the approved ARR and existing retail tariff has derived the following Revenue Gap/Surplus:

Table 114: Standalone Revenue Gap/ Surplus (In Rs Cr.)

Particulars	Approved in MYT Order	Petitioners Submission	Now Approved
Net Revenue Requirement	2,808.45	2782.51	2601.20
Revenue from Retail Sales at Existing Tariff	2,905.38	2355.83	2,281.19
Net Gap /(Surplus)	**(96.94)**	**426.70**	**320.01**

The standalone gap at existing retail tariff is Rs.320.01 Cr. for FY 2018-19. The estimated gap is considered while determining the retail tariff for FY 2018-19, as discussed in the subsequent Chapter.

6. Chapter 6: Tariff Principles and Design

6.1. Overall Approach

The Commission while designing retail tariffs for FY 2018-19 has kept in view the principles of determination of tariff set out in the Electricity Act, 2003 (EA, 2003), Tariff Policy, 2016 and the MYT Regulations, 2014.

The Commission, with this Tariff Order, has tried to meet the objectives of the EA 2003, as set out in its Preamble, including the protection of the interest of consumers, the supply of electricity to all areas and the rationalisation of tariffs. The EA, 2003 also directs to maintain a healthy balance between the interests of the Utilities and the reasonableness of the cost of power being supplied to consumers. The Commission has also taken into consideration DNHPDCL's submissions as well as the public responses in these proceedings.

The provision of supply of electricity to all the people is an essential driver for development, and also influences social and economic change. Since, the area served by DNHPDCL has 94-95% of industrial sales, the Commission has attempted to ensure that, while industries and commerce are promoted, it is not at the cost of other segments of society. The Commission has also sought to ensure regulatory consistency for all stake-holders and financial sustainability of the Petitioner.

6.2. Applicable Regulations

Regulation 36 of MYT Regulations, 2014 states the following:

"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

(i) 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.

(ii) 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".

(iii) 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

(i) 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.

(ii) 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

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

(ii) 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.

(iii) 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.

(iv) 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."

6.3. Consolidated Revenue Gap/ Surplus

Petitioner's Submission

The Petitioner has proposed a consolidated revenue gap of Rs. 616. 32 Cr. till FY 2018-19. The standalone and consolidated revenue gap as submitted by the Petitioner has been tabulated below:

Table 115: Standalone Revenue Gap/ Surplus submitted by Petitioner (In Rs Cr.)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Net Revenue Requirement	1,978.25	2,425.11	2,782.51
Revenue from Retail Sales at Existing Tariff	1,775.10	2,113.62	2355.83
Revenue from Open Access	102.61	14.61	-
Standalone Gap /(Surplus) for the year	**100.51**	**296.87**	**426.69**

Table 116: Consolidated Revenue Gap/ Surplus submitted by Petitioner (In Rs Cr.)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening Gap /(Surplus)	(207.75)	(107.24)	189.63
Add: Gap/(Surplus)	100.51	296.87	426.69
Closing Gap /(Surplus)	(107.24)	189.63	616.32
Carrying Cost	0.00	0.00	0.00
Final Closing Gap/ (Surplus)	**(107.24)**	**189.63**	**616.32**

Commission's analysis

The Petitioner while projecting consolidated revenue gap has not considered the carrying cost. The Commission observes that the Petitioner has the surplus fund, which is deposited in the Banks. This surplus fund is being used by the Petitioner for funding the revenue gap. The Commission, further notices that the Petitioner has not taken any loan till date. As per the preamble of the Electricity Act, 2003, the Commission is required to balance the interest of all the stakeholders while determining the tariff. Keeping in mind all of the above, the Commission as considered the carrying cost @ 8.00% which is the opportunity cost for the Petitioner.

The Commission, in the APR Order has approved a revenue surplus of Rs. 383.88 Cr. till 31st March 2016. With reference to the above mentioned surplus amount, during the discussions with the Commission, the Government of DNH has requested the Commission not to consider an amount of about Rs 180 Cr. in the surplus considered by the Commission in earlier Order, as this was given to the DNHPDCL as capital grant. However, a written submission to this effect is yet to be received. Based on this request, the Commission has decided to set aside a sum of Rs 180.00 Cr. from revenue surplus considered earlier. The Commission will take cognizance of this matter in the next Tariff Order based on the submissions from the Government of DNH. Accordingly, the Commission determines the following consolidated revenue gap/ surplus as shown below:

Table 117: Standalone Revenue Gap/ Surplus determined by Commission (In Rs. Cr)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Net Revenue Requirement	1,984.50	2,503.46	2,601.20
Revenue from Retail Sales at Existing Tariff	1,775.10	2,173.56	2,281.19
Revenue from Open Access	102.61	14.61	0.00
Standalone Gap /(Surplus) for the year	**106.79**	**315.29**	**320.01**

Table 118: Consolidated Revenue Gap/ Surplus determined by Commission (In Rs. Cr)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening Gap /(Surplus)	(383.88)	(97.09)	224.24
Surplus set aside	(180.00)	-	-
Gap/(Surplus) available for adjustment	(203.88)		
Add: Gap/(Surplus)	106.79	315.29	320.01
Closing Gap /(Surplus)	(97.09)	218.20	544.25
Carrying Cost (@8.00% p.a.)	0.00	6.04	30.74
Final Closing Gap/ (Surplus)	**(97.09)**	**224.24**	**574.99**

The Commission determines a consolidated revenue gap of Rs. 574.99 Cr. till FY 2018-19 at existing tariff.

6.4. Treatment of the consolidated Gap/ Surplus and Tariff Design

As derived from above, the resultant consolidated revenue gap is Rs. 574.99 Cr., signifying that the existing tariff does not commensurate with the costs incurred by the Petitioner. In this present situation, in order to fulfill this revenue deficit and to be financially sustainable, the retail consumer tariffs demand a tariff increase. However the revenue gap being substantial, recovering this complete revenue gap from increase in consumer tariffs may lead to a tariff shock. Hence, the Commission proposes to recover certain proportion of this gap by imposing a Regulatory Surcharge and the remaining through increase in retail tariff, for each consumer category. The individual approach adopted and the applicability of the same has been discussed in the following sections.

6.4.1. Tariff Proposal

Petitioner's Submission

The Petitioner has proposed to recover the consolidated revenue gap of Rs. 616.32 Cr. by way of tariff hike of only HT/EHT category. The proposed tariff for each of the subcategory within HT/ EHT category has been shown below:

Table 119: Retail Tariff proposed by Petitioner for HT/EHT Category

HT/EHT	Existing		Proposed	
	Demand Charge	Energy Charge	Demand Charge	Energy Charge
11 kV- Load upto 1 MW	375 Rs/kVA/month	3.30 Rs/kWh	500 Rs/kVA/month	4.32 Rs/kWh
11 kV- 1 MW and above	375 Rs/kVA/month	3.30 Rs/kWh	550 Rs/kVA/month	4.22 Rs/kWh
66 kV	500 Rs/kVA/month	3.25 Rs/kWh	600 Rs/kVA/month	4.17 Rs/kWh
220 kV	550 Rs/kVA/month	3.20 Rs/kWh	650 Rs/kVA/month	4.12 Rs/kWh

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

Table 120: Retail Tariff proposed by Petitioner

Category	Existing tariff		Proposed Tariff	
	Energy Charge (Rs./kWh)	Fixed Charge	Energy Charge (Rs./kWh)	Fixed Charge
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	0.70		0.70	
Beyond 10 HP	1.00		1.00	
LTP Industrial				
Above 20 HP Connected Load	3.45	Rs.25/HP/month	3.45	Rs.25/HP/month
LT-PI/Public Lighting				
Public Lighting	3.00		3.00	

Category	Existing tariff		Proposed Tariff	
	Energy Charge (Rs./kWh)	Fixed Charge	Energy Charge (Rs./kWh)	Fixed Charge
LT Public Water Works				
Above 20 HP Connected Load	3.70	Rs.25/HP/month	3.70	Rs.25/HP/month
HT				
11 kV - with connected load upto 1 MW	3.25	Rs.300/kVA/month	4.32	Rs.300/kVA/month
11 kV - with connected load 1 MW and above	3.15	Rs.350/kVA/ month	4.22	Rs.350/kVA/month
66 kV	3.10	Rs.400/ kVA/month	4.17	Rs.400/kVA/month
220 kV	3.05	Rs.450/kVA/month	4.12	Rs.450/kVA/month
Hoardings/ Advertisement				
For all units	7.00	RS.100/kVA/month	7.00	Rs.100/kVA/month

Commission‘s analysis

As discussed above, the Commission has determined the retail tariff for the FY 2018-19 in accordance with the principles stated in the Electricity Act, 2003 Tariff Policy, 2016, and the MYT Regulations, 2014.

Tariff design in general is guided by the following principles:

1. Cost reflectivity: The tariffs determined should efficiently reflect the cost of supply for each of the consumer category

2. Progressivity in tariffs: Ensuring progressivity among tariffs by having telescopic tariff slabs which encourages efficient consumption and at the same time promotes intra category cross subsidy by way of charging higher tariff for higher consumption to subsidise the lower consumption consumers

3. Revenue neutrality: There should be no impact on utility’s yearly revenue due to rationalization of tariffs i.e. the overall status quo should be maintained.

4. Affordability: Assessing affordability of electricity for Domestic & Commercial consumers for defining slab ranges and setting tariffs

5. Avoiding tariff shocks: Tariff shocks should be prevented and consumers should be kept informed about the future trends in tariffs

6. Revenue stability: Utilities should ensure adequate fixed cost recovery from fixed/demand charges

7. Demand management and grid stability: Demand management and grid stability should be ensured with demand based tariffs

8. Simplified tariff structure: Tariff structure should be simplified for easy administer ability for the utility and comprehensibility by the consumer

9. Smart tariff design: Tariff rate design should take into consideration trends in electric power such as small scale renewable generation by consumers, energy efficiency, electric vehicle charging, etc.

Keeping in view the above principles, the Commission has made the following amendments in the retail tariff applicable for FY 2018-19

1. Introduction of two part tariff with inclusion of demand charges for Domestic (excluding LIG), Commercial and Low Tension Motive power (Upto 20 HP sub category) categories in order to ensure revenue stability for the Petitioner.

2. Relatively higher tariff increase for cross subsidized categories such as Domestic, Commercial etc. than cross subsidizing categories such as HT/ EHT category, in order to ensure that tariff progressively reflect the cost of supply

3. Merging of 11 kV-Upto 1 MW and 11 kV- Above 1 MW sub category under HT/EHT category in accordance with the principles laid down in Section 63 of the EA, 2003 which stipulates that the differentiation in tariff's among consumers can be only on the basis of the following factors- load factor, power factor, voltage, total consumption during any specified period/time, geographical position of any area, the nature of supply and the purpose for which the supply is required.

4. Introduction of kVAh Tariff for HT/EHT categories and thereby doing away with the practice of power factor incentive and penalty.

6.4.2. Tariff Increase and Schedule:

As discussed above, the Commission proposes to recover the overall revenue gap by way of Regulatory Surcharge and as well as increase in retail tariffs for consumers. The substantial revenue gap at the end of FY 2018-19 necessitates an increase which has to be recovered through increased retail tariffs. The Commission in order to ensure that overall costs of the Petitioner are recovered and at the same time tariff shock to consumer is avoided, proposes an average increase of 11.00% in consumer retail tariffs for FY 2018-19.

The table below provides the category wise Average Cost of Supply (ACoS), Existing Average Billing Rate (ABR), Approved ABR and the existing and approved recovery vis-à-vis the (ACoS).

Table 121: Tariff increase approved by Commission

Category	ACoS (Rs./kwh)	Existing Tariff ABR (Rs./kwh)	Existing Tariff Recovery (%)	Approved Tariff ABR (Rs./kwh)	Approved Tariff Recovery (%)	Increase (%)
Domestic	4.38	1.96	45%	2.27	52%	15%
Commercial	4.38	3.22	73%	3.57	82%	11%
LT Industrial (Motive Power)	4.38	3.48	79%	3.83	87%	10%
LT Public Water Works	4.38	3.72	85%	4.11	94%	11%
HT/EHT	4.38	3.91	89%	4.34	99%	11%
Agriculture & Poultry	4.38	0.73	17%	0.73	17%	0%
Public Lighting	4.38	3.00	69%	3.45	79%	15%
Temp. Supply	4.38	4.99	114%	4.99	114%	0%
Average	**4.38**	**3.84**	**88%**	**4.26**	**97%**	**11%**

The retail tariff approved for each category has been discussed as follows:

1. Domestic

As mentioned earlier, the Commission is introducing Demand Charges for domestic category. The Demand charges are applicable monthly, on per connection basis. The Commission has not increased the energy charges for consumers consuming upto 200 units a month and increased the energy charges for consumers having higher energy consumption. The existing and approved tariff for the Domestic category has been shown in the table below:

Table 122: Retail Tariff for Domestic category

S. No	Domestic	Existing		Approved	
		Demand Charge	Energy Charge	Demand Charge	Energy Charge
(i)	0-50 units	-	1.20 Rs/kWh	5.00 Rs/Con/Month	1.20 Rs/kWh
(ii)	51-200 units	-	1.80 Rs/kWh	5.00 Rs/Con/Month	1.80 Rs/kWh
(iii)	201-400 units	-	2.20 Rs/kWh	5.00 Rs/Con/Month	2.30 Rs/kWh
(iv)	401 and above	-	2.55 Rs/kWh	5.00 Rs/Con/Month	2.80 Rs/kWh
(v)	Low Income Group	10.00 Rs/Con/Month	-	10.00 Rs/Con/Month	-

2. Commercial

Similar to Domestic category, the Commission is introducing two part tariff for commercial category on per connection basis as well. The Commission has not increased the energy charges for consumers consuming upto 100 units a month and increased the energy charges for consumers having higher energy consumption. The existing and approved tariff is shown in the table below:

Table 123: Retail Tariff for Commercial category

S. No	Commercial	Existing		Approved	
		Demand Charge	Energy Charge	Demand Charge	Energy Charge
(i)	*0-100 units*	-	2.55 Rs/kWh	5.00 Rs/Con/Month	2.55 Rs/kWh
(ii)	*101 Units and Above*	-	3.35 Rs/kWh	5.00 Rs/Con/Month	3.60 Rs/kWh

3. LT Industrial

Similar to Domestic and Commercial category, the Commission is introducing Demand Charges for Upto 20 HP slab within the LT Motive Power and LT Public Water Works sub- category.

Table 124: Retail Tariff for LT Industry category

S. No	LT Industrial	Existing		Approved	
		Demand Charge	Energy Charge	Demand Charge	Energy Charge
(i)	LTP Motive Power				
(a)	*Up to 20 HP*	-	3.45 Rs/kWh	5.00 Rs/HP/Month	3.65 Rs/kWh
(b)	*Above 20 HP*	25.00 Rs/HP/Month	3.45 Rs/kWh	50.00 Rs/HP/Month	3.75 Rs/kWh
(ii)	LT Public Water Works				
(a)	*Up to 20 HP*	-	3.70 Rs/kWh	25.00 Rs/HP/Month	3.95 Rs/kWh
(b)	*Above 20 HP*	25.00 Rs/HP/Month	3.70 Rs/kWh	50.00 Rs/HP/Month	3.95 Rs/kWh

4. HT/EHT Industry

The Commission, for the industrial consumers connected at 11 kV voltage level introduces a single Demand and Energy Charge for both slabs viz. 'Load upto 1 MW' and 'Load above 1 MW'. With this modification the number of sub-categories under the HT/ EHT category has been reduced to three from four earlier.

Further, the Commission has modified the Energy Charge, payable on kWh basis earlier to kVAh basis now. The existing and approved tariff is shown in the table below:

Table 125: Retail Tariff for HT/EHT Industry category

S. No	HT/EHT	Existing		Approved	
		Demand Charge	Energy Charge	Demand Charge	Energy Charge
(i)	11 kV- Load upto 1 MW	300 Rs/kVA/month	3.25 Rs/kWh	375 Rs/kVA/month	3.30 Rs/kVAh
(ii)	11 kV- 1 MW and above	350 Rs/kVA/month	3.15 Rs/kWh		
(iii)	66 kV	400 Rs/kVA/month	3.10 Rs/kWh	500 Rs/kVA/month	3.25 Rs/kVAh
(iv)	220 kV	450 Rs/kVA/month	3.05 Rs/kWh	550 Rs/kVA/month	3.20 Rs/kVAh

5. Agriculture and Poultry

The Commission has decided to keep the tariff of this category same as earlier with no change. The existing and approved tariff is shown in the table below:

Table 126: Retail Tariff for Agriculture and Poultry category

S. No	Agriculture and Poultry	Existing		Approved	
		Demand Charge	Energy Charge	Demand Charge	Energy Charge
(i)	For sanctioned load upto 10 HP	-	0.70 Rs/kWh	-	0.70 Rs/kWh
(ii)	Beyond 10 HP and up to 99 HP sanctioned load	-	1.00 Rs/kWh	-	1.00 Rs/kWh

6. Public Lighting

The Commission has not introduced the demand charges for public lighting in absence of the data on no of connection point and load and increase the energy charges. The existing and approved tariff is shown in the table below:

Table 127: Retail Tariff for Public Lighting category

S. No	Public Lighting	Existing		Approved	
		Demand Charge	Energy Charge	Demand Charge	Energy Charge
(i)	For all units		3.00 Rs/kWh		3.45 Rs/kWh

7. Hoarding/ Advertisements

The existing and approved tariff is shown in the table below:

Table 128: Retail Tariff for Hoarding/ Advertisements category

S. No	Hoarding/ Advertisements	Existing		Approved	
		Demand Charge	Energy Charge	Demand Charge	Energy Charge
(i)	For all units	100 Rs/kVA/month	3.00 Rs/kWh	100 Rs/kVA/month	3.00 Rs/kWh

6.4.3. Revenue from Approved Retail Tariff for FY 2018-19

Based on the retail tariff as approved above the Revenue from approved tariff is shown in the table below:

Table 129: Revenue from approved retail tariff (In Rs. Cr.)

S. No.	Category	Fixed Charges (Rs Cr.)	Energy Charges (Rs Cr.)	Total (Rs. Cr.)	ABR (Rs./unit)
1	**DOMESTIC**	**3.00**	**26.09**	**29.09**	**2.27**
(i)	0-50 units	0.65	3.11	3.76	1.45
(ii)	51-200 units	1.23	8.25	9.48	2.07
(iii)	201-400 units	0.58	5.15	5.74	2.56
(iv)	401 and above	0.36	9.57	9.93	2.91
(v)	Low Income Group	0.18	0.00	0.18	0.29
2	**COMMERCIAL**	**0.49**	**11.69**	**12.18**	**3.57**
(i)	0-100 units	0.24	1.44	1.68	2.98
(ii)	101 Units and Above	0.25	10.25	10.51	3.69
3	**LT INDUSTRIAL**	**1.92**	**84.91**	**86.83**	**3.84**
(i)	LTP Motive Power	1.82	82.45	84.27	3.83
	Up to 20 HP	0.72	2.12	2.84	4.89
	Above 20 HP	1.10	80.33	81.43	3.80
(ii)	LT Public Water Works	0.10	2.46	2.56	4.11
	Up to 20 HP	0.08	2.15	2.22	4.09
	Above 20 HP	0.02	0.31	0.33	4.25
4	**HT/EHT**	**516.99**	**1881.61**	**2398.60**	**4.34**
(i)	11 kV- Load upto 1 MW	109.50	302.33	411.83	4.99
(ii)	11 kV- 1 MW and above	123.97	529.67	653.64	4.29
(iii)	66 kV	173.57	668.36	841.93	4.18
(iv)	220 kV	109.95	381.26	491.20	4.21
5	**AGRICULTURE AND POULTRY**	**0.00**	**0.52**	**0.52**	**0.73**
(i)	For sanctioned load upto 10 HP	0.00	0.45	0.45	0.70
(ii)	Beyond 10 HP and up to 99 HP sanctioned load	0.00	0.07	0.07	1.00
6	**PUBLIC LIGHTING**	**0.00**	**3.26**	**3.26**	**3.45**
(i)	For all units		3.26	3.26	3.45
7	**HOARDINGS/SIGNBOARDS**	**0.00**	**0.00**	**0.00**	**-**
(i)	For all units		0.00	0.00	-
8	**TEMPRORARY**	0.00	1.62	1.62	4.99
(i)	For all units		1.62	1.62	4.99
	TOTAL	**522.41**	**2009.69**	**2532.09**	**4.26**

Therefore, the Commission approves revenue from approved Retail Tariff of Rs 2,532.09 Cr. for the FY 2018-19 against a Net Revenue Requirement of Rs. 2,601.20 Cr.

6.4.4. Regulatory Surcharge

As is evident from above, the revenue from Approved Retail Tariff is not commensurate with the Net Revenue Requirement of FY 2018-19. The Commission has tried to limit the tariff increase in each category in order to safeguard the interests of consumer by avoiding abnormal increase in tariffs. It is pertinent to mention here that the average tariff increase of 11.00% has been done to partially recover the standalone revenue gap of FY 2018-19. In addition to this, the revenue gap of FY 2017-18 resulting from the Annual Performance Review is yet to be recovered. Therefore, the Commission in order to realize the remaining revenue gap for FY 2018-19 and complete revenue gap along with carrying cost for FY 2017-18, proposes to impose a Regulatory Surcharge of 9.70% on all consumers.

Applicability and Conditions of the Regulatory Surcharge

- This Regulatory Surcharge shall be applicable on all consumer categories served by the Petitioner.
- The Surcharge shall also be applicable to consumers opting for open access.
- The Regulatory Surcharge shall be levied in the monthly/ bimonthly bill as a percentage of the total energy and fixed charges payable by the consumer
- The Surcharge shall be applicable for all the bills raised on or after 1st February 2018 and shall continue till 31st March 2019.

6.4.5. Revised Revenue Gap/ Surplus

On considering the additional revenue from tariff increase and Regulatory Surcharge, the resultant Revenue Gap/Surplus has been shown in the table below:

Table 130: Revised Revenue Gap/ Surplus approved by Commission (In Rs. Cr)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening Gap /(Surplus) (a)	(383.88)	(97.09)	169.66
Surplus set aside (b)	(180.00)	-	-
Add: Gap/(Surplus) (c)	106.79	315.29	320.01
Total Gap to be recovered in FY 2018-19 (a+c)			489.67
Less: Additional Revenue on account of tariff increase (d)	-	-	250.91
Less: Additional Revenue on account of Regulatory Surcharge (e)	-	52.71*	245.61
Additional revenue on account of Additional Surcharge and Tariff Increase (d+e)			496.52
Closing Gap /(Surplus) (f=a-b+c-d-e)	(97.09)	165.49	(6.84)
Carrying Cost (@8.00% p.a.)(g)	0.00	4.17	6.51
Final Closing Gap/ (Surplus) (f+g)	**(97.09)**	**169.66**	**(0.33)**

**Proportionate to three months of revenue in FY 2017-18 (Jan- Mar 2018)*

The Commission approves additional recovery of Rs. 52.71 Cr. in FY 2017-18 through Additional Surcharge and Rs. 496.52 Cr. through Additional Surcharge and tariff increase in FY 2018-19 for meeting the revenue gap determined by the Commission at existing tariff. The Commission approves a revised revenue surplus of Rs. 0.33 Cr. in FY 2018-19.

7. Chapter 7. Open Access Charges for the FY 2018-19

7.1. Determination of Wheeling Charges

7.1.1. 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 shown in the table below.

Table 131: Allocation matrix as submitted by Petitioner

Particulars	Allocation (%)		FY 2018-19	
	Wheeling	Supply	Wheeling	Supply
Cost of power purchase for full year	*0%*	*100%*	0.00	2699.84
Employee costs	*70%*	*30%*	8.92	3.82
Administration and General Expenses	*90%*	*10%*	5.90	0.66
Repair and Maintenance Expenses	*50%*	*50%*	3.62	3.62
Depreciation	*90%*	*10%*	25.64	2.85
Interest and Finance charges	*90%*	*10%*	16.63	1.85
Interest on Working Capital	*22%*	*78%*	2.77	9.80
Interest on consumer security deposit	*0%*	*100%*	0.00	2.62
Return on Equity	*90%*	*10%*	19.91	2.21
Income Tax	*90%*	*10%*	0.00	0.00
Total Revenue Requirement			**83.39**	**2727.27**
Less: Non-Tariff Income	*0%*	*100%*	0.00	28.15
Net Revenue Requirement			**83.39**	**2699.12**

Table 132: Determination of input energy for network usage percentage

Particulars	Unit	FY 2018-19
Sales at 11 kV and above (HT/EHT)	MU	5,771.28
Losses in % for HT/EHT network	%	3.22%
Input required for sales at 11 kV and above	MU	5963.30
Projected total Input	MU	6475.44
Projection of HT/EHT network usage	%	92.09%
Balance proportion of LT network usage	MU	7.91%

Accordingly, the Petitioner has submitted wheeling charges of Rs. 0.13/kWh for 2018-19 as shown in the table below:

Table 133: Wheeling Charge calculation as submitted by Petitioner

Particulars	Unit	Formula	FY 2018-19
Wheeling Cost	Rs. Cr.	A	83.39
Wheeling Cost at HT/EHT network	Rs. Cr.	B=A*92.09%	76.80
Input required for sales at 11 kV and above	MU	C	5,963.30
Wheeling Charges for HT/EHT network usage	Rs. Per unit	D=B/C*10	0.13
Wheeling Cost for LT network	Rs. Cr.	E	6.60

Particulars	Unit	Formula	FY 2018-19
Input required for sales at LT level	MU	F	512.15
Wheeling Charges for HT/EHT network usage	Rs. Per unit	G=1/ F*10	0.13

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 approved by the Commission in the Tariff Order for FY 2017-18. The allocation between wheeling and retail supply business for the FY 2018-19 as per the ARR approved in this Order is provided in the Table below:

Table 134: Allocation matrix approved by Commission

Sr. No.	Particulars	Allocation (%)		FY 2018-19		
		Wheeling	Supply	Wheeling	Supply	Total
1	Cost of power purchase for full year	*0%*	*100%*	0.00	2562.98	2562.98
3	Employee costs	*70%*	*30%*	9.24	3.96	13.21
4	Administration and General Expenses	*90%*	*10%*	5.26	0.58	5.84
5	Repair and Maintenance Expenses	*50%*	*50%*	4.91	4.91	9.82
6	Depreciation	*90%*	*10%*	20.43	2.27	22.70
7	Interest and Finance charges	*90%*	*10%*	2.30	0.26	2.55
8	Interest on Working Capital	*22%*	*78%*	3.57	12.66	16.23
9	Interest on consumer security deposit	*22%*	*78%*	0.45	1.61	2.06
10	Return on NFA /Equity	*90%*	*10%*	13.14	1.46	14.60
11	Income Tax	*90%*	*10%*	0.00	0.00	0.00
12	**Total Revenue Requirement**			**59.30**	**2590.69**	**2649.99**
13	Less: Non-Tariff Income	*0%*	*100%*	0.00	48.79	48.79
14	**Net Revenue Requirement**			**59.30**	**2541.90**	**2601.20**

In order to determine the wheeling charges prudently, the Commission has allocated the wheeling costs on the basis of voltage levels. The wheeling charges are levied for distribution network utilized by Open Access consumers and primarily comprises of O&M Expenses and other costs as provided in the table above. The criteria for allocation of wheeling costs is elaborated as follows:

- O&M Expenses are allocated on the basis of number of consumers under each category.
- All expenses other than the O&M expenses are allocated on the basis of voltage wise asset allocation. The Petitioner in this regard was directed to submit the voltage wise asset allocation however the Petitioner has failed to submit the desired information. In absence of such information, the Commission has assumed the voltage wise asset allocation.
- Cost at a voltage level was allocated to consumers at various voltage based on the input energy at the particular voltage.

The Petitioner in case submits the voltage wise asset allocation in due course, the Commission shall review the same based on actual information provided. The voltage wise asset allocation assumed and the number of consumers in each category has been shown in the table on the next page:

Table 135: Parameters assumed for voltage wise allocation of wheeling charges

Category	Consumers	Sales (MU)	Asset Allocation (%)	Voltage wise Losses (%)
Below 11 kV -LT	75,056	408	40%	14.36%
11kV	877	2,349	30%	3.80%
66 kV	32	2,015	30%	1.50%
220 kV	2	1,168	-	0.60%
Total	75,966	5,941	100%	4.70%

Accordingly, the Commission approves the Wheeling Charges as follows:

Table 136: Wheeling Charges approved by Commission

Category	O&M	Others	Total	Wheeling Charges (Rs./kWh)
Below 11 kV -LT	10.04	19.65	29.70	0.82
11kV	0.12	14.74	14.86	0.08
66 kV	0.00	14.74	14.74	0.03
	10.17	**49.13**	**59.30**	

The Commission approves wheeling charge of Rs.0.82/ kWh at LT voltage level, Rs. 0.08/kWh at 11 kV voltage level and Rs. 0.03/kWh at 66 kV voltage level

7.2. Determination of 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.1.21/kWh from the open access consumers on the energy purchased by them through open access.

Commission's analysis:

The Commission has notified the Joint Electricity Regulatory Commission for the State of Goa And Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017. The Regulation 4.5 (1) of the said Regulations states the following:

"An Open Access Consumer, 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:

Provided that such additional surcharge shall not be levied in case Open Access is provided to a person who has established a captive generation plant for carrying the electricity to the destination of his own use."

Regulation 4.5 (2) of the said Regulations stipulates:

This additional surcharge shall become applicable only if the obligation of the Licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and *incidence to bear fixed costs by the Licensee consequent to such a contract. However, the fixed costs related to network assets would be recovered through wheeling charges.*

Further, Regulation 5.2 (1) (b) states the following:

The quantum of drawal of electricity by a partial Open Access Consumer from the Distribution Licensee during any Time Block of a Day should not exceed the "Admissible Drawl of Electricity by the Open Access Consumer" which is the difference of Contract Demand and maximum quantum of Open Access for which approval has been granted by the Nodal Agency.

[Illustration: If an Open Access Consumer with a Contract Demand of 10 MW has been given an approval for a maximum Open Access quantum of 6MW for a period of 3 Months, the Admissible Drawl of Electricity from the Distribution Licensee during any Time Block shall be 4 MW for any Day during a period of 3 Months.]"

Therefore, in accordance with the above Regulations, the Commission has determined the Additional Surcharge as per the following:

Table 137: Additional Surcharge approved by Commission

Particulars	FY 2018-19
Total Power Purchase cost approved	**2,562.98**
Fixed Cost component in Power Purchase Cost (excluding Transmission Charges)	1,014.32
Energy Sales (MU)	5,940.79
Additional Surcharge (Rs./kWh)	**1.71**

In the previous regime, a consumer availing open access was required to pay fixed charges on contracted load even when the load was drawn partially from the Distribution Licensee. In addition, he was also required to pay wheeling charges, additional surcharge and cross-subsidy surcharge. As per the Open Access Regulations, 2017, a consumer now is only required to pay fixed charges on Admissible Drawal rather than on total contracted load. The Commission, in this Order, has determined voltage wise wheeling charges rather than a single per unit wheeling charge as was approved in the previous Tariff Order. The Commission has also revised the methodology for Additional surcharge, as discussed, and Cross-Subsidy surcharge as discussed in the subsequent sections.

The Commission approves an Additional Surcharge of Rs. 1.71/kwh for FY 2018-19.

The Commission directs the Petitioner to submit quarterly details of power stranded on account of consumers opting for open access alongwith the Additional Surcharge recovered from these consumers. The Commission will analyse the information and change the applicable Additional Surcharge, if required.

7.3. Cross-Subsidy Surcharge

Petitioner's submission:

The Petitioner has proposed no Cross Subsidy Surcharge for FY 2018-19.

Commission's analysis:

The Commission in this Order has calculated the cross-subsidy surcharge with respect to voltage wise cost of supply. The following approach has been adopted to determine the voltage wise cost of supply:

- Voltage Wise losses at each voltage level are assumed for 11 kV, 66 kV and 220 kV voltage levels. The remaining losses are adjusted in the LT voltage level in order to maintain the Intra-State distribution losses at 4.70%, as approved in the ARR for FY 2018-19. Voltage wise losses assumed at each level has been shown in the table below:

Table 138: Voltage Wise Losses assumed by Commission

Category	Losses (%)
Below 11 kV -LT	14.36%
11kV	3.80%
66 kV	1.50%
220 kV	0.60%
Total	**4.70%**

- The voltage wise losses are then stacked on lower voltage levels as follows:
    - Losses of 220 kV level are loaded on all voltage levels
    - Losses of 66 kV level are stacked on 11 kV, and LT levels
    - Losses of 11 kV level are stacked only on to LT levels

The resultant losses due to stacking is shown in the table below

Table 139: Cumulative Voltage Wise Losses (%)

Category	Losses (%)
Below 11 kV -LT	19.34%
11kV	5.81%
66 kV	2.09%
220 kV	0.60%
Total	4.70%

Using these losses the energy input at each voltage level is determined based on the energy sales. The table below shows the energy input at each voltage level

Table 140: Energy Input at each voltage level (MU)

Category	Energy Sales (MU)	Losses (%)	Energy Input (MU)
Below 11 kV -LT	408	19.34%	506
11kV	2,349	5.81%	2,494
66 kV	2,015	2.09%	2,058
220 kV	1,168	0.60%	1,175
Total	**5,941**	**4.70%**	**6,234**

Now the overall ARR approved for FY 2018-19 is divided into variable and fixed ARR with variable ARR comprising of variable power purchase cost and fixed ARR comprising of all the other costs.

The fixed component comprising of fixed cost of power purchase, O&M etc. is further allocated to each voltage level as per the following principles:

- The fixed cost of power purchase is allocated to each voltage level on the basis of energy input at respective voltage levels.
- The O&M expenses is allocated on the basis of number of consumer
- All remaining fixed cost are allocated on the basis of voltage wise asset allocation assumed earlier.

Table 141: Parameters utilized for allocation of fixed costs

Category	Energy Input (MU)	Voltage wise Asset Allocation (%)	Number of Consumers
Below 11 kV - LT	506	40%	75,056
11kV	2,494	30%	877
66 kV	2,058	30%	32
220 kV	1,175	-	2
Total	**6,234**	**100%**	**75,966**

The Variable component of the Power purchase cost is allocated on the basis of energy input.

The Voltage wise cost of supply (VCoS) is then determined in the basis of energy sales of respective categories.

Accordingly, the Voltage wise cost of supply for each category is determined as shown in the table below:

Table 142: Voltage Wise Cost of Supply (VCoS)

Category	Allocated Fixed Cost (Rs. Cr.)	Allocated Variable Cost (Rs. Cr.)	Total Cost (Rs. Cr.)	Energy Sales (MU)	VCoS (Rs./kwh)
Below 11 kV	146	108	254	408	6.23
11kV	492	533	1,024	2,349	4.36
66 kV	408	440	848	2,015	4.21
220 kV	223	251	474	1,168	4.06
Total	**1,269**	**1,332**	**2,601**	**5,941**	

The Voltage Wise Cost of Supply as derived is used to determine the cross subsidy surcharge

Table 143: Cross Subsidy Surcharge

Category	VCoS (Rs/kWh)	ABR (Rs./kWh)	Cross- Subsidy (Rs./kWh)
11 kV- 1 MW and above	4.36	4.29	(0.07)
66 kV	4.21	4.18	(0.03)
220 kV	4.06	4.21	0.14

The Cross Subsidy Surcharge is coming out to be negative for 11 KV and 66 KV voltage levels and Rs 0.14/kWh for 220 kV voltage level.

Therefore, the Commission approves nil cross subsidy surcharge at 11kV and 66 kV voltage levels, and Rs. 0.14/kWh for 220 kV level, in FY 2018-19.

8. Chapter 8: Tariff Schedule

8.1. Tariff Schedule

Table 144: Tariff Schedule

<table>
<tr><th>S. No.</th><th>Category</th><th>Fixed Charges</th><th>Energy Charges</th></tr>
<tr><td>1.</td><td colspan="3">DOMESTIC</td></tr>
<tr><td>i</td><td>0-50 units</td><td rowspan="4">5.00 Rs./Con/Month</td><td>1.20 Rs/kWh</td></tr>
<tr><td>ii</td><td>51-200 units</td><td>1.80 Rs/kWh</td></tr>
<tr><td>iii</td><td>201-400 units</td><td>2.30 Rs/kWh</td></tr>
<tr><td>iv</td><td>401 and above</td><td>2.80 Rs/kWh</td></tr>
<tr><td>v</td><td>Low Income Group
(Up to 2x40 W bulbs only)</td><td>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.</td><td></td></tr>
<tr><td colspan="4"></td></tr>
<tr><td>2.</td><td colspan="3">COMMERCIAL</td></tr>
<tr><td>i</td><td>1-100 units</td><td rowspan="2">5.00 Rs./Con/Month</td><td>2.55 Rs/kWh</td></tr>
<tr><td>ii</td><td>101 units and above</td><td>3.60 Rs/kWh</td></tr>
<tr><td colspan="4"></td></tr>
<tr><td>3.</td><td colspan="3">LT INDUSTRIAL</td></tr>
<tr><td>i</td><td>LTP Motive Power</td><td></td><td></td></tr>
<tr><td></td><td>Up to 20 HP</td><td>5.00 Rs/HP/Month</td><td>3.65 Rs/kWh</td></tr>
<tr><td></td><td>Above 20 HP</td><td>50.00 Rs/HP/Month</td><td>3.75 Rs/kWh</td></tr>
<tr><td>ii</td><td>LT Public Water Works</td><td></td><td></td></tr>
<tr><td></td><td>Up to 20 HP</td><td>25.00 Rs/HP/Month</td><td>3.95 Rs/kWh</td></tr>
<tr><td></td><td>Above 20 HP</td><td>50.00 Rs/HP/Month</td><td>3.95 Rs/kWh</td></tr>
<tr><td colspan="4">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.</td></tr>
<tr><td>4.</td><td colspan="3">HT/EHT</td></tr>
<tr><td>i</td><td>11 kV supply</td><td>Up to Contract Demand - Rs.375/kVA/month or part thereof
In Excess of Contract Demand – Rs.750/kVA/month or part thereof</td><td>3.30 Rs/kVAh</td></tr>
<tr><td>iii</td><td>66 kV supply</td><td>Up to Contract Demand - Rs.500/kVA/month or part thereof
In Excess of Contract Demand – Rs.1000/kVA/month or part thereof</td><td>3.25 Rs/kVAh</td></tr>
</table>

S. No.	Category	Fixed Charges	Energy Charges
iv	220 kV supply	Up to Contract Demand - Rs.550/kVA/month or part thereof In Excess of Contract Demand – Rs. 1100/kVA/month or part thereof	3.20 Rs/kVAh

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. **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 Rs/kWh
ii	Beyond 10 HP and up to 99 HP sanctioned load	-	1.00 Rs/kWh
6.	**PUBLIC LIGHTING**		
i	For all units	-	3.45 Rs/kWh
7.	**HOARDINGS/SIGNBOARDS**		
i	Hoarding/Signboards	Rs.100 per kVA per Month or part thereof	7.00 Rs/kWh
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

Table 145: Applicability of Tariff Schedule

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	This schedule shall apply to all Industrial/Motive power/ Ferro Metallurgical / Steel Melting / Steel Rerolling / Power Intensive consumers drawing through 11 kV systems	
5. 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	
6. 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	
7. Agriculture	This schedule shall apply to Agriculture or poultry loads up to 99 HP sanctioned load will be considered in this category.	
8. Public Lighting		
9. 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	

Category	Applicability	Point of Supply/Notes
	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.	
10. 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 notified in Chapter 9 of this Order. 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 2018-19.

8.4. Schedule of Miscellaneous Charges

Table 146: 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: 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	

Description	Approved 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/-
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

9. Chapter 9. Fuel and Power Purchase Adjustment Mechanism

The State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry receives power from the Central Generating Stations, State Generating Stations, Independent Power Producer's (IPP's) through the long-term power purchase agreements and short term purchases – through exchange, bilateral purchases etc. The distribution licensees procure power from various available sources and supply power to the consumers at retail tariffs determined by the Commission. Power purchase cost accounts for more than 80% of the Annual Revenue Requirements (ARR) of the distribution licensees and includes the cost paid for procurement of power, transmission charges, Deviation Settlement Mechanism (DSM) charges, State Load Despatch Center (SLDC)/ Regional Load Despatch Center (RLDC) charges and is netted off with revenue earned from the sale of surplus power.

The cost of the long term power being procured by the distribution licensees is fixed by the Central Electricity Regulatory Commission (CERC) for plants supplying power to more than one State/UT (for example NTPC, NHPC etc.) and by the JERC for plants located within the region (for IPP's, licensees own generation and other State generating sources). Charges for the Over-drawal/Under-drawal from the Grid and the Inter State Transmission charges, RLDC charges are fixed by the CERC, while Intra-State Transmission charges and SLDC charges are fixed by the JERC. Short term purchase/ sale of power is done through traders, bilateral contracts, banking and power exchanges at market determined prices.

While determining retail tariff for any year, the Commission first determines the ARR based on the projection of various cost elements including power purchase cost. Power purchase cost of the distribution licensee is derived from the power purchase quantum and per unit power purchase cost. Quantum of power purchase depends upon the energy sales to the retail consumer and distribution losses, out of which energy sales is not in control of the distribution licensee. There is also variation in actual per unit power purchase cost vis-a-vis projected per unit power purchase cost due to change in fuel cost, change in power purchase mix i.e. thermal /hydel/renewable mix, long term/short term power mix etc. This makes power purchase cost uncontrollable in nature.

The Commission undertakes the truing up exercise for the variation in the cost and revenue once the audited accounts of the distribution licensee are available. For example, true up of FY 2016-17 will be undertaken by the Commission once the audited accounts of FY 2016-17 are available. If the audited accounts for FY 2016-17 are prepared timely, the impact of true up of various cost and revenue items is allowed in the tariff of FY 2018-19, along with the carrying cost for 2 years. As the power purchase cost is the major cost element of the ARR of the distribution licensee, adjustment due to change in power purchase cost at regular intervals is important in order to avoid the burden of carrying cost on the additional power purchase cost incurred during the year.

9.1. Legal Provisions

The relevant provisions of the Electricity Act, Regulations, Policy document and the ATE judgments, which enables the Commission to devise, adopt and implement a power purchase/ fuel price adjustment mechanism are as follows:-

(a) Indian Electricity Act, 2003- Section 62 (4)

"No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified."

(b) Tariff Policy, 2016, clause 5.11 – sub clause (h-4)

"Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Uncontrollable costs would include (but not limited to) fuel costs, costs on account of inflation, taxes and cess, variations in power purchase unit costs including on account of adverse natural events."

(c) Tariff Policy, 2016, clause 8.2– sub clause 8.2.1-(1)

"8.2 Framework for revenue requirements and costs
Actual level of retail sales should be grossed up by normative level of T&D losses as indicated in MYT trajectory for allowing power purchase cost subject to justifiable power purchase mix variation (for example, more energy may be purchased from thermal generation in the event of poor rainfall) and fuel surcharge adjustment as per regulations of the SERC."

(d) Hon'ble ATE judgement in OP1 of 2011 dated 11 November, 2011

The Hon'ble ATE directed the SERCs to develop a power purchase cost adjustment mechanism within six months of the date of the Order. The relevant excerpt of the Order is shown as follows:
"(vi)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."

9.2. Existing formula

The Commission first introduced the provision for adjustment of fuel surcharge in Joint Electricity Regulatory Commission for the State of Goa and UT's (Terms and conditions for determination of tariff) Regulations, 2009 notified on 08 February 2010. The relevant Clause 7 of the Regulations is provided below:
"7. Fuel Surcharge Formula
(1) The fuel cost revisions for the generating companies/units owned by the licensee that are due to reasons beyond the control of the generating companies / the licensee be in accordance with the fuel surcharge formula as may be decided by the Commission from time to time.
(2) The generating company or the licensee may determine such charge in accordance with the specified formula and recover the same from such categories of consumers or the licensees, as the case may be after following procedure and the terms and conditions attached thereto."

The Commission subsequently notified the Joint Electricity Regulatory Commission for the State of Goa and UT's (Terms and conditions for determination of tariff) (First Amendment) Regulations, 2009 on 27 June, 2012 prescribing the methodology for determination and the recovery mechanism of Fuel & Power Purchase Cost Adjustment (FPPCA) formula. Subsequently on 18 January, 2013, the Commission issued a Corrigendum correcting the calculations of the FPPCA for certain consumer categories.

On 30 June, 2014 the Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014 wherein the Commission proposed to adopt the same methodology as prescribed in the Joint Electricity Regulatory Commission for the State of Goa and UT's (Terms and conditions for determination of tariff) (First Amendment) Regulations, 2009 in the MYT Period. Clause 19 of the Regulations is shown as follows
"*19. Treatment of Incremental Power procurement cost*
The Distribution Licensee shall recover the incremental cost on account of fuel & power purchase adjustment in accordance with FPPCA formula provided in JERC Terms & Condition for determination of Tariff (first amendment) Regulations, 2009."

On 19 October, 2016 JERC notified the Joint Electricity Regulatory Commission for the State of Goa and UT's (Multi Year Distribution Tariff) (Second Amendment) Regulations, 2016 according to which the a Fuel and Power Purchase cost adjustment charge shall be levied by distribution licensees on consumer electricity bills on account of the incremental power purchase cost incurred by the licensees and the Transmission charge recovery was also added to the formula. The relevant amendment to the Regulation has been shown as follows:

"***1. Recovery Periodicity (Cycle)***

The licensee shall compute fuel and power procurement cost variations on quarterly basis and adjustment shall be made in consumers bills starting after a month following the end of the quarter on units billed in the month under consideration. For example, Fuel & Power Purchase Cost Adjustment (FPPCA) for the quarter April-May-June shall be made in the month of July and shall be reflected in the consumer bills raised in the months of August-September and October on the units billed for the respective months. The formula shall be applicable prospectively for the purpose of consideration of Fuel and Power Purchase Cost Adjustment. FPPCA shall be done for all consumer categories except Below Poverty Line (BPL) and Agriculture consumers.

2. Formula

The formula for determination of per unit Fuel & Power Purchase Cost Adjustment ("FPPCA") is as under:

Per Unit FPPCA (Paisa/ unit) = Per Unit Actual cost of Power Purchase- Per Unit Approved Cost of Power Purchase in Tariff Order

$$Per\ Unit\ FPPCA\ \left(\frac{Paisa}{Unit}\right) = \left[\frac{Pactual - Sbulk}{[\{(X-c) - Xs\} * b] - Z}\right] * 1000 - Rapproved$$

Where

$$c = \{(X - A) * \frac{Tapproved}{100}$$

$$b = (1 - \frac{Yapproved}{100})$$

Where:

- $Pactual$ *: Actual cost of power purchased during the quarter (excluding purchase from unapproved bilateral and other unapproved sources) includes transmission charges of PGCIL but excludes SLDC charges, RLDC charges and reactive energy charges (Rs. crores).*
- $Sbulk$ *: Actual Revenue recognized from Sale of power to persons other than consumers of the licensee during the quarter (Rs. crores).*
- $Rapproved$ *: Approved per unit cost of power purchase for use in the FPPCA formula as given in the Tariff Order of the Licensee (Paisa per unit).*
- X *: Actual Energy units (kWh) procured during the quarter in consideration excluding unapproved sources (million units).*
- A *: Actual Energy Units (kWh) procured during the quarter in consideration (million units) from power exchanges, power generation within the periphery of the licensee & used by licensee and units overdrawn from the grid.*
- $Tapproved$ *: Approved inter-state transmission losses for the year in consideration as provided in the Tariff Order (%).*
- $Yapproved$ *: Approved T&D losses for the year in consideration as provided in the Tariff Order (%).*
- Xs *: Actual Sale of power to persons other than the utility consumers (million units) during the quarter.*
- Z *: Actual energy units billed for BPL and Agriculture category consumers (million units).*

3. *Other Terms and conditions*

a) *For the purpose of Fuel and Power Purchase Cost Adjustment, all the bills admitted and credits, if any, received by the distribution licensee during the period in consideration, irrespective of the period to which they pertain shall be considered. However, the bills or credits of earlier period received by the distribution licensee earlier than the period under consideration will not be considered for the purpose of FPPCA.*

b) *The variation in fuel and power purchase cost adjustment with respect to the approved per unit power purchase cost, as per the formula specified above shall be recoverable/payable based on units billed for each category of consumers except BPL & Agriculture.*

c) *Per unit rate of FPPCA to be billed to consumers is worked out in Paisa after rounding off to the next lower integer in case of fraction less than 0.5 and to the next higher integer in case of fraction equal to or greater than 0.5.*

d) *The per unit FPPCA so worked out is charged differentially as per the approved retail tariff of the consumers. The determination of differential per unit FPPCA is mentioned below:*

- *Step 1: Determination of Value of K*

$$\frac{Approved\ Retail\ Tariff\ for\ a\ category\ or\ sub\ category}{Weighted\ Average\ Retial\ Tariff\ (WART)}$$

The value of K for different consumer category or sub category for the year in consideration is considered as per the respective Tariff Order.

- *Step 2: Determination of proportionate FPPCA (Paisa/unit) consumer category/sub-category wise*

FPPCA to be billed for the consumers category or sub-category (Paisa/unit) =

$$Average\ FPPCA\ (\frac{Paisa}{uni}) * K\ for\ that\ consumer\ category\ or\ sub-category$$

4. *Duties of the licensees and Designated officer*

a) *Every distribution licensee shall appoint a designated officer not below the rank of Executive Engineer with Name, Designation, Telephone no. & Fax and Place of Posting, who shall compute, certify and post the PPCA calculations, PPCA chargeable & related data summary on the licensees website and clarify to consumers query, if any.*

b) *The Designated Officer shall send certified copy of FPPCA calculations immediately to Joint Electricity Regulatory Commission."*

9.3. Need to review the existing mechanism

JERC has been amongst the first few Electricity Regulatory Commission's in India to introduce the concept of adjustment of variation in the power purchase cost in the end consumer tariffs through Fuel and Power Purchase Cost Adjustment (FPPCA) mechanism in 2012.

The Indian Power Sector is very dynamic and has changed a lot since 2012. Further, there have been changes in the methodology for determination and recovery of generation and transmission tariff, transmission pricing mechanism, fuel mix with emergence of renewable energy etc. Other State Electricity Regulatory Commissions (SERCs) have also introduced the concept of the FPPCA wherein the Fuel and Power Purchase cost variations are passed through to the consumer either monthly, bi-monthly or quarterly. In between, the Commission has also received representation from various consumer groups and the distribution licensees seeking clarity and simplicity in the FPPCA mechanism adopted by the Commission. In light of the above and the experiences gained during these years, the Commission has decided to examine the FPPCA mechanism followed in other States vis-à-vis the FPPCA mechanism adopted by the Commission and identify the best practices.

A detailed examination of the methodology followed across other States for calculation of variations in the Fuel and Power Purchase Cost Adjustment revealed the following observations:

- Every State has a different formula for determination of the FPPCA charges however the fundamental objective of all of them remains the same i.e. to pass on the incremental cost of power procurement to the consumers
- FPPCA charges are composed of different elements in different States with power purchase cost from approved and long term sources being the only element common across all States
- FPPCA charges are mostly determined on the Discom Periphery across all the States
- Power purchase cost considered as base for calculation of FPPCA charges is determined in the TO
- For States, procuring power from the owned generation plants, the Station Heat Rate and other components such as Auxiliary consumption, losses etc. are considered as base as approved in the Tariff Order for calculating the variations in the power purchase costs

The key takeaways with respect to certain parameters of the formula are provided in the table below:

Table 147: Key Takeaways

S. No.	Parameter	Takeaways
1.	*Time Period*	• Time period for levy of the FPPCA is quarterly in most of the States except in Chhattisgarh and Bihar where recovery is on bi-monthly and monthly basis respectively.
2.	*Approval Process*	• Some of the SERC's allow the Discoms to recover FPPCA charges upto a certain limit via automatic route (without approval of the Commission) thereby reducing the administrative burden. However, in most of the States like Maharashtra, Kerala, Madhya Pradesh etc. prior approval from the Commission is required.
3.	*Elements included while determining FPPCA charges*	• In all the States, power purchase cost from long term approved sources is considered while calculating the FPPCA charges • Central Transmission charges are considered in the States of Gujarat, Maharashtra, Delhi and Uttar Pradesh; • Adjustments (Under-recovery/ Over-recovery) due to previous FPPCA period is considered in the States like Bihar, Karnataka , Kerala and Maharashtra; • Power Purchase cost from short term sale/ purchase, bilateral exchange, IEX etc. is considered in the States of Gujarat, Maharashtra and Uttar Pradesh; • In States like Karnataka and Madhya Pradesh, only variable cost of power purchase is considered while calculating the FPPCA charges; • In Uttar Pradesh (UP) any kind of arrears/refunds etc. in the period are also considered
4.	*Elements excluded while determining FPPCA charges*	• Short term power procurement cost is excluded while calculation in most of the States except Gujarat, Maharashtra and Uttar Pradesh • In UP, power purchase cost from unapproved plants are excluded

S. No.	Parameter	Takeaways
		• DSM charges are excluded in most of the States • In Bihar, the Regulations categorically defines exclusion of any kind of penalties due to delayed payment, while calculating FPPCA charges • In Chhattisgarh power purchase cost from renewable sources are excluded. • In the NCT of Delhi, past arrear/ credits are not considered unlike UP where they are considered.
5.	*Categories excluded*	• Almost all categories are covered under the ambit of the FPPCA charges except in the State of Kerala where the domestic consumers upto a certain consumption limit are not levied FPPCA charges. • In Gujarat State, the FPPCA charges for the Agriculture category are subsidized by the State Government.
6.	*T&D losses considered for determination*	• In most of the States, the T&D losses approved in the Tariff Order are considered for calculation of gross units; however, in Gujarat and Bihar, the approved or actual losses whichever are lower are considered • In Maharashtra, the actual T&D losses are considered.
7.	*Notification via Regulations/ Tariff Order*	• In most of the States like Delhi, Maharashtra, Madhya Pradesh etc., the FPPCA methodology is defined in the Tariff regulations except in Karnataka and Kerala where individual regulations are notified.
8.	*Ceiling within a month (%) for recovery*	• In States like Maharashtra, Gujarat, Bihar and Karnataka, the upper ceiling of the FPPCA charges is provided which is applicable to all categories.
9.	*Ceiling within a month for a category*	• Ceiling of the FPPCA charges in a quarter for categories such as Domestic and Agriculture in Chhattisgarh State.
10.	*Recovery Mechanism*	• FPPCA charges are recovered from the consumers and are part of their electricity bills • In some States like Gujarat and Madhya Pradesh, a uniform FPPCA charge is recovered depending on the billed units while in States like Maharashtra and UP, the category wise FPPCA charges based on the category ABR is determined

The existing FPPCA mechanism notified by the Commission is in the form of an amendment in the existing Regulation - *Joint Electricity Regulatory Commission for the State of Goa and UT's (Multi Year Distribution Tariff) (Second Amendment) Regulations, 2016*. These Regulations are sub-legislations and making any changes in the Regulation involves legal process which is cumbersome and time consuming. The Commission, therefore, proposes to repeal the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) (Second Amendment) Regulations, 2016 and going forward provide formula for the FPPCA mechanism in the Tariff Order issued by the Commission.

In the section below, the Commission has discussed the proposed FPPCA formula for inclusion in the Tariff Order for the FY 2018-19.

9.4. New formula

Based on the review of the existing formula and examination of the formulas and the best practices adopted by the various SERC's, the Commission proposes the following mechanism for calculation and passing on of variations in the Fuel and Power Purchase Cost Adjustment (FPPCA) in the end consumer tariff, which shall come into force w.e.f. 1st April 2018 (i.e. Power Purchased by the Licensee from 1st April 2018 onwards). For Power Purchased by the Licensee for the period from 1st January 2018 till 31st March 2018, the FPPCA will be calculated based on the earlier formula.

1. **Periodicity for recovery (Cycle)**
   The licensee shall compute the fuel and power procurement cost variations on quarterly basis. The adjustment shall be made in the consumers bills starting after a month following the end of the quarter on the units billed in the months following the quarter.
   For example, FPPCA for the quarter April- June shall be done in the month of July and shall be reflected in the consumer bills raised in the months of August, September and October on the units billed for the month of July, August and September respectively.

2. **Chargeability**
   FPPCA charges shall be levied on all consumer categories excluding Below Poverty Line (BPL) and Agriculture category consumers on per unit basis on monthly/ bi-monthly consumption depending on the billing cycle.

3. **Formula**
   The FPPCA formula shall contain the following three components:
   1. Power Purchase Cost adjustments which shall contain the following elements:
      - Variation in the Power Purchased from long term/ firm sources viz. CGS, IPP's, State, Own generation etc. This may consist of fixed cost, variable costs, arrears, other charges but excluding any kind of penalties
      - Variation in Short term power purchase cost through IEX, Bilateral etc. (shall be allowed upto a certain ceiling rate as may be fixed in the Tariff Order by the Commission).
      - Variation on account of Deviation Settlement Mechanism – Shall be allowed, but the incentive/penalty shall be excluded
   2. Transmission cost adjustments which shall contain the following elements:
      - Variation on account of Central Transmission Charges including arrears/ revisions.
      - Variation on account of State Transmission charges including arrears/revisions
   3. Other Charges which shall contain all the other elements not forming part of the above two components for example:
      - Any adjustments /reversals due to over recovery of charges
      - Any adjustments due to under recovery of charges in case the Commission decides to limit the FPPCA charges in previous quarters to avoid tariff shock or other reasons
      - Any other adjustments on account of factors not envisaged at time of tariff fixation
   4. Less any revenue from Additional Surcharge collected from Open Access consumer towards the stranded power purchase cost.

Based on the components as defined above, the new FPPCA formula can be represented as follows:

$$\boldsymbol{FPPCA\left(\frac{Rs.}{Unit}\right) =. \left(\frac{(Pact + \ Tact \ + Oact - ASact) * 10}{\{[PPOact * \ (1 - TLapp) + PPIact - PSOact] * (1 - DLapp)\} - Zact}\right) - Rapp}$$

Where:

- $Pact(in\ Rs.Cr.)$: Actual Power purchase cost inclusive of fixed cost, variable costs, arrears, and other charges excluding any kind of penalties incurred in the quarter. This shall include:
  - Cost of procurement from sources outside the State,

- Cost of procurement from sources within the State,
- Cost of DSM excluding any penal charges,
- Cost of procurement from the Bilateral/ exchange etc.
- Less: Revenue from sale of surplus power/ DSM

- $Tact\ (in\ Rs.Cr.)$: Actual Transmission cost inclusive of any kind of arrears, other charges etc. and excluding any kind of penalties incurred in the quarter. This shall include:
  - Inter-State transmission cost (PGCIL charges),
  - Intra-State transmission cost
- $Oact\ (in\ Rs.Cr.)$: Adjustments from the previous FPPCA quarter on account of over/ under recovery and any other incidental costs not accounted for at the time of retail tariff fixation
- $ASact\ (in\ Rs.Cr.)$: Revenue from Additional Surcharge collected from Open Access consumer towards the stranded power purchase cost
- $PPOact\ (in\ MU)$: Quantum of power purchased in the quarter from sources outside State/ Union Territory
- $TLapp\ (in\ \%)$: Approved Inter- State transmission losses for the year in consideration as provided in the relevant Tariff Order
- $PPIact\ (in\ MU)$: Quantum of power purchased in the quarter from sources within State/Union Territory, Bilateral/ Exchange and Over-drawal under the DSM
- $PSOact\ (in\ MU)$: Actual quantum of sale of surplus power/ under-drawal under the DSM in the quarter
- $DLapp\ (in\ \%)$: Approved T&D losses for the year in consideration as provided in the relevant Tariff Order
- $Zact\ (in\ MU)$: Actual energy sales for agriculture and BPL category consumers in the quarter

$$Rapp\ (\frac{Rs}{unit}) = \left(\frac{(Papp + Tapp) * 10}{\{[PPOapp * (1 - TLapp) + PPIapp - PSOapp] * (1 - DLapp)\} - Zapp}\right)$$

- $Papp\ (in\ Rs.Cr.)$: Total power purchase cost approved in the Tariff Order for a quarter inclusive of fixed costs, variable costs etc. and containing the following elements:
  - Cost of procurement from sources outside the State,
  - Cost of procurement from sources within the State,
  - Cost of procurement from the Bilateral/ exchange etc.
  - Less: Revenue from sale of surplus power
- $Tapp\ (in\ Rs.Cr.)$: Total transmission charges approved in the Tariff Order for a quarter consisting of the following elements:
  - Inter-State transmission charges (PGCIL charges),
  - Intra-State transmission charges
- $PPOapp\ (in\ MU)$: Quantum of power to be procured from sources outside State/ Union Territory in a quarter as approved in the Tariff Order
- $TLapp\ (in\ \%)$: Approved Inter- State transmission losses for the year in consideration as provided in the relevant Tariff Order

- $PPIapp\ \ (in\ MU)$: Quantum of power to be procured from sources within the State, bilateral/ exchange in a quarter as approved in the Tariff Order
- $DLapp\ (in\ \%)$: Approved T&D losses for the year in consideration as provided in the Tariff Order
- $PSOapp\ \ (in\ MU)$: Quantum of sale of surplus power approved in the Tariff Order for a quarter
- $Zapp\ (in\ MU)$: Sales for agriculture and BPL category consumers for a quarter as approved in the relevant Tariff Order

4. Other Terms and conditions

1. For the purpose of the Fuel and Power Purchase Cost Adjustment, the Commission suggests that all the bills admitted and credits, if any, received by the distribution licensee during the period in consideration, irrespective of the period to which they pertain, may be considered.
2. The FPPCA charges determined as per the formula above may be recovered from the consumers of all categories based on their billed units excluding the BPL and the agriculture category consumers.
3. The FPPCA charges for a quarter shall be limited to a certain percentage of the ABR of the consumer category as may be determined by the Commission from time to time in the Tariff Order. The distribution licensee shall be allowed to collect the FPPCA without obtaining approval from the Commission. However, the distribution licensee shall be required to submit the FPPCA calculation to the Commission atleast one week before levying the same on the consumers.
4. The per unit FPPCA so worked out is charged differentially as per the approved retail tariff of the consumers. The determination of differential per unit FPPCA is mentioned below:

   - Step 1: Determination of Value of K

$$\frac{Approved\ Retail\ Tariff\ for\ a\ category\ or\ sub\ category\ (\frac{Rs.}{unit})}{Weighted\ Average\ Retail\ Tariff\ (WART)(\frac{Rs.}{unit})}$$

   The value of K for different consumer category or sub category for the year in consideration is considered as per the respective Tariff Order.

   - Step 2: Determination of proportionate FPPCA (Rs./unit) consumer category/sub-category wise

$$FPPCA\ \left(\frac{Rs.}{Unit}\right) = Average\ FPPCA * K\ for\ that\ consumer\ category\ or\ sub-category$$

10. Chapter 10: 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>.***

10.1. 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.

10.1.1. 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.*

10.1.2. 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 would like to submit to the Hon'ble Commission that there were no cases under the enforcement cell during the year. If any cases are registered by the enforcement cell, the details of the same shall be submitted to the Hon'ble Commission.*

Originally Issued in Tariff Order dated 31st July 2012
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 2016-17 and FY 2018-19, failing which the Commission will be constrained to take appropriate action against the Petitioner.*

10.1.3. 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 capitalisation shall be reported.*
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. Further, it is observed that the Petitioner has been able to submit capitalisation of only Rs.7.22 cr. in FY 2017-18 and nil in FY 2018-19. The Commission directs the Petitioner to increase its efforts towards capex activities necessary to enhance reliability and quality of supply to consumers.*

10.1.4. 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 2018.*
Petitioner's Response in the Present Tariff Petition *All the consumers of UT shall be metered by March, 2018.*
Commission's Response *The Commission directs the Petitioner to report the compliance of this directive within 2 months of issuance of this Order.*

10.1.5. 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 DNHPDCL would like to submit that the matter is under consideration of the DNHPDCL and possibility is being explored for the implementation of smart grid in the UT of Dadra and Nagar Haveli*
Commission's Response *The Commission notes the submission of the Petitioner and directs it to submit the quarterly status report on the implementation of smart grid.*

10.1.6. 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 2018.*

10.2. New Directives issued in this Order

10.2.1. Capital Expenditure

It is noticed that the Petitioner for FY 2017-18, could manage to provide supporting documents for capital expenditure and capitalisation worth Rs. 7.22 Cr only, against approved of Rs.119.02 Cr. in the Tariff Order for FY 2017-18. Further, for FY 2018-19 the Petitioner has proposed nil capitalisation, against an approved of Rs.83.18 Cr. in the MYT Order. Lower capital expenditure has direct impact on the reliability and quality of supply to consumers. Therefore, the Petitioner is directed to ramp up its efforts towards capital expenditure and further take steps towards strengthening the distribution network.

10.2.2. Assets created from consumer contribution

The Petitioner has failed to submit the details of assets created through consumer contribution. During the Technical Validation Session, the Petitioner confirmed that some of the assets have been created by consumer contribution however the Petitioner couldn't submit the details for the same. The Petitioner is not entitled to get depreciation on these assets. The Commission has currently considered entire GFA towards depreciation and will reduce the depreciation in future, once the details of consumer contribution is made available. The Commission directs the Petitioner to submit detailed scheme wise consumer contributions, the impact of which shall be accounted by Commission in future Tariff Orders.

Annexures

Annexure 1: Public Notices published by the Commission

Public Notice for the Petition of true-up of FY 2016-17

JOINT ELECTRICITY REGULATORY COMMISSION

(*For the state of Goa and Union territories*)

2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase V, Gurgaon (Haryana)
Ph: 0124-2342851, 2342852 Fax: 0124-2342853
Email: secy-jerc@nic.in, Website: www.jercuts.gov.in

PUBLIC NOTICE

Further to the Public Notice published on 07.10.2017 the stakeholders of the UT of Dadra & Nagar Haveli are hereby informed that the Public Hearing for approval of True-Up for the FY 2016-17 under Section 61, 62 and 64 of the Electricity Act, 2003 filed by the DNH Power Distribution Corporation Limited is scheduled on 30.10.2017. The Petition has been admitted as Petition No.240 of 2017 respectively, and is available on the Commission's website **www.jercuts.gov.in.**

The Commission shall hold the Public Hearing on the above Petition as per the schedule given below:

Date/Day	Time	Venue
30th October 2017	11.30 am	The President Hall, Yatri Niwas, Silvassa.

-sd/-
(Keerti Tiwari)
Secretary

Joint Electricity Regulatory Commission

(for The State of Goa and Union Territories)

2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana) Ph.: 0124-2342851, 2342852 Fax: 0124-2342853, E-mail: secy-jerc@nic.in Website: www.jercuts.gov.in

PUBLIC NOTICE

Notice is hereby given to all interested persons that the DNH Power Distribution Corporation Limited has filed a Petition for approval of True-up for the FY 2016-17 under Section 61, 62 and 64 of the Electricity Act, 2003. The same has been admitted as Petition No. 240/2017 and is available on Commission's website www.jercuts.gov.in

Interested persons may file objections/suggestions in six copies on the above Petition, in person or through e-mail / registered post on or before 26.10.2017 addressed to The Secretary, JERC (For the State of Goa & UTs) 2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana) email id.- secretaryjerc@gmail.com with a copy to the Chief Engineer, Electricity Department, DNH Power Distribution Corporation Limited, Vidyut Bhawan, 66KV Road, Amli, Opp. Secretariat, Silvassa – 396 230.

The Commission will conduct a Public Hearing at **11.30 am** on **30.10.2017** at Silvassa in the above matter.

Sd/-

(Keerti Tewari)

Secretary

8x7 cm

Public Hearing for the Petition for APR of FY 2017-18 and ARR of FY 2018-19

Joint Electricity Regulatory Commission
(for The State of Goa and Union Territories)
2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana) Ph.: 0124-2342851, 2342852
Fax: 0124-2342853, E-mail: secy-jerc@nic.in Website: www.jercuts.gov.in

PUBLIC NOTICE

Further to the Public Notice published on 24.12.2017 the stakeholders of the UT of Dadra & Nagar Haveli are hereby informed that the **(i)** DNH Power Distribution Corporation Ltd. has filed a Petition for approval of the Annual Revenue Requirement (ARR) and Tariff Proposal for the FY 2018-19 under Section 61, 62 & 64 of the Electricity Act, 2003 and **(ii)** the Electricity Department, Transmission Division, of Union Territory of Dadra and Nagar Haveli has filed a Petition for approval of the Aggregate Revenue Requirement (ARR) for the FY 2018-19 for the Electricity Department, Transmission Division Union Territory of Dadra and Nagar Haveli under Section 61, 62 & 64 of the Electricity Act, 2003. Both the Petitions have been admitted as **Petitions No. 247/2017** and **250/2017** respectively, and are available on the Commission's website **www.jercuts.gov.in**

The Commission shall hold the Public Hearing on the above Petitions as per the schedule given below:

Date / Day / Year	Time	Venue
10th January (Wednesday), 2018	11.00 A.M. onwards	The President Hall, Yatri Niwas, Silvassa

Sd/-
(Keerti Tewari)
Secretary

Silvassa

8x8 cm

Joint Electricity Regulatory Commission

(for The State of Goa and Union Territories)

2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana) Ph.: 0124-2342851, 2342852
Fax: 0124-2342853, E-mail: secy-jerc@nic.in Website: www.jercuts.gov.in

PUBLIC NOTICE

1. DNH Power Distribution Corporation Ltd. has filed a Petition for approval of Annual Revenue Requirement (ARR) and Tariff Proposal for FY 2018-19 under Section 61, 62 & 64 of the Electricity Act, 2003. The same has been admitted as Petition No. 247/2017 and is available on the Commission's website **www.jercuts.gov.in**
2. Electricity Department, Transmission Division, of Union Territory of Dadra and Nagar Haveli has filed a Petition for approval of Aggregate Revenue Requirement (ARR) for FY 2018-19 for Electricity Department, Transmission Division Union Territory of Dadra and Nagar Haveli under Section 61, 62 & 64 of the Electricity Act, 2003. The same has been admitted as Petition No. 250/2017 and is available on the Commission's website **www.jercuts.gov.in**

Interested persons may file objections/suggestions in six copies on the above Petitions in person or through E-mail: **secretaryjerc@gmail.com** or through registered post addressed to **The Secretary, JERC (for Goa & UTs)** to reach on or before **10.01.2018** with a copy to the Chief Engineer, DNH Power Distribution Corporation Ltd., UT of Dadra & Nagar Haveli, Silvassa. (E-mail **caparmar1956@gmail.com**) against Petition No. 247/2017 and Executive Engineer (Transmission), Electricity Department, Transmission Division, of Union Territory of Dadra and Nagar Haveli (E-mail: **hmpatel39@gmail.com**) against Petition No. 250/2017.

The Commission shall hold a Public Hearing for both the above stated Petitions on **10th January, 2018** at **11.00 AM**, at **Silvassa.**

Sd/-
(Keerti Tewari)
Secretary

Dadra & Nagar Haveli 8x10 cm

संयुक्त विद्युत विनियामक आयोग

(गोवा राज्य तथा संघशासित क्षेत्र)

दूसरी मंजिल, एचएसआईआईडीसी ऑफिस कॉम्पलेक्स, वाणिज्य निकुंज कॉम्पलेक्स, उद्योग विहार, फेज- V, गुड़गांव (हरियाणा) फोन: 0124-2342851, 2342852 फैक्स: 0124-2342853, ईमेल: secy-jerc@nic.in, वेबसाइट: www.jercuts.gov.in

सार्वजनिक सूचना

1. डीएनएच पावर डिस्ट्रीब्यूशन कॉरपोरेशन लि. ने विद्युत अधिनियम, 2003 की धारा 61, 62 तथा 64 के अधीन वित्त वर्ष 2018-19 हेतु टैरिफ प्रस्ताव तथा एन्युअल रिवेन्यू रिक्वायरमेंट (एआरआर) की स्वीकृति के लिए एक याचिका दाखिल कराई है। इसको याचिका नं. 247/2017 के तौर पर दाखिल किया गया है तथा यह आयोग की वेबसाइट www.jercuts.gov.in पर उपलब्ध है।
2. दादरा और नगर हवेली संघशासित क्षेत्र के विद्युत विभाग, ट्रांसमिशन डिवीजन ने विद्युत अधिनियम, 2003 की धारा 61, 62 तथा 64 के अधीन वित्त वर्ष 2018-19 के लिए विद्युत विभाग, ट्रांसमिशन डिवीजन, दादरा एवं नगर हवेली संघशासित क्षेत्र के एग्रीगेट रिवेन्यू रिक्वायरमेंट (एआरआर) की स्वीकृति हेतु एक याचिका दाखिल कराई है। इसको याचिका नं. 250/2017 के तौर पर दाखिल किया गया है तथा यह आयोग की वेबसाइट www.jercuts.gov.in पर उपलब्ध है।

इच्छुक व्यक्ति उपरोक्त याचिकाओं पर अपनी आपत्तियां/सुझाव सचिव, संयुक्त विद्युत विनियामक आयोग (गोवा एवं संघशासित क्षेत्र) को सम्बोधित करते हुए छह प्रतियों में व्यक्तिगत रूप से अथवा ई-मेल: secretaryjerc@gmail.com अथवा पंजीकृत डाक द्वारा इस प्रकार प्रेषित करें कि 10.01.2018 को अथवा इससे पूर्व पहुंच जाएं तथा एक प्रति याचिका नं. 247/2017 के विरुद्ध मुख्य अभियन्ता, डीएनएच पावर डिस्ट्रीब्यूशन कॉरपोरेशन लि., संघशासित क्षेत्र दादरा एवं नगर हवेली, सिलवासा (ईमेल : caparmar1956@gmail.com) को तथा याचिका नं. 250/2017 के विरुद्ध कार्यपालक अभियन्ता (ट्रांसमिशन), विद्युत विभाग, ट्रांसमिशन डिवीजन, दादरा एवं नगर हवेली संघशासित क्षेत्र (ई-मेल : hmpatel39@gmail.com) को प्रेषित करें।

उपरोक्त दोनों याचिकाओं के मामले में आयोग द्वारा सिलवासा में 10 जनवरी, 2018 को पूर्वा. 11.00 बजे एक सार्वजनिक सुनवाई का आयोजन किया जाएगा।

हस्ता./-
(कीर्ति तिवारी)
सचिव

NAV BHARAT TIMES
23.12.17

જોઈન્ટ ઈલેક્ટ્રિસિટી રેગુલેટરી કમિશન

(ગોવા સ્ટેટ અને કેન્દ્ર શાસિત પ્રદેશ માટે)

બીજો માળ, એચએસઆઈઆઈડીસી ઓફિસ કોમ્પલેક્સ, વાણિજ્ય નીકુંજ કોમ્પલેક્સ, ઉદ્યોગ વિહાર, ફેઝ-૫, ગુરગાંવ (હરિયાણા) ફોન નં. ૦૧૨૪-૨૩૪૨૮૫૧, ૨૩૪૨૮૫૨, ફેક્સ: ૦૧૨૪-૨૩૪૨૮૫૩, ઈ-મેલ: secy-jerc@nic.in વેબસાઈટ: www.jercuts.gov.in

જાહેર નોટીસ

૧. ડીએનએચ પાવર ડિસ્ટ્રીબ્યુશન કોર્પોરેશન લિ. દ્વારા ઈલેક્ટ્રિસિટી એક્ટ, ૨૦૦૩ ની કલમ ૬૧, ૬૨ અને ૬૪ હેઠળ ના.વ. ૨૦૧૮-૧૯ માટે વાર્ષિક રેવન્યુ રીકવાયરમેન્ટ (એઆરઆર) અને ટેરિફ પ્રપોઝલ મંજુરી માટે દાવો ફાઈલ કરવામાં આવેલ છે. જેને પીટીશન નં. ૨૪૭/૨૦૧૭ તરીકે દાખલ કરવામાં આવેલ છે અને કમિશન વેબસાઈટ **www.jercuts.gov.in** ઉપર ઉપલબ્ધ છે.

૨. ઈલેક્ટ્રિસિટી ડિપાર્ટમેન્ટ, ટ્રાન્સમીશન ડિવિઝન, કેન્દ્રશાસિત પ્રદેશ દાદરા અને નગર હવેલી દ્વારા ઈલેક્ટ્રિસિટી એક્ટ, ૨૦૦૩ ની કલમ ૬૧, ૬૨ અને ૬૪ હેઠળ ઈલેક્ટ્રિસિટી ડિપાર્ટમેન્ટ, ટ્રાન્સમીશન ડિવીઝન કેન્દ્ર શાસિત પ્રદેશ, દાદરા અને નગર હવેલી માટે ના.વ. ૨૦૧૮-૧૯ સંદર્ભે એગ્રીગ્રેટ રેવન્યુ રીક્વાયરમેન્ટ (એઆરઆર) મંજુરી સંદર્ભે પીટીશન ફાઈલ કરવામાં આવેલ છે, જે પીટીશન નં. ૨૫૦/ ૨૦૧૭ તરીકે દાખલ કરવામાં આવેલ છે અને કમિશન વેબસાઈટ **www.jercuts.gov.in** ઉપર ઉપલબ્ધ છે.

રસ ધરાવતા વ્યક્તિઓ ઉપરોક્ત પીટીશનો બાબતે વાંધાઓ/ સૂચનો છ નકલમાં રૂબરૂ અથવા ઈમેલ: **secretaryjerc@gmail.com** અથવા રજિસ્ટર્ડ પોસ્ટથી: ધ સેક્રેટરી, જર્ક (ગોવા અને કે.શા.પ્ર. માટે) ફાઈલ કરાવી શકે છે. જે તારીખ ૧૦-૧-૨૦૧૮ નાં રોજ કે તે અગાઉ મળી જવા જોઈશે, જેની એક નકલ ચીફ એન્જિનિયર, ડીએનએચ પાવર ડિસ્ટ્રીબ્યુશન કોર્પોરેશન લિ., કે.શા.પ્ર. દાદરા અને નગર હવેલી, સિલ્વાસા (ઈમેલ:- **caparmar1956@gmail.com**) પીટીશન નં. ૨૪૭/૨૦૧૭ સામે મોકલવાની રહેશે. તેમજ પીટીશન નં. ૨૫૦/૨૦૧૭ સામે એક્ઝિક્યુટીવ એન્જિનિયર, (ટ્રાન્સમીશન), ઈલેક્ટ્રિસિટી ડિપાર્ટમેન્ટ, ટ્રાન્સમીશન ડિવીઝન, કે.શા.પ્ર. દાદરા અને નગર હવેલી (ઈમેલ:- **hmpatel39@gmail.com**)ને મોકલવાની રહેશે.

ઉપરોક્ત બંને પીટીશનો માટે કમિશન દ્વારા જાહેર સુનાવણી **૧૦ જાન્યુઆરી, ૨૦૧૮ નાં રોજ સવારે ૧૧.૦૦ વાગે સિલવાસા** ખાતે રાખવામાં આવશે.

સહી/-

(કીર્તિ તિવારી)

...e above arbitration clause,...

COPY

23.12.17. Gujrat Samachar

Joint Electricity Regulatory Commission

(for The State of Goa and Union Territories)
2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana) Ph.: 0124-2342851, 2342852 Fax: 0124-2342853, E-mail: secy-jerc@nic.in Website: www.jercuts.gov.in

PUBLIC NOTICE

1. DNH Power Distribution Corporation Ltd., has filed a Petition for approval of Annual Revenue Requirement (ARR) and Tariff Proposal for FY 2018-19 under Section 61, 62 & 64 of the Electricity Act, 2003. The same has been admitted as Petition No. 247/2017 and is available on the Commission's website **www.jercuts.gov.in**
2. Electricity Department, Transmission Division, of Union Territory of Dadra and Nagar Haveli has filed a Petition for approval of Aggregate Revenue Requirement (ARR) for FY 2018-19 for Electricity Department, Transmission Division Union Territory of Dadra and Nagar Haveli under Section 61, 62 & 64 of the Electricity Act, 2003. The same has been admitted as Petition No. 250/2017 and is available on the Commission's website **www.jercuts.gov.in**

Interested persons may file objections/suggestions in six copies on the above Petitions in person or through E-mail: **secretaryjerc@gmail.com** or through registered post addressed to **The Secretary, JERC (for Goa & UTs)** to reach on or before **10.01.2018** with a copy to the Chief Engineer, DNH Power Distribution Corporation Ltd., UT of Dadra & Nagar Haveli, Silvassa. (E-mail **caparmar1956@gmail.com**) against Petition No. 247/2017 and Executive Engineer (Transmission), Electricity Department, Transmission Division, of Union Territory of Dadra and Nagar Haveli (E-mail: **hmpatel39@gmail.com**) against Petition No. 250/2017.

The Commission shall hold a Public Hearing for both the above stated Petitions on **10th January, 2018** at **11.00 AM**, at **Silvassa.**

Sd/-
(Keerti Tewari)
Secretary

Indian Express
23.12.2017

संयुक्त विद्युत विनियामक आयोग

(गोवा राज्य और संघ राज्य क्षेत्र हेतु)

2 तल, एचएसआईआईडीसी आफिस काम्प्लेक्स, वाणिज्य (Vanijya) निकुंज काम्प्लेक्स, उद्योग विहार,फेज-V, गुड़गांव (हरियाणा) फो.: 0124-2342851, 2342852
फैक्स: 0124-2342853, ई-मेल: secy-jerc@nic.in वेबसाइट: www.jercuts.gov.in

सार्वजनिक सूचना

एतदद्वारा 24.12.2017 को प्रकाशित हुई सार्वजनिक सूचना के क्रम में दादर एवं नागर हवेली संघ राज्य क्षेत्र (UT) के सभी हितधारकों को सूचित किया जाता है कि (I) डीएनएच पावर डिस्ट्रीब्यूशन कार्पोरेशन लि. द्वारा **Annual Revenue Requirement (ARR)** के अनुमोदन तथा विद्युत अधिनियम, 2003 की धारा 61, 62 एवं 64 के अन्तर्गत वित्तीय वर्ष 2018-19 हेतु टैरिफ प्रस्ताव हेतु एक याचिका योजित की गई तथा (II) विद्युत विभाग, पारेषण खण्ड,यूनियन टैरिटरी दादर एवं नागर हवेली द्वारा वित्तीय वर्ष 2018-19 हेतु विद्युत विभाग, पारेषण खण्ड,यूनियन टैरिटरी दादर एवं नागर हवेली के लिए विद्युत अधिनियम, 2003 की धारा 61,62 एवं 64 के अन्तर्गत Aggregate Revenue Requirement (ARR) के अनुमोदन हेतु एक याचिका योजित की गई है। दोनों ही याचिकाएं क्रमशः **याचिका सं. 247/2017** तथा **250/2017** के रूप में स्वीकार की जा चुकी हैं तथा आयोग की वेबसाइट **www.jercuts.gov.in** पर उपलब्ध हैं।

आयोग द्वारा उपरोक्त याचिकाओं पर आम सुनवाई नीचे अंकित शिड्यूल के अनुसार आयोजित की जायेगी।

तारीख/दिन/वर्ष	समय	स्थान
10 जनवरी(बुधवार), 2018	11.00 बजे पूर्वान्ह के बाद	प्रेसीडेन्ट हॉल, यात्री निवास, सिलवासा

ह0/-
(कीर्ति तिवारी)
सचिव

NAVBHARAT TIMES 08.01.2018

Joint Electricity Regulatory Commission
(for The State of Goa and Union Territories)
2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana) Ph.: 0124-2342851, 2342852
Fax: 0124-2342853, E-mail: secy-jerc@nic.in Website: www.jercuts.gov.in

PUBLIC NOTICE

Further to the Public Notice published on 24.12.2017 the stakeholders of the UT of Dadra & Nagar Haveli are hereby informed that the **(i)** DNH Power Distribution Corporation Ltd. has filed a Petition for approval of the Annual Revenue Requirement (ARR) and Tariff Proposal for the FY 2018-19 under Section 61, 62 & 64 of the Electricity Act, 2003 and **(ii)** the Electricity Department, Transmission Division, of Union Territory of Dadra and Nagar Haveli has filed a Petition for approval of the Aggregate Revenue Requirement (ARR) for the FY 2018-19 for the Electricity Department, Transmission Division Union Territory of Dadra and Nagar Haveli under Section 61, 62 & 64 of the Electricity Act, 2003. Both the Petitions have been admitted as **Petitions No. 247/2017** and **250/2017** respectively, and are available on the Commission's website **www.jercuts.gov.in**

The Commission shall hold the Public Hearing on the above Petitions as per the schedule given below:

Date / Day / Year	Time	Venue
10th January (Wednesday), 2018	11.00 A.M. onwards	The President Hall, Yatri Niwas, Silvassa

Sd/-
(Keerti Tewari)
Secretary

INDIAN EXPRESS
08.01.2018

જોઈન્ટ ઈલેક્ટ્રિસિટી રેગ્યુલેટરી કમિશન

(ગોવા રાજ્ય અને કેન્દ્ર શાસિત પ્રદેશો માટે)

[illegible] www.jercuts.gov.in

જાહેર નોટિસ

૨૪-૧૨-૨૦૧૭ નાં રોજ પ્રકાશિત જાહેર નોટિસ પ્રતિ વિશેષમાં, દાદરા અને નગર હવેલી ના કેન્દ્રશાસિત પ્રદેશના લાભાર્થીઓને આ સાથે જણાવવામાં આવે છે કે, (i) ડીએનએચ પાવર ડિસ્ટ્રીબ્યુશન કોર્પોરેશન લિમિટેડ દ્વારા ઈલેક્ટ્રિસિટી એક્ટ, ૨૦૦૩ ની કલમ ૬૧, ૬૨ અને ૬૪ હેઠળ નાણાંકીય વર્ષ ૨૦૧૮-૧૯ માટે એન્યુઅલ રેવન્યુ રીક્વાયરમેન્ટ (એઆરઆર) અને ટેરિફ દરખાસ્તોની મંજૂરી માટે એક દાવો દાખલ કરેલ છે. અને (ii) ઈલેક્ટ્રિસિટી ડીપાર્ટમેન્ટ, ટ્રાન્સમિશન ડિવિઝન, કેન્દ્રશાસિત પ્રદેશ દાદરા અને નગર હવેલીના એ વર્ષ ૨૦૧૮-૧૯ માટે એગ્રીગેટ રેવન્યુ રીક્વાયરમેન્ટ (એઆરઆર) ની મંજૂરી માટે, ઈલેક્ટ્રિસિટી એક્ટ, ૨૦૦૩ ની કલમ ૬૧,૬૨ અને ૬૪ હેઠળ દાવો દાખલ કરેલ છે. બંને દાવાઓ અનુક્રમે દાવા ક્રમાંકઃ- ૨૪૭/૨૦૧૭ અને ૨૫૦/૨૦૧૭ તરીકે દાખલ કરેલ છે. અને જે કમિશનની વેબસાઈટ **www.jercuts.gov.in** પર ઉપલબ્ધ છે.

આયોગ, ઉપરોક્ત દાવાઓ પરની જાહેર સુનાવણી નીચે આપેલ સમયપત્રક પ્રમાણે યોજશે.

તારીખ/ દિવસ/ વર્ષ	સમય	સ્થળ
૧૦ મી જાન્યુઆરી (બુધવાર), ૨૦૧૮	સવારે ૧૧.૦૦ વાગે અને આગળ ઉપર	પ્રેસિડેન્ટ હોલ, યાત્રી નિવાસ, સિલવાસા

અવાચ્ય/-

(કીર્તિ તિવારી)

સચિવ

Annexure 2: Public Notices published by the Petitioner

Public Notice for the Petition of true-up of FY 2016-17

DNH POWER DISTRIBUTION CORPORATION LTD.

શનિવાર, તા. ૭ ઓક્ટોબર ૨૦૧૭

ગુજરાત સમાચાર (સુરત આવૃત્તિ) ૧૩

પશ્ચિમ રેલવે

પશ્ચિમ રેલવે

જાહેર નોટિસ

ગુજરાત સરકાર

નર્મદા, જળ સંપત્તિ પાણી પુરવઠા અને કલ્પસર વિભાગ

ઇ-ટેન્ડર નોટીસ નં. ૧૦, સને ૨૦૧૭-૧૮

PRAMUKHSWAMI MEDICAL COLLEGE, KARAMSAD

Admission in

Second year of MBBS Course 2017-18

Applications are invited from eligible and interested applicants for admission in 2nd year MBBS by way of transfer to Pramukhswami Medical College from other Medical Colleges/University as per MCI rules and regulations.

Rules, Regulations and Application Form can be downloaded from our website : www.charutarhealth.org

Process Fee: Rs.15,000/- | Last Date of Submission: 17/10/2017

Dean's Office
Pramukhswami Medical College
Gokal Nagar, Karamsad - 388 325

HolBiz Private Limited

PMKVY અંતર્ગત સૌરઉર્જા (Solar panel installation)

નો ચાર મહિના નો નિઃશુલ્ક કોર્ષ કરાવવામાં આવશે.

ઈચ્છુક ઉમેદવારોએ નીચેના સરનામે સંપર્ક કરવો

સરનામું-C-419, ... 7283872756

ટૂંકી મુદતની જાહેર નિવિદા નંબર : ૨/૨૦૧૭-૧૮

ડાંગ જિલ્લાના ઉત્તર ડાંગ વન વિભાગના કાર્યક્ષેત્ર હેઠળ આવેલ ભેંસકાતરી રેંજમાં વર્ષ ૨૦૧૭-૧૮ માટે વન સંરક્ષણ અને વન સંવર્ધનની જુદી જુદી કામગીરી જેવી કે, (૧) નાળા બંન્ડીંગ (ગેબીયન સ્ટ્રકચર) રૂા. ૧૨૫૦૦/- (૨) ગટ્ટર રૂા. ૭૫૦૦૦/- (૩) ચેકવોલ રૂા. ૨,૦૦,૦૦૦/- સુધીની મર્યાદામાં આ કામો ડાંગ જિલ્લા સ્થાનિક ઇજારદાર / કોન્ટ્રાકટર / વેપારી / સંસ્થા / સંઘ વિગેરેને આમંત્રિત કરવામાં આવે છે. આ કામે ટેન્ડર ફોર્મ રૂા. ૫૦૦/- રોકડા ચૂકવી રેંજ કચેરી ભેંસકાતરી ખાતેથી તા. ૦૯/૧૦/૨૦૧૭ થી ૧૨/૧૦/૨૦૧૭ સુધી સમય ૧૮-૦૦ કલાક સુધીમાં મેળવી રેંજ કચેરીએ રૂબરૂ મોકલવાના રહેશે. આ કામે સિક્યુરીટી ડીપોઝીટ પેટે નાયબ વન સંરક્ષકશ્રી ઉત્તર ડાંગ, વન વિભાગ આહવાના નામનો રૂા. ૧૦,૦૦૦/- પુરાનો રાષ્ટ્રીયકૃત બેન્કનો ડી.ડી. ટેન્ડર ફોર્મ સાથે જોડવાનો રહેશે. તા. ૧૩/૧૦/૨૦૧૭ના રોજ સવારે ૧૧-૦૦ કલાકે રેંજ કચેરી ભેંસકાતરી ખાતે ટેન્ડર ખોલવામાં આવશે. ટેન્ડર મંજુર કરવા કે નહી અથવા એમાં ફેરફાર કરવાનો કોઈ પણ કારણ આપ્યા વગર રદ કરવાની સત્તા નાયબ વનસંરક્ષકશ્રી ઉત્તર ડાંગ વન વિભાગ આહવાને રહેશે.

સરનામું :
પરિક્ષેત્ર વન અધિકારીશ્રીની કચેરી,
ભેંસકાતરી
તા. વઘઈ, જિ. ડાંગ
ફોન નં. ૯૪૦૮૩૪૨૩૬૪
ક્રમાંક : માહિતી/ડાંગ/૨૦૭/૨૦૧૭

પરિક્ષેત્ર વન અધિકારી
ભેંસકાતરી રેંજ

Joint Electricity Regulatory Commission

(for The State of Goa and Union Territories)

2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana) Ph.: 0124-2342851, 2342852 Fax: 0124-2342853, E-mail: secy-jercuts@nic.in Website: www.jercuts.gov.in

PUBLIC NOTICE

Notice is hereby given to all interested persons that the DNH Power Distribution Corporation Limited has filed a Petition for approval of True-up for the FY 2016-17 under Section 61, 62 and 64 of the Electricity Act, 2003. The same has been admitted as Petition No. 240/2017 and is available on Commission's website www.jercuts.gov.in

Interested persons may file objections/suggestions in six copies on the above Petition, in person or through e-mail / registered post on or before 26.10.2017 addressed to The Secretary, JERC (For the State of Goa & UTs) 2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana) email id.- secretaryjerc@gmail.com with a copy to the Chief Engineer, Electricity Department, DNH Power Distribution Corporation Limited, Vidyut Bhawan, 66KV Road, Amli, Opp. Secretariat, Silvassa – 396 230.

The Commission will conduct a Public Hearing at **11.30 am** on **30.10.2017** at Silvassa in the above matter.

Sd/-

(Keerti Tewari)

Secretary

Public Notice for the Petition of APR of FY 2017-18 and ARR of FY 2018-19

Joint Electricity Regulatory Commission

(for The State of Goa and Union Territories)

2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana) Ph.: 0124-2342851, 2342852 Fax: 0124-2342853, E-mail: secy-jerc@nic.in Website: www.jercuts.gov.in

PUBLIC NOTICE

Further to the Public Notice published on 24.12.2017 the stakeholders of the UT of Dadra & Nagar Haveli are hereby informed that the **(I)** DNH Power Distribution Corporation Ltd. has filed a Petition for approval of the Annual Revenue Requirement (ARR) and Tariff Proposal for the FY 2018-19 under Section 61, 62 & 64 of the Electricity Act, 2003 and **(II)** the Electricity Department, Transmission Division, of Union Territory of Dadra and Nagar Haveli has filed a Petition for approval of the Aggregate Revenue Requirement (ARR) for the FY 2018-19 for the Electricity Department, Transmission Division Union Territory of Dadra and Nagar Haveli under Section 61, 62 & 64 of the Electricity Act, 2003. Both the Petitions have been admitted as **Petitions No. 247/2017** and **250/2017** respectively, and are available on the Commission's website **www.jercuts.gov.in**

The Commission shall hold the Public Hearing on the above Petitions as per the schedule given below:

Date / Day / Year	Time	Venue
10th January (Wednesday), 2018	11.00 A.M. onwards	The President Hall, Yatri Niwas, Silvassa

Sd/-

(Keerti Tewari)

Secretary

Page : 7
Saturday 23, December 2017
દમણગંગા ટાઇમ્સ
DAMANGANGA TIMES

સંઘ પ્રદેશ
દાદરા અને નગર હવેલી
વિદ્યુત વિભાગ
પ્રસારણ ડિવિઝન,
સેલવાસ

નંબર: ડીએનએચ/ઈએલઈ/પ્રસા./2017/224/૪૦૮ તા: 21/12/2017

જાહેર નોટિસ

જોઈન્ટ ઈલેક્ટ્રીસીટી રેગ્યુલેટરી કમિશન (JERC)સમક્ષ નાણાકીય વર્ષ 2018-19 માટે ARR નક્કી કરવા અને દર સુધારણા દરખાસ્તની જાહેરાત

પૂર્વ જાણકારી : વિદ્યુત વિભાગ, પ્રસારણ ડિવિઝન, એ નાણાકીય વર્ષ 2018-19 માટે ARR અરજી અને દર સુધારણા દરખાસ્ત જોઈન્ટ ઈલેક્ટ્રીસીટી રેગ્યુલેટરી કમિશન (JERC) સમક્ષ ઈલેક્ટ્રીસીટી એક્ટ, 2003ની સેક્શન 62,63 અને 64 પ્રમાણે અરજી JERC (Conduct Business) નિયમો, 2009 અને JERC (Multi Year Distribution Tariff) નિયમો, 2014 અનુસાર દાખલ કરેલી છે.

ARR ની સૂચિત દરખાસ્ત નીચે પ્રમાણે છે.

2. સરેરાશ આવક જરૂરીયાત (ARR) નાણાં વર્ષ 2018-19 માટે અનુમાનિત અને નાણાં વર્ષ 2017-18 માટે સુધારેલ અંદાજ નીચે પ્રમાણે આપેલ છે.

(રૂ. કરોડમાં)

વિગતો	નાણા વર્ષ 2017-18 RE	નાણા વર્ષ 2018-19 Projected
ઓ & એમ ખર્ચ	6,34	6,43
ઘસારો	11,91	12,54
લાંબા ગાળાની લોનનું વ્યાજ	5,91	5,37
કાર્યકારી મુડી પર લોનનું વ્યાજ	0,92	0,94
ઈક્વીટી પર વળતર	5,21	5,77
કુલ :	30,29	31,04
બાદ :		
શુલ્ક સિવાયની આવક	0,05	0,05
વાર્ષિક આવકની જરૂરિયાત	30,24	30,99

3. નાણાકીય વર્ષ 2014-15 થી 2016-17 માટે વિદ્યુત વિભાગ, પ્રસારણ ડીવિઝનની True-Up ના સમ્બંધિત વર્ષના રૂ. 46,77 કરોડ.

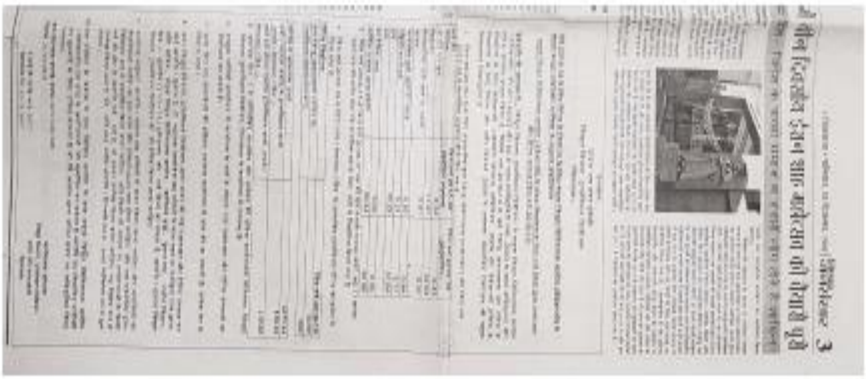
4. નાણાકીય વર્ષ 2018-19 નો સૂચિત ટ્રાન્સમિશન ટેરિફ નીચે મુજબ છે.

ટેરિફ નિર્ધારણ	નાણાકીય વર્ષ 2018-19
એકંદર આવકની જરૂરિયાત (રૂ. કરોડમાં)	30,99
ટ્રાન્સમિશન ક્ષમતા (MW)	980
પરિધિમાં જરૂરી ઉર્જા	6475,44
લાંબાગાળાના ટૂંકા ટ્રાન્સમિશન ચાર્જ (રૂપયા/મેગાવોટ/દિવસ)	878,38
શોર્ટ ટર્મ ટ્રાન્સમિશન ચાર્જ (રૂપયા/મેગાવોટ/દિવસ)	219,60

5. [illegible]
6. [illegible] ARR [illegible]
7. [illegible] 100 [illegible]
8. [illegible] 2018-19 [illegible] (JERC) [illegible] HSHDC [illegible]
9. [illegible]
10. [illegible] (JERC) [illegible]

[illegible] 462/2017
[illegible] 22/12/2017

કાર્યપાલક ઇજનેર
વિદ્યુત વિભાગ, ટ્રાન્સમિશન ડીવિઝન,
દાદરા અને નગર હવેલી,
સેલવાસ



Annexure 3: List of Stakeholders

The following is the list of the stakeholders who have submitted objections/ suggestions:

Sl. No.	Name of Stakeholder
1.	Mr. Kaushik J Mody, Association of Continuous Polymer Industries
2.	Mr. Atul R Shah, Federation of Industrial Association
3.	Shruti Bhatia – VP, IEX