TARIFF ORDER

Approval of True up of FY 2015-16 & Aggregate Revenue Requirement for 2nd MYT Control Period (FY 2019-20 to FY 2021-22) & Determination of Retail Supply Tariff for the FY 2019-20

Petition No. 274/2019

For

Electricity Department, Andaman & Nicobar Administration

20th May 2019

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

Abbreviation	Full Form
A&G	Administrative and General
Act	The Electricity Act, 2003
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal of Electricity
CAGR	Compound Annualized Growth rate
Capex	Capital Expenditure
CEA	Central Electricity Authority
CGS	Central Generating Stations
Cr	Crores
DG	Diesel Generator
Discom	Distribution Company
FY	Financial Year
GoI	Government of India
HPP	Hired Power Plant
HT	High Tension
JERC	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
kVA	Kilo Volt Ampere
kWh	Kilo Watt Hour
LT	Low Tension
MoP	Ministry of Power
MU	Million Units
MW	Mega Watt
MYT	Multi Year Tariff
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance
PH	Power House
PLF	Plant Load Factor
PPA	Power Purchase Agreement
REC	Renewable Energy Certificate
RPO	Renewable Purchase Obligation
SECI	Solar Energy Corporation of India Limited
SERC	State Electricity Regulatory Commission
T&D	Transmission & Distribution
TVS	Technical Validation Session
UI	Unscheduled Interchange
UT	Union Territory
YoY	Year on Year

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. 274/2019

In the matter of

Approval of True up of FY 2015-16 & Aggregate Revenue Requirement for 2nd MYT Control Period (FY 2019-20 to FY 2021-22) & Determination of Retail Supply Tariff for the FY 2019-20.

And in the matter of

Electricity Department, Andaman & Nicobar Administration (EDA&N) .... Petitioner

ORDER

Dated: 20th May 2019

1) This order is passed in respect of the Petition filed by the Electricity Department, Andaman & Nicobar Administration (herein after referred as the Petitioner or EDA&N) for approval of True up of FY 2015-16 and Aggregate Revenue Requirement for the 2nd MYT Control Period (FY 2019-20 to FY 2021-22) & Retail Supply Tariff for the FY 2019-20.

2) On receipt of the Petition, the Commission scrutinised its contents and requisitioned further information/clarifications on the data gaps observed in the Petition to take a prudent view of the Petition. The Commission also held a Technical Validation Session to determine sufficiency of data and the veracity of the information submitted. Further, suggestions/comments/objections were invited from the public/stakeholders. A Public Hearing was also held and the stakeholders/Public were heard.

3) The tariff, as detailed in the Chapter "Tariff Schedule" and other provisions as approved in this Order shall come into force from 1st June, 2019 and shall remain valid till further Orders of the Commission.

4) 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. The Commission also directs the Licensee to upload the Tariff Order on its website.

5) The Commission based on the Petitioner's submission, relevant MYT Regulations, facts of the matter and after proper due diligence has approved the True-up of FY 2015-16 and ARR for the 2nd MYT Control Period along with the retail supply tariff for FY 2019-20.

A Summary of the order is as follows:

i) The following table provides ARR, Revenue and gap as submitted by the Petitioner and approved by the Commission for the True-up of FY 2015-16

Table 1: Revenue Gap / (Surplus) approved for FY 2015-16 (INR Crore)

S. No.	Particulars	FY 2015-16	
		Claimed	Approved
1	Net Revenue Requirement	586.07	578.05
2	Revenue from sale of power at Existing Tariff	119.81	120.03
3	**Net Gap during the year**	**466.27**	**458.02**
4	Add: Previous Year Gap	0.00	0.00
5	**Total Gap**	**466.27**	**458.02**

The above gap is met through budgetary support , therefore the gap is not carried forward for the future years.

ii) The following table provides the cumulative revenue gap/ (surplus) at approved tariff by the end of FY 2019-20:

Table 2: Revenue Gap / (Surplus) approved for FY 2019-20 (INR Crore)

S. No.	Particulars	FY 2019-20	
		Claimed	Approved
1	Net Revenue Requirement	930.13	747.85
2	Revenue from sale of power at Existing Tariff	185.12	185.11
2	Increase/(decrease) in revenue from sale of power at Approved Tariff	0.00	18.22
3	**Net Gap during the year**	**745.01**	**544.52**
4	Add: Previous Year Gap	0.00	0.00
5	**Total Gap**	**745.01**	**544.52**

6) In order to meet the entire gap of INR 544.52 Crore through tariff, an average tariff hike from INR 6.27/unit to INR 25.35/unit would be required. However, keeping in view the socio-economic constraints of consumers residing in the licensee area and the budgetary support by the Government to the extent of to meet the gap, a nominal increase in tariff from the existing level of INR 6.27 / unit to INR 6.89/ unit is approved by the Commission.

7) The Commission has introduced a new category of Life line Connection for the domestic consumers having consumption upto 50 units in order to provide benefit of lower tariffs to the weaker section of the society. The tariff for this lifeline category will be applicable only for the consumers consuming upto 50 units per month. For consumers having consumption higher than 50 units per month, the tariff as specified for Domestic Connection shall be applicable.

8) The Commission believes that the demand for charging infrastructure for electric vehicles will increase in the near future due to increased commercialization. Furthermore, the Commission is of the opinion that to impart the necessary impetus for the adoption of E-Vehicles in the Territory a sustainable framework has to be developed and having a designated electricity tariff is the first step towards achieving it. Therefore, keeping in view the anticipated demand and need, the Commission introduces a new category namely Electric Vehicle Charging Stations for consumers setting up infrastructure for charging of Electric vehicles/ Electric rickshaws etc. and has fixed the tariff as per the guidelines of Ministry of Power, Govt. of India.

9) The Commission has also introduced the two part tariff comprising of Fixed Charges and Energy Charges and abolished the minimum charges for all the consumer categories.

10) The Commission has increased the average tariff for FY 2019-20 by 9.84% from the existing tariff of FY 2018-19.

11) The Petitioner is directed to ensure applicability of tariff of Commercial category to all the hotel establishment, failing which, the Commission may take an appropriate view considering the non-compliance of Commission's direction.

12) Ordered as above, read with attached document giving detailed reasons, grounds and conditions.

-sd-	**-sd-**
(Neerja Mathur)	**(M. K. Goel)**
Member	**Chairperson**

Place: Gurugram
Date: 20th May, 2019

1. Chapter 1: Introduction

1.1 Joint Electricity Regulatory Commission (JERC) Formation

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 May 2, 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 "Commission") vide notification no. 23/52/2003-R&R (Vol. II) dated May 30, 2008.

The JERC is an autonomous body responsible for regulation of the Power Sector in the State of Goa and the 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.

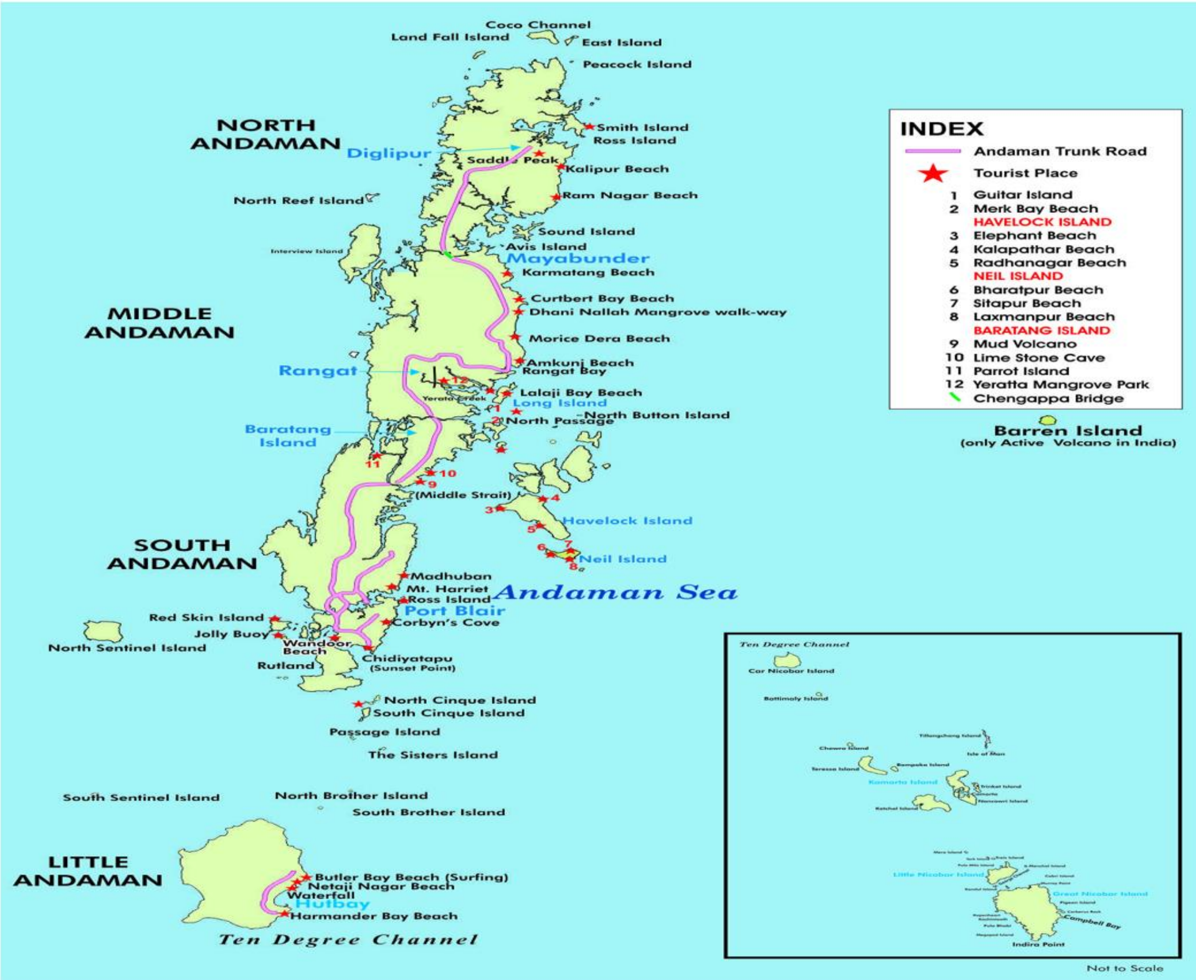
1.2 Andaman & Nicobar Islands

Andaman & Nicobar Islands (hereinafter referred to as "A&N") is a cluster of islands scattered in the Bay of Bengal. These islands are separated from the rest of India by more than 1000 kms. The total area of the territory is 8,249 sq.km out of which the forest cover is about 7,589 sq. km. (92%). A&N is having population of 379,944 as per census provisional records and average growth rate of population is 6.68%. These islands are divided in three districts, viz., Andaman, Nicobar and North & Middle Andaman. The seat of the Administration is at Port Blair (South Andaman) in which 14.14 sq. km. area is under the jurisdiction of Port Blair Municipal Council.

The tempo of economic development has tremendously accelerated along with all-round expansion in the areas/ sectors, viz., (i) Shipping Services, (ii) Civil Supplies, (iii) Education, (iv) Fisheries, (v) Tourism & Information Technology, (vi) Health, (vii) Industries, (viii) Rural Development, (ix) Social Welfare, (x) Transport, (xi) Increase in District Headquarters, (xii) Central Government Department, (xiii) Public Undertaking & other offices, (xiv) Services & Utilities, (xv) Defence Establishment, (xvi) Commercial Organisations/Business Centres, etc. Thus, these islands have reached the take off stage for total economic transformation. All these economic and infrastructure developments require power as a vital input and to play a key role for achieving overall transformation.

For operational purpose the area has been divided into 7 divisions and 26 sub-divisions.

Andaman Group of Islands



Nicobar Group of Islands

1.3 Electricity Department Andaman & Nicobar Administration (EDA&N)

The Electricity Department of Andaman & Nicobar Administration (hereinafter referred to as "EDA&N" or "Utility" or "Petitioner") is solely responsible for power supply in the Union Territory (UT). Power requirements of EDA&N are met by own generating stations as well as power purchase.

Due to the geographical and topographical peculiarities of these islands including separation by sea over great distances, there is no single power grid for the entire electrified islands, instead, power house at various islands caters independently to the power requirements of area/islands.

EDA&N is operating and maintaining power generation, transmission and distribution system network in these islands for providing electric power supply to general public. It implements various Planned and Non-Planned schemes for augmentation of DG Generating Capacity, establishment of new power plants and T&D Systems. EDA&N is also functioning as a Nodal Agency for implementing renewable energy programme of the Ministry of New & Renewable Energy (MNRE) on these islands. Presently, EDA&N is headed by a Superintending Engineer, along with seven Executive Engineers and around thirty-eight Assistant Engineers for carrying out the task of power generation, transmission and distribution to the general public including schemes under renewable energy sources.

The key duties being discharged by EDA&N are:

- 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 Andaman & Nicobar Islands.
- Operating and maintaining sub-stations and dedicated transmission lines connected there with as per the provisions of the Act and the rules framed there under;
- Generation of electricity for the supply of electricity required within the boundary of the UT 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;
- Implementation of schemes for distribution and generally for promoting the use of electricity within the UT.

The present Installed Capacity of EDA&N is approximately 113.86 MW from various generating stations. The current demand mainly comprises of the domestic and commercial category, which contributed approximately 75% to the total sales of the EDA&N.

The table below gives an overview of present infrastructure of EDA&N.

Table 3: Present Infrastructure

S. No.	Particulars	Details
1	Total Installed Capacity	113 MW
1(a)	Diesel Generation (Including 19.83 MW hired)	102 MW
1(b)	Hydro Generation	5 MW
1(c)	Solar Generation	6 MW
2	33 kV lines	497 km
3	11 kV lines	894km
4	LT Lines (415 V)	3,474 km
5	Distribution Transformer	980 Nos.
6	Capacity of Distribution Transformer 33kV S/S	163 MVA

1.4 Multi Year Tariff Regulations, 2018

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2018 on 10 August 2018. The said Regulations have been hereinafter referred to as the "JERC MYT Regulations". As per Clause 2.1.17 of these Regulations, the "Control Period" is defined as the multi-year period comprising of three financial years from FY 2019-20 to FY 2021-22.

These Regulations are applicable to all the generation companies and transmission and distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry.

1.5 Approval of Business Plan for 2nd MYT Control Period (FY 2019-20 to FY 2021-22)

As per Clause 8.1 of the JERC MYT Regulations, the Petitioner is required to file Business Plan Petition for the three years Control Period from FY 2019-20 to FY 2021-22 with details for each year of the Control Period for approval of the Commission.

The EDA&N submitted the Petition via email for approval of 'Business Plan for MYT Control Period from FY 2019-20 to FY 2021-22' on 10th September, 2018.

After initial scrutiny/analysis, the Petition on Business Plan for the Control Period FY 2019-20 to FY 2021-22 was admitted on 18th September, 2018 and was marked as Petition no. 264/2018. Subsequently, the Commission approved the Business Plan vide order dated December 31, 2018 with the direction to the Petitioner to submit the MYT Petition at the earliest.

1.6 Multi-Year Tariff Petition for 2nd MYT Control Period (FY 2019-20 to FY 2021-22)

As per Regulation 9 and 16 of the JERC MYT Regulations, the Petitioner is required to file Multi Year Tariff Petition for the three years Control Period from FY 2019-20 to FY 2021-22 with details for each year of the Control Period for approval of the Commission.

The EDA&N submitted this Petition for approval of its Multi Year Tariff for the three years Control Period from FY 2019-20 to FY 2021-22 on 30th January 2019, which was admitted by the Commission on 4th February 2019 and marked as Petition no. 274/2019.

1.7 Interaction with the Petitioner

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

To analyse the Petition, the Commission's staff held discussions with the Petitioner/Petitioner's representatives, obtained information/clarifications wherever required, and carried out technical validation with regard to the information provided by the Petitioner. The Commission's staff interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for analysis of the Tariff Petition and conducted a Technical Validation Session (TVS) with the Petitioner during which discrepancies in the Tariff Petition were pointed out and additional information required by the Commission was indicated. This session was held in the office of JERC, Gurugram, Haryana on 13th February 2019. The Petitioner submitted its response on the issues through various letters/emails. The following table provides the list of interactions with the Petitioner along with the dates:

Table 4: Interactions with the Petitioner

S. No.	Subject	Date
1	Receipt of Petition by the Commission	January 30, 2019
2	Admission of the Petition by the Commission	February 4, 2019
3	Deficiency note issued by the Commission	February 3, 2019
4	Reply to the Deficiency Note received by the Commission	February 12, 2019
7	Additional Information sought during TVS by the Commission	February 13, 2019
8	Reply of Petitioner to the additional queries sought during TVS	March 1, 2019, March 2, 2019, March 3, 2019

1.8 Public Hearing Process

The Commission directed the Petitioner to publish the Summary of the ARR for the 2nd Control Period and tariff proposal for FY 2019-20 in the abridged form to ensure due public participation. The Public Notices were published by the Petitioner for inviting objections/ suggestions from the stakeholders on the ARR for the 2nd Control Period and tariff Petition for FY 2019-20 as detailed below:

Table 5: Public Notices published by the Petitioner

Sr. No.	Date	Name of Newspaper	Place of circulation
1	February 14, 2019	The Daily Telegrams	Port Blair

The Petitioner also uploaded the Petition on its website (http://electricity.and.nic.in) for inviting objections and suggestions on the Petition. Interested parties/stakeholders were requested to file their objections / suggestions on the Petition to the Commission with a copy to the Petitioner on or before February 18, 2019. The Commission has also uploaded the copy of the Petition on its website to facilitate the stakeholders.

The Commission also published Public Notices in the leading newspapers as tabled below and also also uploaded the MYT Petition and the Public Notice on its website www.jercuts.gov.in, giving due intimation to the stakeholders, consumers and the public at large about the Public Hearing to be conducted by the Commission on 18th February 2019 at 10:00 AM at Dolphin resort, on Havelock Island and 20th February 2019 at 10:00 AM at Megapode Resort, Port Blair. The details of the public notices published by the Commission is as below:

Table 6: Public Notices published by the Commission

S. No.	Date	Name of Newspaper	Place of Circulation
1	February 1, 2019	Arthik Lippi	Port Blair
		The Andaman Express	Port Blair
		Eco of India	Port Blair
2	February 15, 2019	Arthik Lippi	Port Blair
		The Andaman Express	Port Blair
		Eco of India	Port Blair

During the public hearing, each Stakeholder was provided with an opportunity to present his views on the petition filed by the Petitioner. All those present in the hearing, irrespective of whether they had given a written comments / observations or not, were given an equal opportunity to express their views. The list of Stakeholders is attached at Annexure 1 to this order. The list includes the Stakeholders who gave their written comments / observations and presented before the Commission; and other stakeholders who did not submitted their written comments / observations earlier but presented before the Commission orally. The Commission has examined the issues and concerns expressed by stakeholders. The major issues raised/indicated during the public hearing, along with the comments/replies of the utility and the views of the Commission, thereon, have been summarized in **Chapter 2** of this order.

1.9 Organization of the Order

This Order is organized in the following chapters:

- **Chapter 1** of the Order provides the Background and Brief description of the Territory, utility and regulatory process undertaken by the Commission.
- **Chapter 2** of the Order provides a Summary of various suggestions and objections raised by the stakeholders, followed by the response of the Petitioner and the rulings of the Commission on these issues.
- **Chapter 3** of the Order discusses the views of the Commission on True-Up for FY 2015-16.
- **Chapter 4** of the Order discusses the Review for FY 2018-19.
- **Chapter 5** of the Order discusses various components of ARR for the MYT Control Period FY 2019-20 to FY 2021-22, key issues and Commission's ruling on the same.
- **Chapter 6** of the Order discusses the approach of the Commission on Tariff Principles and Design.
- **Chapter 7** of the Order discusses the Tariff Schedule approved by the Commission.
- **Chapter 8** of the Order provides necessary directions of the Commission to EDA&N.

2. Chapter 2: Stakeholder Consultation

2.1 Regulatory Process

The Public Hearing was held on 18th February 2019 at 10:00 AM at Dolphin resort, on Havelock Island and 20th February 2019 at 10:00 AM at Government Resort, Port Blair in respect of True up for FY 2015-16 & Approval of Aggregate Revenue Requirement for the 2nd MYT Control Period (FY 2019-20 to FY 2021-22) & Retail Supply Tariff for FY 2019-20. During the Public Hearing, stakeholders presented their views in person before the Commission. All the participants from the public, who had not submitted written comments earlier, were also given an equal opportunity to present their views/ suggestions/objections in respect of the Petition.

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

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

2.2.1 Treatment of subsidy received from Government

Stakeholder Comments:

- Stakeholders submitted that the Havelock being a tourism place and majority of electricity consumption is of commercial consumers, the benefit of subsidy received from the government should be provided to Domestic consumers only.

Petitioner's Response:

- The Petitioner has not submitted any response to the same.

Commission's View:

- The Cost of supply for EDA&N is very high owing to the high cost of generation from Diesel generating stations. The Commission considering the socio-economic condition of the consumers residing on Andaman and Nicobar Islands only allow part recovery of the cost to supply to EDA&N and the remaining gap is funded by the budgetary support received from the government. The Commission determines the tariff irrespective of the subsidy to be provided by the Government.

2.2.2 Scarcity of Transformers, Meters, Poles and Street Lights

Stakeholder Comments:

- Stakeholders submitted that number of installed transformers, poles and street lights are very less as compared to their requirement. Further, the stakeholder also submitted that there is delay in providing the new connection due to unavailability of meter with the Electricity Department. Therefore, they requested the Commission to direct the Petitioner to take appropriate action on the same.

Petitioner's Response:

- The Petitioner submitted that the procurement order for Poles has already been placed and the work for installation of poles and street lights will be completed at the earliest. Further, with regard to installation of transformers, the Petitioner submitted that presently many remote locations are facing the issue of low voltage, which will be resolved on upgradation of the network i.e. installation of transformers at consumer end and increase in supply voltage, which will be done based on the assessment of feasibility of doing so.

- The Petitioner also submitted that the process for procurement of meters has already been initiated.

Commission's View:

- The Commission directed the Petitioner to expedite the procurement process in order to resolve the problem of the consumers at the earliest. Further, the timelines for the new connection for Island Areas have been provided in the Supply Code, 2018 and the Petitioner is required to comply with such timelines.

2.2.3 Employee Strength

Stakeholder Comments:

- Stakeholders submitted that there is shortage of employees of Electricity Department of Andaman and Nicobar island on the Havelock island, because of which there is delay in resolution of problems faced by the Consumers.

Petitioner's Response:

- The Petitioner accepted that the strength of employees of Electricity Department of Andaman and Nicobar island is less on the Havelock island.

Commission' View:

- The Commission has been directing the Petitioner to complete the employee assessment based on which island wise requirement of the employees can be analysed. However, the Petitioner has been adopting a laid-back approach and still has not completed the assessment of employees. Therefore, the Commission again directs the Petitioner to expedite the process of employee assessment at the earliest and submit it to the Commission. However, considering the shortage of employees, the Commission in this order has agreed for the addition of employees as projected by the Petitioner. The sanctioned posts may be approved from the competent authority accordingly.

2.2.4 Establishment of multiple Bill Collection Centres

Stakeholder Comments:

- Stakeholders submitted that the consumers are facing grave difficulty in paying the electricity bills on Havelock Island as many consumers have to travel a long distance to reach the collection centre. Therefore, they requested to increase the number of collection centres on Havelock Island.

Petitioner's Submission

- The Petitioner submitted that Collection Centres cannot be increased due to poor employee strength on Havelock Island.

Commission's View:

- The Commission directed the Petitioner to explore other options like integration with other government department, shifting of the collection centres to pre-defined locations on particular days etc. for collection of bill payments. Further, as per Supply Code, 2018, the payment of bills can also be made by consumers through online transfer methods.

2.2.5 Difficulty in taking new electricity connection

Stakeholder Comments:

- Stakeholders submitted that the consumers are facing difficulties in taking new connections for those properties, wherein disputes are reported with regard to ownership of the property.

Petitioner's Submission:

- The Petitioner submitted that the connection is not released in the disputed property due to objection raised by the other party.

Commission's View:

- The Commission directed that the Petitioner should provide the connection to occupiers as per the provision of the Supply Code, 2018 unless there is restrain for non-release of electricity connection by any court. Further, the Commission directed the Petitioner to create awareness among the EDA&N employees and consumers about the salient features and measures introduced in the new Supply Code, 2018 notified by the Commission.

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

3.1 Applicable provision of Regulations

The True-up of FY 2015-16 is to be carried out as per the provisions of Regulation 8 of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009 herein referred to as "Tariff Regulations, 2009":

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

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

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

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

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

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

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

3.2 Approach for True-up for FY 2015-16

The Commission had determined the ARR for FY 2015-16 vide its Order dated March 31, 2015. In its Petition no. 274/2019, the Petitioner has requested for True-up of FY 2015-16 on the basis of audited accounts. In the True-up Petition, the Petitioner has submitted details of the expenditure and the revenue for the year based on its audited accounts along with a comparison of the actual revenue and expenditure against the corresponding figures previously approved by the Commission in the Tariff Order for FY 2015-16.

In this Chapter, the Commission has analysed various elements of the actual revenue and expenses for the FY 2015-16 based on the audited accounts submitted by the Petitioner, and has carried out the True-up exercise, after prudence check, and has allowed necessary adjustments in cases where variations are for reasonable and justifiable reasons.

3.3 Energy Sales

Petitioner Submission

The actual energy sales were 239.09 MUs for the FY 2015-16, as against 234.20 MUs approved earlier by the Commission vide Tariff Order dated March 31, 2015.

Commission's View

The Commission observed that the actual claim is marginally higher than the approved sales for FY 2015-16.

Further the Commission notes that the Petitioner has not submitted any supporting documents to validate the sales quantum, so the Commission is constrained to accept the energy sales at 239.09 MUs as submitted by the Petitioner for the purpose of True-up of FY 2015-16, as shown in the following Table:

Table 7: Sales approved by the Commission in the True-up of FY 2015-16 (in MU)

Consumer Category	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Domestic	119.90	121.17	121.17
Commercial	60.52	59.16	59.16
Industry	13.56	15.42	15.42
Bulk	29.77	33.47	33.47
Public Lighting	9.53	8.93	8.93
Irrigation, Pumps & Agriculture	0.93	0.94	0.94
Total	**234.20**	**239.09**	**239.09**

Therefore, the Commission approves the total sales of 239.09 MU in the True-up of FY 2015-16.

3.4 Number of Consumers

Petitioner Submission

The actual number of consumers were 124,622 for the FY 2015-16, as against 131,230 approved earlier by the Commission vide Tariff Order dated March 31, 2015.

Commission's View

The Commission observed that the actual number of consumers submitted by the Petitioner is marginally lower than the approved number of consumers for FY 2015-16. Further the Commission notes that the Petitioner has not submitted any supporting documents to validate its claim. Therefore, the Commission is constrained to accept the number of consumers at 124,622 as submitted by the Petitioner for the purpose of True-up of FY 2015-16, as shown in the following Table:

Table 8: No. of Consumers approved by the Commission in the True-up of FY 2015-16

Consumer Category	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Domestic	110,482	104,111	104,111
Commercial	19,133	18,958	18,958
Industry	543	534	534
Bulk	65	63	63
Public Lighting	752	668	668
Irrigation, Pumps & Agriculture	255	288	288
Total	**131,230**	**124,622**	**124,622**

Therefore, the Commission approves the total number of consumers as 124,622 in the True-up of FY 2015-16.

3.5 Connected Load

Petitioner Submission

The actual connected load was 200,222 kW for the FY 2015-16, as against 188,381 kW approved earlier by the Commission vide Tariff Order dated March 31, 2015.

Commission's View

The Commission observed that the actual claim is marginally higher than the approved number of consumers for FY 2015-16. Further the Commission notes that the Petitioner has not submitted any supporting documents to validate its claim. Therefore, the Commission is constrained to accept the connected load as submitted by the Petitioner for the purpose of True-up of FY 2015-16, as shown in the following Table:

Table 9: Connected Load approved by the Commission in the True-up of FY 2015-16 (kW)

Consumer Category	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Domestic	105,875	121,988	121,988
Commercial	56,057	48,646	48,646
Industry	11,304	15,227	15,227
Bulk	10,728	10,844	10,844
Public Lighting	3,595	2,715	2,715
Irrigation, Pumps & Agriculture	821	802	802
Total	**188,381**	**200,222**	**200,222**

Therefore, the Commission approves the total connected load as 200,222 kW in the True-up of FY 2015-16.

3.6 Transmission & Distribution (T&D) losses and Energy Balance

Petitioner Submission

The actual T&D losses for the FY 2015-16 were at 18.90% as against the 17.00% approved by the Commission vide Tariff Order dated March 31, 2015. The Petitioner has submitted the comparison of energy balance statement and loss levels based on the audited accounts and approved by the Commission.

Commission's View

Regulation 15 of the Tariff Regulations, 2009 stipulates as follows:

"15. AT&C Losses

1. The licensee shall give information of total AT&C losses in Previous Year and Current Year and the basis on which such losses have been worked out.

2. The licensee shall also propose a loss-reduction programme for the ensuing year as well as for the next three years giving details of the measures proposed to be taken for achieving the same.

3. Based on the information furnished and field studies carried out and the loss reduction program proposed by the licensee, the Commission shall fix separate targets for reduction of transmission and distribution losses and for commercial efficiency for the period specified by the Commission:

4. Provided further that in the event of unbundling of the integrated utility, the Commission may fix separate transmission and distribution loss targets and commercial efficiency targets, as the case may be, for each successor licensee taking into account its area of operation, its consumer mix, state of the network, level of metering, metering initiatives planned, etc.

5. The licensee shall conduct regular energy audit to substantiate its estimation of T&D losses. The licensee shall also furnish six monthly energy audit reports to the Commission.

6. The energy audit report for the first six months of the year shall be provided by November-end of the same year. Similarly, energy audit report for the last six months of the year shall be provided by May-end of the next year.

***7.** In the absence of energy audit, the Commission may not accept the claim of the licensee and may proceed to fix the loss levels on the basis of any other information available and its own judgment."*

The Commission has observed that considering the actual sales of 239.09 MU and actual availability of 294.81 MU, the actual T&D loss works out to be 18.90%, which are higher than the T&D losses of 17.00% approved by the Commission for FY 2015-16. The Commission vide deficiency note sought justification from the Petitioner for actual higher T&D losses as against the losses approved by the Commission for FY 2015-16. The Petitioner in reply has submitted that it has made all the efforts to reduce the T&D losses and because of which the current actual T&D loss of FY 2018-19 is less than 15%, however, the Petitioner did not submit any reason for not achieving the target set for T&D loss for FY 2015-16.

The Commission while carrying out the truing up for FY 2014-15 vide its Order dated February 26, 2018 had approved the actual T&D losses of 19.96% as compared to target of 17%, with the direction as follows:

"However, the Petitioner is directed to undertake adequate measures for meeting the T&D loss target approved for subsequent years, failing which suitable penalty shall be levied as per the provisions of applicable Regulations."

Considering that the Petitioner has been able to reduce the actual T&D loss to 18.90% from 19.96% in FY 2014-15 level, the Commission has approved the actual T&D losses at 18.90% for FY 2015-16. Accordingly, the approved energy balance for FY 2015-16 is as shown in the following Table:

Table 10: T&D Losses approved by the Commission in the True-up of FY 2015-16

Consumer Category	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Energy Sales (MU)	234.20	239.09	239.09
Overall T&D loss (%)	**17.00%**	**18.90%**	**18.90%**
Overall T&D loss (MU)	47.97	55.72	55.72
Total Energy Requirement (MU)	282.17	294.81	294.81
Power Purchase (MU)	172.39	160.86	160.86
Own Generation (MU)	109.61	133.94	133.94
Total Energy Availability (MU)	**282.00**	**294.81**	**294.81**

3.7 Power purchase quantum & Cost

Petitioner Submission

The energy requirement is met mainly from own generation apart from procurement of power from the IPPs and other generators. However, there is no availability of power from Central Generating Stations (CGS) or from other sources/ open market/ power exchanges, etc. The Petitioner submitted that it procured power from 20 MW IPP and other generators. The Petitioner purchased power worth INR 197.64 Crore against INR 277.23 Crore approved earlier by the Commission. Further, the Petitioner has incurred fuel cost of INR 183.36 Crore against INR 160.86 Crore approved by the Commission in the Tariff Order dated March 31, 2015.

Commission's View

It is observed that the Petitioner has not submitted any details about the plant wise units purchased from the IPPs and the units generated from own generating stations for FY 2015-16. Further, the Petitioner has also not submitted the invoices of the IPPs for validating the claim of the Petitioner. Therefore, in absence of adequate supporting documents, the Commission has no other option than to accept and approve the quantum of power generation and purchase as submitted by the Petitioner for FY 2015-16.

On scrutiny of the Own Generation Power Purchase cost for FY 2015-16, it is observed as follows:

Table 11: Comparison of Cost of Own Generation and Power Purchase for FY 2015-16

Particular	Approved in True Up of FY 2014-15	Approved in TO for FY 2015-16	As per Actuals of FY 2015-16	Deviation (Actual– Approved)
Own Generation (MU)	114.45	113.64	133.94	24.33
Own Generation Fuel Cost (in INR Crore)	174.89	160.86	183.36	-26.73
Per unit Own Generation Fuel Cost (INR /kWh)	15.28	14.16	13.7	
Power Purchase (MU)	172.25	178.76	160.86	-11.53
Power Purchase Cost (in INR Crore)	241.68	277.23	197.64	-97.15
Per unit Power Purchase Cost (INR /kWh)	14.03	15.51	12.3	

From above, it is inferred that the per unit cost of own generation and power purchase for FY 2015-16 has decreased from FY 2014-15 level as well as that compared to approved by the Commission for FY 2015-16 in Tariff order dated March 31, 2015 for FY 2015-16. The Commission vide deficiency note sought justification for such decrease in cost of own generation and power purchase cost for FY 2015-16. In reply, the Petitioner has submitted that the reason for decrease in cost of generation and power purchase is due to decrease in HSD prices by approximately 20% from FY 2014-15 level of INR 55 – 60 per litre to INR 45 – 48 per litre in FY 2015-16.

Accordingly, considering that there is substantial decrease in per unit cost of generation and power purchase as compared to approved level for FY 2015-16, the Commission has approved the total power purchase cost and fuel cost as per the amount reflected in the audited accounts for FY 2015-16.

The approved quantum of Own generation, cost of fuel, power purchase quantum and cost in True-up of FY 2015-16 is as given in the following Table:

Table 12: Power purchase quantum (MU) and Cost (INR Crore) approved by the Commission in the True-up of FY 2015-16

Consumer Category	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Own Generation (MU)	113.64	133.94	133.94
Own Generation Fuel Cost (in INR Crore)	**160.87**	**183.36**	**183.36**
Own Generation Fuel Cost (INR /kWh)	14.16	13.7	13.7
Power Purchase (MU)	178.76	160.86	160.86
Power Purchase Cost (in INR Crore)	**277.23**	**197.64**	**197.64**
Power Purchase Cost (INR /kWh)	15.51	12.3	12.3
Total Own Generation and Power Purchase (MU)	**292.40**	**294.86**	**294.86**
Total Own Generation and Power Purchase Cost (INR Crore)	**438.09**	**381.00**	**381.00**
Total Own Generation and Power Purchase Cost (INR /kWh)	**14.98**	**12.92**	**12.92**

The Commission would like to highlight that the approved cost towards own generation consists of cost incurred towards consumption of HSD oil and Lube oil only as per the audited accounts as the fixed cost incurred against own generation (i.e. O&M expenses, interest and finance charges, depreciation, interest on working capital etc.) has been considered and approved for the department as a whole in subsequent sections. Accordingly, no separate cost has been approved for own generation.

Therefore, the Commission approves the overall power generation and purchase cost of INR 381.00 Crore in the True-up of FY 2015-16.

Renewable Power Purchase Obligations

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 targets specified under the Sub Regulation (1) of the said Regulations were revised by way of the 3rd Amendment of the JERC Regulations, 2016 where the minimum quantum of RPO has been specified as a percentage of the total energy mix of consumption after excluding hydro power.

The actual availability of renewable power from NTPC Solar and KHEP and the consequential RPO compliance for the True-up of FY 2015-16 is tabulated as follows:

Table 13: Summary of RPO Compliance for FY 2015-16

Particulars	FY 2015-16
Sales within the State (MU)	239.09
Less: Hydro Power	12.24

Particulars	FY 2015-16
Sales excluding Hydro Power	226.85
RPO Obligation (in %)	**3.55%**
Solar	*0.85%*
Non-Solar	*2.70%*
RPO Obligation (in MU)	**8.05**
Solar	*1.93*
Non-Solar	*6.12*
Total RPO Compliance (in MU)	**18.51**
Solar	*6.27*
Non-Solar	*12.24*
Shortfall/(surplus) in RPO compliance	**(10.46)**
Solar	***(4.34)***
Non-Solar	***(6.12)***

The Commission appreciates the achievement of RPO compliance by the Petitioner as there is surplus compliance of both the Solar and Non-Solar RPO by 4.34 MUs and 6.12 MUs respectively.

3.8 GFA, Capitalisation & Depreciation

Petitioner Submission

The Petitioner submitted the opening Gross Fixed Assets (GFA) of INR 75.74 Crores, no additions in GFA during FY 2015-16 and closing GFA of INR 75.74 Crore for the FY 2015-16, on the basis of the audited accounts. The Petitioner has further submitted that it has booked depreciation of INR 3.80 Crore in the FY 2015-16.

Commission's View

The Commission has considered the closing value of GFA approved in the True-up of FY 2014-15 in the Tariff Order dated February 26, 2018 as opening value of GFA for the FY 2015-16. Further, the additions to GFA has been considered as per the audited accounts for the FY 2015-16.

The Commission, accordingly, approved GFA for FY 2015-16 as given in the following Table:

Table 14: GFA approved by the Commission in the True-up of FY 2015-16 (INR Crore)

Particulars	Approved in True up order for FY 2014-15	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Opening GFA	112.58	202.51	75.74	130.81
Addition	18.23	68.23	0	0
Closing GFA	130.81	270.74	75.74	130.81

Further, with regard to Depreciation, Regulation 26 of the Tariff Regulations, 2009 stipulates as follows:

"26. Depreciation

(1) For the purpose of tariff, depreciation shall be computed in the following manner:

(i)The value base for the purpose of depreciation shall be the historical cost of the assets, that is actual expenses limited to approved capital cost where such capital cost has been approved by the Commission:

Provided that land is not a depreciable asset and its cost shall be excluded from the capital cost while computing depreciation.

(ii) The historical cost of the asset shall include additional capitalization.

(iii) The historical cost shall include foreign currency funding converted into equivalent rupees at the exchange rate prevalent on the date when foreign currency was actually availed but not later than the date of commercial operation.

(iv) Depreciation for generation and transmission assets shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation specified by the Central Electricity Regulatory Commission from time to time.

Provided that the total depreciation during the life of the asset shall not exceed 90% of the original cost.

Depreciation for distribution and other assets not covered by CERC shall be as per Government of India norms of 1994 as may be revised by the Commission from time to time."

The Commission has considered the closing asset wise opening GFA for FY 2014-15 as approved by the Commission in Tariff Order dated 26th February 2018 as opening GFA for FY 2015-16. Further, with regards to true up of FY 2015-16, as per Regulations, depreciation rates as per CERC Tariff Regulations are applicable for computation of Depreciation for FY 2015-16. However, due to absence of details of assets attaining 90% depreciation of the asset value (i.e. Fixed Asset Register for FY 2015-16), the Commission has approved the depreciation as per the audited account, which is shown in the table as follows:

Table 15: Asset -wise depreciation approved by the Commission in the True-up of FY 2015-16 (INR Crore)

Particulars	Opening GFA	Addition	Closing GFA	Average GFA	Depreciation Rate	Depreciation
Plant & Machinery	71.47	0	71.47	71.47	3.26%	2.33
Buildings	36.43	0	36.43	36.43	1.80%	0.65
Vehicles	6.42	0	6.42	6.42	5.46%	0.35
Furniture and fixtures	1.36	0	1.36	1.36	3.51%	0.05
Computers & others	15.13	0	15.13	15.13	2.77%	0.42
Total	**130.81**	**0**	**130.81**	**130.81**		**3.80**

The depreciation as submitted by the Petitioner and that approved by the Commission for FY 2015-16 is as follows:

Table 16: Depreciation approved by the Commission in the True-up of FY 2015-16 (INR Crore)

Particulars	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Depreciation	**11.64**	**3.80**	**3.80**

3.9 Operation & Maintenance Expenses

Petitioner Submission

Employee Expenses

The Petitioner has submitted that the employee expenses for FY 2015-16 has been claimed on the basis of actual employee expenses incurred during the entire year. Accordingly, the Petitioner has claimed the employee expenses of INR 90.72 Crore incurred during the entire year as against INR 68.36 Crore approved earlier by the Commission vide Tariff Order dated March 31, 2015.

Repair & Maintenance (R&M) Expenses

The Petitioner has submitted that the R&M expenses for FY 2015-16 has been claimed on the basis of actual R&M expenses incurred during the entire year. The Petitioner has claimed the R&M expenses of INR 76.21 Crore incurred during the entire year as against INR 41.31 Crore approved earlier by the Commission vide Tariff Order dated March 31, 2015.

Administrative & General (A&G) Expenses

The Petitioner has submitted that the A&G expenses for FY 2015-16 on the basis of actual A&G expenses incurred during the entire year. The Petitioner has claimed the A&G expenses of INR 15.41 Crore incurred during the entire year as against INR 1.38 Crore approved earlier by the Commission vide Tariff Order dated March 31, 2015.

Commission's View

Employee Expense

The Commission had approved employee expenses of INR 68.36 crore in the Tariff Order for FY 2015-16 vide order dated 31st March 2015. The Commission has analysed the information available in the audited accounts and found certain variations/discrepancies in the submissions of the Petitioner viz-a-viz the audited accounts as follows:

Table 17: Employee Expense considered by the Petitioner vis-a-vis considered by the Commission for FY 2015-16 (INR)

Particulars	As per Petitioners Submission	Commission Analysis
Proportionate Salaries, allowances, pension and house rent of PH staff for running operation	347,934,750	347,934,750
Proportionate Salaries, allowances, pension and house rent of PH staff for R&M	115,978,250	115,978,250
Proportionate Salaries, allowances, pension and house rent of PH staff for T&D staff	260,243,100	260,243,100
Proportionate General & Administrative Expenditure	154,116,272	-
Proportionate salaries allowances, pension and house for staff of consumer service	28,915,900	28,915,900
Total	**907,188,272**	**753,072,000**

From above it can be observed that the Petitioner has considered proportionate A&G expense for the Power House staff under Employee Expense. Therefore, the same has been considered by the Commission under the A&G expense. Accordingly, the approved employee expenses for the FY 2015-16 as per the audited accounts incorporating corrections due to wrong classification of employee expenses towards A&G Expenses by the Petitioner, is as shown in the following Table:

Table 18: Employee Expense approved by the Commission in True Up of FY 2015-16 (INR Crore)

Particulars	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Employee expenses	68.36	90.72	75.31

Repair & Maintenance (R&M) Expenses

The Commission had approved R&M expenses of INR 41.31 crore in the Tariff Order of FY 2015-16. The Commission has analysed the information available in the audited accounts and observed that the actual R&M expense for FY 2015-16 increased to INR 76.21 Crore from INR 8.34 Crore approved by the Commission in true up of FY 2014-15. The Commission sought justification for such exorbitant increase in R&M expense from 2014—15 level. However, the Petitioner did not provide any justification for the same. The Commission has accordingly considered the R&M expenses for FY 2015-16 as per the audited accounts with directions to submit a detailed justification for such increase in R&M expense along with the planned measures to optimise R&M cost in future years as shown in the following Table:

Table 19: R&M Expense approved by the Commission in True Up of FY 2015-16 (INR Crore)

Particulars	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
R&M expenses	41.31	76.21	76.21

Administrative and General (A&G) Expenses

The Commission had approved A&G expenses of INR 1.38 Crore in the Tariff Order of FY 2015-16 as against the claimed A&G Expense of INR 15.41 Crore in True up of FY 2015-16. The Commission sought justification from the Petitioner for such exorbitant increase in A&G expense. In reply, the Petitioner submitted that the Commission in true up of FY 2014-15 had approved the actual A&G expense of INR 29.87 Crore and the Petitioner has made efforts to contain the expenses to INR 15.41 Crore in FY 2015-16. On analysis of the audited accounts for FY 2015-16 it is observed that actual A&G expense for FY 2015-16 is INR 30.82 Crore and the Petitioner has wrongly classified part of A&G expense as employee expense.

Accordingly, the Commission has approved the A&G Expense as per audited account after incorporating the correction due to wrong classification of A&G Expense as Employee Expense as follows:

Table 20: A&G Expense approved by the Commission in True Up of FY 2015-16 (INR Crore)

Particulars	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
A&G expenses	1.38	15.41	30.82

Accordingly, the Operation and Maintenance Expense claimed by the Petitioner vis-a-vis approved by the Commission in true up of FY 2015-16 is as follows:

Table 21: O&M Expense approved by the Commission in True Up of FY 2015-16 (INR Crore)

Particulars	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Employee expenses	68.36	90.72	75.31
R&M expenses	41.31	76.21	76.21
A&G expenses	1.38	15.41	30.82
Total	**111.05**	**182.34**	**182.34**

3.10Interest & Finance Charges

Petitioner Submission

The Petitioner has submitted that all the capital assets are created out of budgetary allocation from the Government of India without any external borrowings. However, the Petitioner has claimed, the interest and finance charges, based on normative loan considered to the extent of capitalisation during the year. The rate of interest considered is the prevailing Prime Lending Rate of the State Bank of India as on 1st April of that relevant year. Accordingly, the Petitioner has claimed interest and finance charges of INR 13.55 crore for FY 2015-16.

Commission's View

Regulation 25 of the Tariff Regulations, 2009 stipulates as follows:

"1. For existing loan capital interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreements.

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

Further, Regulation 23 of the Tariff Regulations 2009, specifies as follows:

"23. Debt-Equity Ratio

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

2. Provided that the Commission may, in appropriate cases, consider equity higher than 30% for the purpose of determination of tariff, where the generating company or the licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of the general public.

3. The debt and equity amounts arrived at in accordance with sub-regulation (1) above shall be used for all purposes including for determining interest on loan, return on equity, Advance against Depreciation and Foreign Exchange Rate Variation.

4. Provided that in the case of an Integrated Utility, till the time it remains Integrated Utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948."

Further, with regard to interest on loan, Regulation 25 of the Tariff Regulations, 2009 provides as follows:

"1. For existing loan capital interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreements.

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

The Commission has observed that the Petitioner has not considered the closing loan balance for FY 2014-15 for which True-up has been approved by the Commission vide Order dated February 26, 2018 and further the Petitioner has not submitted any justification for the same. Accordingly, for the True-up of FY 2015-16, the Commission has considered the closing balance of Trued-up normative loan of FY 2014-15 as approved by the Commission in Order dated February 26, 2018 as the opening normative loan for FY 2015-16.

Further, the Commission, for the purpose of funding of capitalisation, has considered normative debt equity ratio of 70:30. However, as there was no addition in GFA in FY 2015-16, the Commission has considered the addition in normative loan as nil. The Commission in line with Regulation 25 of the Tariff Regulations, 2009 and in line with the approach adopted by the Commission in its previous orders has considered weighted average rate of SBI PLR for FY 2015-16 towards the interest rate for the year and repayment of loan has been considered equivalent to the depreciation of the respective year. Accordingly, the approved interest on loan for FY 2015-16 is as follows:

Table 22: Interest on loan approved by the Commission in the True-up of FY 2015-16 (INR Crore)

Particulars	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Opening loan	132.42		18.20
Addition	13.09		0.00
Repayment	13.24		3.80
Closing loan	132.27		**14.40**
Average Normative Loan	132.34		**16.30**
Interest Rate	14.75%		14.29%
Interest on Loan	**17.28**	**13.55**	**2.33**

3.11 Interest on Security Deposits

Petitioner Submission

The Petitioner has not claimed any interest on consumer security deposit.

Commission's View

As per Regulation 25 (4) of the Tariff Regulations, 2009:

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

As per Section 47 (5) of the Electricity Act, 2003, the Petitioner has to pay the interest on the security deposits available with it and the same shall be claimed in the ARR filed by the Petitioner. The Petitioner shall maintain the register of security deposits collected from the consumers every year and pay the interest as per the bank rate of interest. However, the Petitioner has not considered any interest on consumer security deposit.

Therefore, the Commission has not approved any interest on security deposits of the consumers in the True-up of FY 2015-16.

3.12 Interest on Working Capital

Petitioner Submission

The Petitioner submitted that Interest on Working Capital has been claimed in accordance with Regulation 29 of the Tariff Regulations, 2009. The State Bank of India's Prime Lending Rate as on 1st April 2015 is considered for computation of Interest on Working Capital in line with the provisions of the Tariff Regulations, 2009. Accordingly, the Petitioner has claimed INR 5.99 Crore as Interest on Working Capital for true up of FY 2015-16.

Commission's View

Regulation 29 of the Tariff Regulations 2009 stipulates as follows:

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

a. Power purchase cost

b. Employees cost

c. Administration & general expenses

d. Repair & Maintenance expenses

e. Sum of two month requirement for meeting fuel cost

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

For the True-up, the Commission has considered the calculation of different components of the Working Capital on the basis of the above-stipulated norms. As no separate approval of the interest on consumer security deposit is allowed, the Commission considers that the security deposit as on 31st March 2015 is not available with the Petitioner to support the Working Capital requirement for the FY 2015-16, and hence has not deducted this amount from the Working Capital requirement considered for True-up of FY 2015-16. Further, it is observed that the Petitioner has wrongly computed the Interest on Working Capital for FY 2015-16.

Therefore, the Commission has considered the SBI PLR as on 1st April 2015 of 14.75% for computation of Interest on normative Working Capital computed as per the provision of the Regulations for True-up of FY 2015-16. Accordingly, the approved Interest on Working Capital in true up of FY 2015-16 is as follows:

Table 23: Interest on Working Capital approved by the Commission in the True-up of FY 2015-16 (INR Crore)

Particulars	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Fuel Cost for Two Month	26.81		30.56
Power purchase cost for one month	23.1		16.47
Employee cost for one month	5.7		6.28
A&G expenses for one month	0.12		2.57
R&M expenses for one month	3.44		6.35
Total working capital	**59.17**		**62.23**
Security deposit	1.34		0.00
Total working capital after deduction of SD	**57.83**		**62.23**
SBAR rate (%)	14.75%		14.75%
Interest on working capital	**8.53**	**5.99**	**9.18**

Therefore, the Commission approves the Interest on Working Capital at INR 9.18 Crore in the True-up of FY 2015-16.

3.13 Return on Capital base

Petitioner Submission

The Petitioner submitted that return on capital base has been claimed in accordance with Regulation 23 (2) and Regulation 24 of the Tariff Regulations, 2009. Accordingly, the Petitioner has claimed INR 2.27 Crore as return on capital base for true up of FY 2015-16.

Commission's View

As per Regulation 23 of the Tariff Regulations, 2009 the Petitioner is entitled to a return on its capital base. The Commission finds it appropriate to approve the return on capital base, on the basis of GFA and cumulative depreciation as approved above. Detailed calculation of Return on Capital base is given in the following Table:

Table 24: Return on Capital Base approved by the Commission in the True-up of FY 2015-16 (INR Crore)

Particulars	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Gross Block at Beginning of the year	202.51		130.81
Less Accumulated Depreciation	18.82		55.36
Less Consumer Contribution	0.00		0.00
Net Fixed Asset at Beginning of the Year	**183.69**		**75.45**
Rate of Return on Equity	3.00%		3.00%
Return on Capital base	**5.51**	**2.27**	**2.26**

Therefore, the Commission approves the return on capital base of INR 2.26 Crore in the True-up of FY 2015-16.

3.14 Provision for Bad & Doubtful Debts

Petitioner Submission

The Petitioner has not claimed any provision towards bad & doubtful bets for true up of FY 2015-16.

Commission's View

The Commission is of the view that Tariff Regulations, 2009, allows a provision for bad and doubtful debts up to 1% of receivables in the ARR.

It is observed that the Petitioner has not actually written off any bad debt and therefore the Commission finds it appropriate not to consider any bad and doubtful debts for the True-up of FY 2015-16.

3.15 Non-Tariff Income

Petitioner Submission

The Petitioner has claimed Non-Tariff Income (NTI) of INR 2.87 Crore in the True-up of FY 2015-16 as against an amount of INR 2.57 Crore approved in the Tariff Order dated March 31, 2015 for FY 2015-16.

Commission's View

The Commission has observed that the Petitioner has claimed non tariff income of INR 2.87 in accordance to the amount booked in audited account of FY 2015-16. Accordingly, the Commission approves the Non-Tariff Income at INR 2.87 Crore as submitted by the Petitioner for the True-up of FY 2015-16 as follows:

Table 25: Non-Tariff Income approved by the Commission in the True-up of FY 2015-16 (INR Crore)

Particulars	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Non-Tariff Income	2.57	2.87	2.87

3.16 Aggregate Revenue Requirement

Petitioner Submission

The Petitioner submitted that Aggregate Revenue Requirement, as approved by the Commission, in the Order dated March 31, 2015 was INR 656.32 Crore. In the current Petition, the Petitioner, on the basis of the True-up of FY 2015-16, requests the Commission to approve the ARR at INR 586.07 Crore.

Commission's View

Based on the detailed analysis of all the expenditure heads of the ARR in the preceding sections, the Commission approves the Trued-up net ARR of FY 2015-16 at INR 578.05 Crore as given in the following Table:

Table 26: ARR approved by the Commission in the True-up of FY 2015-16 (INR Crore)

Particulars	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Cost of Fuel	210.09	183.36	183.36
Cost of power purchase	294.79	197.64	197.64
Depreciation	11.64	3.80	3.80
Employee expenses	68.36	90.72	75.31
R&M expenses	41.31	76.21	76.21
A&G expenses	1.38	15.41	30.82
Interest & Finance Charges	17.28	13.55	2.33
Interest on Consumer Security Deposit	0	0	0
Interest on Working Capital	8.53	5.99	9.18
Return on Capital Base	5.51	2.27	2.26
Provision for Bad and doubtful debts	0.00	0.00	0.00
Total Revenue Requirement	**658.89**	**588.94**	**580.92**
Less: Non-Tariff Income	2.57	2.87	2.87
Net Revenue Requirement	**656.32**	**586.07**	**578.05**

3.17 Revenue at approved Tariff for True-up of FY 2015-16

Petitioner Submission

The Petitioner submitted that the revenue from tariff for the FY 2015-16 was INR 119.81 Crore.

Commission's View

The Commission has observed that the revenue from retail sale of power from the audited accounts of FY 2015-16 is INR 120.03 Crore. Accordingly, The Commission has approved INR 120.03 Crore as revenue from sale of power in true up of FY 2015-16, which is shown as follows:

Table 27: Revenue from sale of power approved by the Commission in the True-up of FY 2015-16 (INR Crore)

Particulars	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Revenue from sale of Power	117.27	119.81	120.03

3.18 Revenue Gap

Petitioner Submission

The Petitioner submitted that the revenue gap approved by the Commission in the Order dated 31st March 2015 was INR 539.05 Crore. The revenue gap calculated by the Petitioner on the basis of True-up for FY 2015-16 is INR 466.27 Crore. Further the Petitioner requested the Commission to approve the same in the True-up of FY 2015-16.

Commission's View

Based on the approved ARR and the Revenue approved by the Commission in previous sections, the Commission has approved the revenue gap/(surplus) as per the following Table:

Table 28: Net revenue gap approved by the Commission in the True-up of FY 2015-16 (INR Crore)

Particulars	Approved in Tariff Order Dated 31st March 2015	Petitioner's Submission	Approved by the Commission
Net Revenue Requirement	656.32	586.07	578.05
Revenue at Existing Tariff	117.27	119.81	120.03
Revenue Gap/(Surplus)	**539.05**	**466.27**	**458.02**

The Petitioner has not proposed to carry forward the gap of FY 2015-16 for recovery in the FY 2019-20, has requested for only partial recovery of the standalone gap of FY 2019-20, has sought no hike in tariff, and proposed that the remaining gap will be met through budgetary support of the Government.

Therefore, the Commission approves the revenue gap of INR 458.02 crore in the True-up of FY 2015-16 to be met from the budgetary support of the Government.

4. Chapter 4: Annual Performance Review of FY 2018-19

4.1 Applicable provisions of Tariff Regulations, 2014

The review of FY 2018-19 is to be carried out as per the following provisions of the JERC for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014 (herein after referred as MYT Regulations, 2014):

"8. Annual Review of Performance and True-up

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

....

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

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

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

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

4.2 Annual Performance Review (APR) of FY 2018-19

The ARR for the first MYT Control Period (FY 2016-17 to FY 2018-19) was approved by the Commission vide the MYT Order dated April 06, 2016 along with the Tariff for the FY 2016-17. In accordance with the Regulation 8 (1) of the MYT Regulations, 2014, the Petitioner has not filed for the Annual Performance Review for the FY 2018-19.

The Commission has taken note of the same and directs the Petitioner to follow the Regulations in totality. As the Petitioner has not filed the Annual Performance Review for FY 2018-19, the Commission has not revised the ARR for FY 2018-19. Accordingly, the Commission directs ED A&N to file APR for FY 2019-20 along with the tariff petition for FY 2020-21.

5. Chapter 5: Approval of Aggregate Revenue Requirement for 2nd MYT Control Period (FY 2019-20 to FY 2021-22)

5.1 Approach for the approval of ARR for the MYT Control Period

The Commission approved the Business Plan for the Second Control for the Petitioner for period from FY 2019-20 to FY 2021-22 vide order dated December 31, 2018. In this order the Commission had approved Capital investment Plan, Power Procurement Plan, Sales and Demand Projection, trajectory for certain variable for FY 2019-20 to FY 2021-22. Accordingly, as per the provision of the MYT Regulations, 2018, the Commission has approved various components of ARR based on the approved Business Plan in this chapter.

5.2 Number of Consumers, Connected Load and Energy Sales

Petitioner Submission

The Petitioner has projected the number of consumers, connected load and the category wise sales as approved by the Commission in the Business Plan order dated December 31, 2018 for FY 2019-20 to FY 2021-22.

Commission's View

The Commission has already approved the number of consumers, Connected Load and category wise sales for the second control period in the Business Plan Order dated December 31, 2018. Accordingly, the same has been approved by the Commission, which is as follows:

Table 29: Number of consumers approved by the Commission for FY 2019-20 to FY 2021-22

Number of Consumers	CAGR Approved	Estimated	Approved		
		Base Year	Control Period		
Consumer Category		FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Domestic	3.35%	114,250	118,077	122,032	126,119
Commercial	3.01%	20,660	21,282	21,923	22,583
Industry	2.94%	596	614	632	650
Bulk	2.71%	66	68	69	71
Public Lighting	1.17%	696	704	713	721
Irrigation, Pumps & Agriculture	11.40%	417	464	517	576
Total		**136,684**	**141,208**	**145,885**	**150,721**

Table 30: Connected Load approved by the Commission for FY 2019-20 to FY 2021-22 (kW)

Connected Load (kW)	CAGR Approved	Estimated	Approved Projections		
		Base Year	Control Period		
Consumer Category		FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Domestic	9.43%	158,874	173,850	190,236	208,168
Commercial	2.18%	58,928	60,213	61,526	62,868
Industry	8.00%	23,330	25,197	27,212	29,389
Bulk	5.87%	13,116	13,886	14,702	15,566
Public Lighting	0%	2,832	2,832	2,832	2,832
Irrigation, Pumps & Agriculture	7.19%	1,089	1,167	1,251	1,341
Total		**258,169**	**277,144**	**297,760**	**320,164**

Table 31: Category wise sales approved by the Commission for FY 2019-20 to FY 2021-22 (MU)

Sales (MU)	CAGR Approved	Estimated	Approved Projections		
		Base Year	Control Period		
Consumer Category		FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Domestic	6.40%	147.06	156.46	166.48	177.13
Commercial	1.96%	62.04	63.26	64.50	65.76
Industry	10.00%	21.76	23.93	26.32	28.96
Bulk	5.30%	39.51	41.60	43.81	46.13
Public Lighting	0.00%	8.65	8.65	8.65	8.65
Irrigation, Pumps & Agriculture	3.39%	1.11	1.15	1.19	1.23
Total		**280.12**	**295.06**	**310.95**	**327.86**

5.3 Transmission & Distribution Losses

Petitioner Submission

The Petitioner has considered the Transmission and Distribution (T&D) losses as approved by the Commission in the Business Plan order dated December 31, 2018 for FY 2019-20 to FY 2021-22 for determination of ARR.

Commission View

The Commission has already approved the Transmission & Distribution losses for the second control period in the Business Plan Order dated December 31, 2018. Accordingly, the same has been approved by the Commission, which is as follows:

Table 32: T&D Losses approved by the Commission for FY 2019-20 to FY 2021-22

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
T&D loss trajectory (%)	14.34%	13.84%	13.34%

5.4 Energy Requirement

Petitioner Submission

The Petitioner has submitted that the energy requirement for the control period from FY 2019-20 to FY 2021-22 has been projected based on the approved sales grossed up with T&D losses approved by the Commission in Business Plan Order dated December 31, 2018.

Commission View

The Commission has already approved the energy requirement for the second control period from FY 2019-20 to FY 2021-22 in the Business Plan Order dated December 31, 2018. Accordingly, the Commission has approved the same for FY 2019-20 to FY 2021-22 as follows:

Table 33: Energy Requirement approved by the Commission for FY 2019-20 to FY 2021-22

Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
	Estimated	Approved		
Energy Sales	280.12	295.06	310.95	327.86
Overall T&D Losses (%)	14.84%	14.34%	13.84%	13.34%
Overall T&D Losses (MU)	48.81	49.39	49.95	50.47
Total Energy Requirement	**328.94**	**344.45**	**360.89**	**378.33**

Further, the Commission in accordance with the Renewable Purchase Obligation (RPO) specified in JERC for State of Goa & Union Territories (Procurement of Renewable Energy), 2010 approved RPO target for the control period as follows:

Table 34: RPO Target approved by the Commission for FY 2019-20 to FY 2021-22

Description	FY 2019-20	FY 2020-21	FY 2021-22
Sales (MU)	295.06	310.95	327.86
Less: Hydro Sources (MU)	12.81	12.81	12.81
Sales Excluding Hydro Sources (MU)	282.25	298.14	315.05
RPO Obligation (%)			
Solar	4.70%	6.10%	8.00%
Non-Solar	6.80%	8.00%	9.00%
Total Solar & Non-Solar (%)	**11.50%**	**14.10%**	**17.00%**

Description	FY 2019-20	FY 2020-21	FY 2021-22
RPO Obligation for the Year (MU)			
Solar	**13.27**	**18.19**	**25.20**
Non-Solar	**19.19**	**23.85**	**28.35**
Total Solar & Non-Solar (MU)	**32.46**	**42.04**	**53.55**

5.5 Power Purchase Quantum and Cost

Petitioner Submission

The Petitioner has submitted that there is no availability of power from Central Generating Stations or from other sources/ open market/ power exchanges etc. and therefore the entire energy requirement of the EDA&N will be mainly met from own generation and power purchase from Hired Power Plants (HPPs) and NTPC (Diesel & SPV) plnats for FY 2019-20 to FY 2021-22. The Petitioner has further submitted that 50% of the energy requirement for FY 2017-18 was met from own generation and remaining from Power Purchase, whereas in FY 2018-19, the 37.35% of energy requirement was met through own generation and the remaining 62.65% from Power Purchase. The Petitioner has projected that the same scenario shall continue for the 2nd Control Period i.e. FY 2019-20 to FY 2021-22 and has projected to meet 25-35% energy requirement from Own Generation and remaining 65-75% energy requirement from Power Purchase. The table below provides the details of the estimated generation for the MYT Control period as submitted by the Petitioner:

Table 35: Details of Power Generation submitted by the Petitioner for FY 2019-20 to FY 2021-22

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Units Generated	354.34	371.25	389.19
Auxiliary Consumption	9.89	10.36	10.86
Net Generation	344.45	360.89	378.33

The details of power procurement sources submitted by the Petitioner is as follows:

Table 36: Details of Power Purchase as submitted by the Petitioner for 2nd Control Period

Generating Station	Total Availability (MW)
Power Purchase	
HPP-I	5.00
HPP-II	10.00
NTPC DG Power Plant	5.00
NTPC DG Power Plant	10.00
DG Power Plant at Niel	0.96
G/ Charama (SPV) NTPC	5.00
Rooftop	1.01
HPP – Others	4.56
Sub-Total	**41.53**
Own Generation	
Diesel	70.04
Hydro	5.25
Sub-Total	75.29
Total	**116.82**

Further, the details of the computation of purchases as submitted by the Petitioner is as follows:

Table 37: Summary of Power Purchase as submitted by the Petitioner for FY 2019-20

Sr. No.	Source	Purchase (MU)	External losses (%)	Energy recd. by Licensee (MU)	FC (INR crores)	VC (INR Crore)	Total (INR Crore)
I	HPP- I	28.56	0.00	28.56	3.91	51.45	55.36
Ii	HPP-II	78.32	0.00	78.32	5.04	141.11	146.15
Iii	NTPC DG Power Plant	35.04	0.00	35.04	4.8	63.13	67.93
Iv	NTPC DG Power Plant	70.08	0.00	70.08	9.6	126.26	135.86
V	DG Power Plant at Niel	3	0.00	3.00	0.3	5.41	5.71
Vi	G/Charama (SPV) NTPC	6.08	0.00	6.08	4.68	0	4.68
Vii	HPP - others	0.54	0.00	0.54	1.69	0.73	2.42
	Total	**221.62**	**0.00**	**221.61**	**30.03**	**388.08**	**418.11**

Table 38: Summary of Power Purchase as submitted by the Petitioner for FY 2020-21

Sr. No.	Source	Purchase (MU)	External losses (%)	Energy recd. by Licensee (MU)	FC (INR Crores)	VC (INR Crore)	Total (INR Crore)
I	HPP- I	28.56	0.00	28.56	3.91	54.02	57.93
Ii	HPP-II	78.32	0.00	78.32	5.04	148.17	153.21
Iii	NTPC DG Power Plant	35.04	0.00	35.04	4.80	66.29	71.09
Iv	NTPC DG Power Plant	70.08	0.00	70.08	9.60	132.58	142.18
V	DG Power Plant at Niel	3	0.00	3.00	0.30	5.68	5.98
Vi	G/Charama (SPV) NTPC	6.08	0.00	6.08	4.68	0.00	4.68
Vii	HPP - others	0.54	0.00	0.54	1.69	0.76	2.46
	Total	**221.62**	**0.00**	**221.61**	**30.03**	**407.49**	**437.52**

Table 39: Summary of Power Purchase as submitted by the Petitioner for FY 2021-22

Sr. No.	Source	Purchase (MU)	External losses (%)	Energy recd. by Licensee (MU)	FC (INR Crores)	VC (INR Crore)	Total (INR Crore)
I	HPP- I	28.56	0.00	28.56	3.91	56.72	60.63
Ii	HPP-II	78.32	0.00	78.32	5.04	155.57	160.61
Iii	NTPC DG Power Plant	35.04	0.00	35.04	4.80	69.60	74.40
Iv	NTPC DG Power Plant	70.08	0.00	70.08	9.60	139.20	148.81
V	DG Power Plant at Niel	3	0.00	3.00	0.30	5.96	6.26
Vi	G/Charama (SPV) NTPC	6.08	0.00	6.08	4.68	0.00	4.68
Vii	HPP - others	0.54	0.00	0.54	1.69	0.80	2.50
	Total	**221.62**	**0.00**	**221.61**	**30.03**	**427.86**	**457.89**

Further, with regards to cost of fuel the Petitioner has submitted that approx. 91% of the total generation of power is from Diesel Generating Stations, 8% is generated from Hydro Generating Stations and remaining 1% is from Solar Power Plants. The Petitioner submitted that the Cost of fuel for the second control period has been projected based on the cost of fuel prevailing in November 2018 by escalated by 5% every year. The Cost of fuel for own generation projected by the Petitioner is as follows:

Table 40: Cost of Fuel for Own generation projected by the Petitioner for FY 2019-20 to FY 2021-22 (INR/Ltr)

Sr. No.	Type of Fuel	FY 2019-20	FY 2020-21	FY 2021-22
1	HSD	70.27	73.78	77.47
2	Lubricant	180.00	180.00	180.00

Table 41: Cost of Fuel for Own Generation submitted by the Petitioner for FY 2019-20 to FY 2021-22 (INR Crore)

Sr. No.	Type of Fuel	FY 2019-20	FY 2020-21	FY 2021-22
1	HSD	246.39	295.49	355.00
2	Lubricant	2.51	3.01	3.61
3	Total	248.90	298.50	358.62

Commission View

Own Generation

The Commission observed that the Petitioner has not provided the source wise details of the generation projection from Own Generation for the 2nd control period. Therefore, the Commission during the interaction with the Petitioner sought source wise information from Own Generation for the 2nd Control Period. In reply the Petitioner only provided information with regard to Own Generation for FY 2019-20 as follows:

Table 42: Source wise own generation submitted by the Petitioner for FY 2019-20

SL. No.	Source	Total Capacity MW	Total Capacity kW	Gross Generation (kWh)	Auxiliary Consumption in %	Auxiliary Consumption (kWh)	Net Generation (kWh)
Solar							
1	Raj Niwas (solar)	0.050	50	46,891	0.00%	0	46,891
2	Roof top	1.006	1,006	870,304	0.00%	0	870,304
Sub-Total		**1.056**	**1,056**	**917,195**		**0**	**917,195**
Hydro							
1	KHEP**	5.250	5,250	12,814,630	4.82%	617,400	12,197,230
Sub-Total		**5.25**	**5,250**	**12,814,630**	**4.82%**	**617,400**	**12,197,230**
Diesel							
1	Chatham	15.000	15,000	17,299,000	2.71%	468,803	16,830,197
2	Phoneix Bay	15.800	15,800	21,260,550	1.99%	423,085	20,837,465
3	Raj Niwas	0.512	512	87,200	0.00%*	0	87,200

SL. No.	Source	Total Capacity MW	Total Capacity kW	Gross Generation (kWh)	Auxiliary Consumption in %	Auxiliary Consumption (kWh)	Net Generation (kWh)
4	Secretariat & Medical	0.256	256	7,940	0.00%*	0	7,940
5	Neil Island	2.096	2,096	3,448,769	2.13%	73,592	3,375,177
6	Havelock	4.280	4,280	10,678,054	0.31%	33,047	10,645,007
7	Rutland	0.024	24	32,285	2.93%	947	31,338
8	Baratang	0.512	512	465,749	0.65%	3,023	462,726
9	Rangat	8.200	8,200	25,953,067	5.03%	1,304,898	24,648,169
10	Long Island	0.640	640	451,397	4.82%	21,760	429,637
11	Strait Island	0.015	15	64,458	0.00%*	0	64,458
12	Hanspuri	0.053	53	18,920	2.77%	525	18,395
13	Sita Nagar	4.330	4,330	6,508,384	2.62%	170,587	6337,797
14	Hutbay	3.256	3,256	10,584,754	3.19%	337,755	10,246,999
15	Dugong Creek	0.047	47	94,220	0.35%	329	93,891
16	Car Nicobar	4.384	4,384	7,930,600	12.20%	967,400	6,963,200
17	Kamorta	1.627	1,627	2,335,108	0.25%	5,894	2,329,214
18	Champion	0.347	347	307,085	1.67%	5,115	301,970
19	Katchal	1.012	1,012	524,800	1.58%	8,297	516,503
20	Teressa	0.612	612	693,360	6.34%	43,950	649,410
21	Chowra	0.200	200	235,850	11.85%	27,950	207,900
22	Campbell Bay	3.608	3,608	4,833,090	3.90%	188,732	4,644,358
Sub-Total		**66.81**	**66,811**	**113,814,640**	**3.59%**	**4,085,689**	**109,728,951**
TOTAL		**73.12**	**73,117**	**127,546,465**	**3.69%**	**4,703,089**	**122,843,376**

*Note: The Petitioner has submitted that these plants are utilised for stand by purpose, therefore the details of its auxiliary consumption is not available.

Further, the Commission during the TVS inquired about the actual generation and the cost of fuel from own diesel generation of previous years. The Petitioner submitted the actual generation and cost of HSD for FY 2015-16 and FY 2016-17 as follows:

Table 43: Actual Generation, Quantity consumed and Cost of Fuel for FY 2015-16 and FY 2016-17

Year	Total Generation (MU)	Quantity Consumed (Ltr)	Cost of Fuel (INR Crore)
FY 2015-16	145.96	42,884,255	181.56
FY 2016-17	162.74	43,970,001	212.72

It is observed from above that the Petitioner has projected the lesser quantum of generation from own generation i.e. 127.54 MU for FY 2019-20, whereas the actual generation from own generating station was 162.74 MU in FY 2016-17. However, it is also observed that the Petitioner has projected the cost of own generation for FY 2019-20 at INR 21.87/kWh and the cost of power purchase at Rs. 18.02/kWh. Therefore, considering the fact that the cost of own generation is higher compared to cost of power purchase, the Commission has considered the generation from own generation for FY 2019-20 as projected by the Petitioner, considering that the same will lead to reduction in total cost to supply.

Further, with regard to exorbitantly high cost of fuel claimed by the Petitioner, the Commission sought actual fuel prices prevailing during April 2018 to December 2018, which was not submitted by the Petitioner. Further, the Commission asked the Petitioner to submit justification for increase in cost of fuel as compared to FY 2018-19 levels. In reply, the Petitioner submitted that the main reason for increase in cost of fuel is increase in Cost of HSD from INR 45-48 per litre prevailing in FY 2015-16 (considered in determination of ARR for FY 2018-19) to INR 73 per litre prevailing in November 2018.

Accordingly, the Commission sought HSD prices prevailing for preceding three months i.e. December 2018, January 2019 and February 2019. The Petitioner vide email dated 05 March, 2019 submitted the HSD prices as follows:

Table 44: HSD rates submitted by Petitioner (INR/Litre)

Sr. No.	Month	HSD Rate (INR/Litre)
1	December 2018	54.24
2	January 2019	57.12
3	February 2019	53.00
4	**Average**	**54.79**

Considering the volatile nature of prices of HSD, the Commission has considered the HSD price of INR 54.79/litre, which is the average of the HSD prices prevailing during December 2018 to February 2019. Further, with regard to Lube Oil prices, the Commission has considered INR 180 per litre prevailing in October 2018 (i.e. the latest available price) for the 2nd Control Period.

The Commission has considered the specific fuel consumption of HSD for FY 2019-20 as the average of the actual station wise specific consumption of HSD for FY 2015-16 and FY 2016-17. Further with regard to specific fuel consumption of Lube oil, the Commission in absence of data on actual consumption of lube oil in previous years, has provisionally considered average specific consumption of 0.98 ml/kWh as considered by the Commission in last MYT order. Accordingly, the fuel cost for the second Control Period from FY 2019-20 to FY 2021-22 has been computed as follows:

A. Cost of fuel for FY 2019-20

i. Availability of Power has been considered as projected by the Petitioner i.e. 109.73 MU for Diesel generation.

ii. Cost of HSD has been considered at INR 54.79/Litre (i.e. the average of HSD price prevailing in December 2018, January 2019 and February 2019).

iii. Specific Consumption of HSD has been considered as average of the actual station wise specific consumption for FY 2015-16 and FY 2016-17.

iv. Total consumption of HSD has been computed considering the net power availability considered for FY 2019-20 and the Specific Consumption of HSD approved for FY 2019-20.

v. Cost of Lube oil has been considered at INR 180/Litre as the latest available price of October 2018.

vi. Specific Consumption of lube oil has been considered provisionally as 0.98/kWh considered by the Commission in last MYT order in absence of actual data of previous years.

vii. Total consumption of Lube Oil has been computed considering the net power availability considered for FY 2019-20 and the Specific Consumption of Lube oil approved for FY 2019-20.

B. Cost of fuel for FY 2020-21

i. Availability of Power from existing generating station has been considered as projected by the Petitioner. Additional energy requirement from own generation of 15,958,426 kWh has been projected to be met from upcoming Diesel generating stations of 4 MW for which the Commission has approved the capital expenditure for this control period.

ii. Cost of HSD has been considered at INR 54.79/Litre (i.e. the average of HSD price prevailing in December 2018, January 2019 and February 2019).

iii. Specific Consumption of HSD has been considered as average of the actual specific consumption for FY 2015-16 and FY 2016-17.

iv. Total consumption of HSD has been computed considering the net power availability considered for FY 2020-21 and the Specific Consumption of HSD approved for FY 2020-21.

v. Cost of Lube oil has been considered at INR 180/Litre as the latest available price of October 2018.

vi. Specific Consumption of lube oil has been considered provisionally as 0.98/kWh considered by the Commission in last MYT order in absence of actual data of previous years.

vii. Total consumption of Lube Oil has been computed considering the net power availability considered for FY 2020-21 and the Specific Consumption of Lube oil approved for FY 2020-21.

C. **Cost of fuel for FY 2021-22**

i. Availability of Power from existing generating station has been considered as projected by the Petitioner. Additional energy requirement from own generation of 35,052,483 kWh has been projected to be met from upcoming Diesel generating stations of 4 MW for which the Commission has approved the capital expenditure for this control period.

ii. Cost of HSD has been considered at INR 54.79/Litre (i.e. the average of HSD price prevailing in December 2018, January 2019 and February 2019).

iii. Specific Consumption of HSD has been considered as average of the actual specific consumption for FY 2015-16 and FY 2016-17.

iv. Total consumption of HSD has been computed considering the net power availability considered for FY 2021-22 and the Specific Consumption of HSD approved for FY 2021-22.

v. Cost of Lube oil has been considered at INR 180/Litre as the latest available price of October 2018.

vi. Specific Consumption of lube oil has been considered provisionally as 0.98/kWh considered by the Commission in last MYT order in absence of actual data of previous years.

vii. Total consumption of Lube Oil has been computed considering the net power availability considered for FY 2021-22 and the Specific Consumption of Lube oil approved for FY 2021-22.

Accordingly, the Commission has approved the cost of fuel for own generation from FY 2019-20 to FY 2021-22 as follows:

Table 45: Cost of Fuel approved by the Commission for FY 2019-20

SL. No.	Source	Net Generation (kWh)	Specific Consumption of HSD (ml/kWh)	Total Consumption of HSD (Litre)	Total Lube Oil Consumption (Litre)	HSD Cost (INR Crore)	Lube Oil Cost (INR Crore)	Total Cost (INR Crore)
		A	B	C	D=(0.98 ml/kWh)* A	E=(C*54.79)/10^7	F=(D*180)/10^7	G=E+F
Solar								
1	Raj Niwas (solar)	46,891	-	0.00	0.00	0.00	0.00	0.00
2	Roof top	870,304	-	0.00	0.00	0.00	0.00	0.00
Sub-Total		917,195	-	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Hydro								
1	KHEP[1]	12,680,000	-	0.00	3,696	0.00	0.07	0.07
Sub-Total		12,680,000	-	0.00	3,696	0.00	0.07	0.07
Diesel								
1	Chatham	16,830,197	293	5,063,666	16,938	27.74	0.30	28.05
2	Phoenix Bay	20,837,465	274	5,829,673	20,817	31.94	0.37	32.31
3	Raj Niwas	87,200	481	41,943	85	0.23	0.00	0.23
4	Secretariat & Medical	7,940	469	3,722	8	0.02	0.00	0.02
5	Neil Island	3,375,177	331	1,141,545	3,377	6.25	0.06	6.31
6	Havelock	10,645,007	296	3,159,389	10,455	17.31	0.19	17.50
7	Rutland	31,338	274	8,862	32	0.05	0.00	0.05
8	Baratang	462,726	336	156,703	456	0.86	0.01	0.87
9	Rangat	24,648,169	307	7,959,946	25,412	43.61	0.46	44.07
10	Long Island	429,637	392	176,789	442	0.97	0.01	0.98
11	Strait Island	64,458	449	28,949	63	0.16	0.00	0.16
12	Hanspuri	18,395	456	8,628	19	0.05	0.00	0.05
13	Sita Nagar	6,337,797	370	2,405,897	6,373	13.18	0.11	13.30
14	Hutbay	10,246,999	300	3,177,086	10,364	17.41	0.19	17.59
15	Dugong Creek	93,891	176	16,550	92	0.09	0.00	0.09
16	Car Nicobar	6,963,200	306	2,425,327	7,765	13.29	0.14	13.43
17	Kamorta	2,329,214	375	876,277	2,286	4.80	0.04	4.84
18	Champion	301,970	350	107,356	301	0.59	0.01	0.59
19	Katchal	516,503	345	181,022	514	0.99	0.01	1.00

[1] The Commission has considered normative auxiliary consumption of 1% as per CERC Tariff Regulations, 2014. Specific Fuel consumption has been considered as 0.29ml/kWh i.e. the average of the actual specific Lube oil consumption for FY 2015-16 and FY 2016-17.

SL. No.	Source	Net Generation (kWh)	Specific Consumption of HSD (ml/kWh)	Total Consumption of HSD (Litre)	Total Lube Oil Consumption (Litre)	HSD Cost (INR Crore)	Lube Oil Cost (INR Crore)	Total Cost (INR Crore)
20	Teressa	649,410	341	236,199	679	1.29	0.01	1.31
21	Chowra	207,900	377	88,935	231	0.49	0.00	0.49
22	Campbell Bay	4,644,358	316	1,524,874	4,732	8.35	0.09	8.44
Sub-total		**109,728,951**	**304**	**34,619,338**	**111,442**	**189.67**	**2.01**	**191.67**
TOTAL		**123,326,146**		**34,619,338**	**115,139**	**189.67**	**2.07**	**191.74**

* For KHEP, which is a hydro Power Plant lube oil is utilized for the lubrication purpose

Table 46: Cost of Fuel approved by the Commission for FY 2020-21

SL. No	Source	Net Generation (kWh)	Specific Consumption of HSD (ml/kWh)	Total Consumption of HSD (Litre)	Total Lube Oil Consumption (Litre)	HSD Cost (INR Crore)	Lube Oil Cost (INR Crore)	Total Cost (INR Crore)
		A	B	C	D=(0.98 ml/kWh)*A	E=(C*54.79)/10^7	F=(D*180)/10^7	G=E+F
Solar								
1	Raj Niwas (solar)	46,891	-	0.00	0.00	0.00	0.00	0.00
2	Roof top	870,304	-	0.00	0.00	0.00	0.00	0.00
3	**Total Solar**	**917,195**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Hydro								
1	KHEP*	**12,680,000**	**-**	**0.00**	**3,698.27**	**0.00**	**0.07**	**0.07**
Diesel								
1	Existing Diesel	109,728,951	304	34,619,338	111,442	189.67	2.01	191.67
2	Upcoming Diesel Generating Stations	15,958,426	304	5,034,862	16,208	27.58	0.29	27.88
3	**Sub-total****	**125,687,377**	**304**	**39,654,201**	**127,650**	**217.25**	**2.30**	**219.55**
	Total	**139,284,572**	**-**	**39,654,201**	**131,346**	**217.25**	**2.36**	**219.62**

* For KHEP, which is a hydro Power Plant lube oil is utilized for the lubrication purpose

**Total Diesel Power Generation includes power generation from upcoming Diesel Generation stations

Table 47: Cost of Fuel approved by the Commission for FY 2021-22

SL. No	Source	Net Generation (kWh)	Specific Consumption of HSD (ml/kWh)	Total Consumption of HSD (Litre)	Total Lube Oil Consumption (Litre)	HSD Cost (INR Crore)	Lube Oil Cost (INR Crore)	Total Cost (INR Crore)
		A	B	C	D=(0.98 ml/kWh)* A	E=(C*54.79)/10^7	F=(D*180)/10^7	G=E+F
Solar								
1	Raj Niwas (solar)	46,891	-	0.00	0.00	0.00	0.00	0.00
2	Roof top	870,304	-	0.00	0.00	0.00	0.00	0.00
3	**Sub-total**	**917,195**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Hydro								
1	KHEP*	**12,680,000**	**-**	**0.00**	**3698.27**	**0.00**	**0.07**	**0.07**
Diesel								
1	Existing Diesel	109,728,951	304	34,619,338	111,442	189.67	2.01	191.67
2	Upcoming Diesel Generating Stations	35,052,483	304	11,059,012	35,600	60.59	0.64	61.23
3	**Sub-total****	**144,781,434**	**304**	**45,678,350**	**147,042**	**250.26**	**2.65**	**252.90**
	Total	**158,378,629**		**45,678,350**	**150,739**	**250.26**	**2.71**	**252.97**

* For KHEP, which is a hydro Power Plant lube oil is utilized for the lubrication purpose

**Total Diesel Power Generation includes power generation from upcoming Diesel Generation stations

Power Purchase

The Commission has considered the power purchase from Hired Power Plants and other diesel power plants and Solar Power plants of NTPC as per the actual data of power availability from these plants in FY 2017-18. The Commission has computed the Fixed and Energy Charge for Hired Power Plants and other Diesel Power Plants as follows:

A. Diesel Generation Stations: Hired Power Plants (HPP)

i. Fixed Charge for HPP-1, HPP-2 has been considered as the actual Fixed charge for April 2018 to December 2018 submitted by the Petitioner in reply to additional query raised by the Commission as INR 1.05/kWh for HPP-1 and INR 1.17/kWh for HPP-2, which is in line with the fixed charges as per PPA.

ii. Specific Fuel Consumption (SFC) of HSD for HPP-1 and HPP-2 has been considered based on the average of the actual SFC for the period April 2018 to December 2018 submitted by the Petitioner in reply to additional query raised by the Commission as follows:

Table 48: Actual SFC of HSD of HPP-1 and HPP-2 for April 2018 to December 2018 as submitted by the Petitioner (ml/kWh)

Month	HPP-1	HPP-2
April 2018	277	257
May 2018	278	261
June 2018	272	257
July 2018	273	257
August 2018	273	257
September 2018	275	259
October 2018	274	257
November 2018	272	257
December 2018	270	256
Average	**274**	**258**

iii. Price of HSD has been considered as per the actual price prevailing during December 2018 to February 2018 i.e. INR 54.79/Litre.

B. Other HPPs and DG at Neil Island

i. Fixed Charges for other HPP has been considered as INR 31.53/kWh (high per unit cost as DG sets has tied up on monthly rentals) and for DG at Neil Island, Fixed Charges has been considered as INR 1.00/kWh as submitted by the Petitioner in the absence of actual data of previous years.

ii. Specific Fuel Consumption (SFC) of HSD for other HPP has been considered as the average of the actual SFC of other Generating Stations at 269 ml/kWh and for DG at Neil Island it has been considered as actual SFC of NTPC generating Stations at 270.44 ml/kWh in the absence of actual data of previous years.

iii. Price of HSD has been considered as per the actual price prevailing during December 2018 to February 2018 i.e. INR 54.79/Litre.

C. Diesel Generating Stations: NTPC

i. Fixed Charge has been considered as the actual Fixed charge for April 2018 to December 2018 submitted by the Petitioner in reply to additional query raised by the Commission as INR 1.45/kWh, which is in line with the fixed charges as per PPA.

ii. Specific Fuel Consumption (SFC) of HSD has been considered based on the average of the actual SFC for the period April 2018 to December 2018 submitted by the Petitioner in reply to additional query raised by the Commission as follows:

Table 49: Actual SFC of HSD of NTPC DG plant for April 2018 to December 2018 as submitted by the Petitioner (ml/kWh)

Month	SFC (ml/kWh)
April 2018	271
May 2018	271
June 2018	272
July 2018	273
August 2018	273
September 2018	273

Month	SFC (ml/kWh)
October 2018	268
November 2018	268
December 2018	268
Average	**271**

iii. Price of HSD has been considered as per the actual price prevailing during December 2018 to February 2018.

D. Solar Power plant: NTPC

i. Tariff for the plant has been considered as per the actual per unit cost of INR 7.70 per unit in FY 2017-18 i.e. as per Power Purchase Agreement.

Accordingly, the Commission has approved the power purchase for the second control period from FY 2019-20 to FY 2021-22 is as follows:

Table 50: Power Purchase Cost approved by the Commission for FY 2019-20

Sr. No.	Power Purchase from other sources	Units (MU)	Fixed Charge (INR/ kWh)	Fixed Charge (INR Crore)	SFC of HSD (ml/kWh)	Total HSD Consumption (Ltr)	Total Cost of Fuel (INR Crore)	Total Cost of Energy (INR Crore)
		A	**B**	**C=A*B/10**	**D**	**E=A*D**	**F=INR 54.79*E**	**G=C+F**
1	HPP- I	28.56	1.05	3.00	274	7,817,779	42.83	**45.83**
2	HPP-II	78.32	1.17	9.16	258	20,171,957	110.52	**119.68**
3	NTPC DG Power Plant	35.04	1.45	5.08	270	9,476,373	51.92	**57.00**
4	NTPC DG Power Plant	70.08	1.45	10.16	270	18,952,747	103.84	**114.00**
5	DG Power Plant at Niel	3.00	1.00	0.30	270	811,333	4.45	**4.75**
6	G/Charama (SPV) NTPC	6.08	7.70	4.68				**4.68**
7	HPP - others	0.54	31.53	1.70	269	145,008	0.79	**2.50**
8	**Total**	**221.62**		**34.09**		**57,375,198**	**314.34**	**348.43**

Table 51: Power Purchase Cost approved by the Commission for FY 2020-21

Sr. No.	Power Purchase from other sources	Units (MU)	Fixed Charge (INR/ kWh)	Fixed Charge (INR Crore)	SFC of HSD (ml/kWh)	Total HSD Consumptio n (Ltr)	Total Cost of Fuel (INR Crore)	Total Cost of Energy (INR Crore)
		A	**B**	**C=A*B/10**	**D**	**E=A*D**	**F=INR 54.79*E**	**G=C+F**
1	HPP- I	28.56	1.05	3.00	274	7,817,779	42.83	**45.83**
2	HPP-II	78.31	1.17	9.16	258	20,168,720	110.50	**119.66**
3	NTPC DG Power Plant	35.04	1.45	5.08	270	9,476,373	51.92	**57.00**
4	NTPC DG Power Plant	70.08	1.45	10.16	270	18,952,747	103.84	**114.00**
5	DG Power Plant at Niel	3.00	1.00	0.30	270	811,333	4.45	**4.75**

Sr. No.	Power Purchase from other sources	Units (MU)	Fixed Charge (INR/ kWh)	Fixed Charge (INR Crore)	SFC of HSD (ml/kWh)	Total HSD Consumption (Ltr)	Total Cost of Fuel (INR Crore)	Total Cost of Energy (INR Crore)
6	G/Charama (SPV) NTPC	6.08	7.70	4.68				**4.68**
7	HPP - others	0.53	31.53	1.70	269	145,008	0.79	**2.50**
8	**Total**	**221.61**		**34.09**		**57,371,960**	**314.32**	**348.41**

Table 52: Power Purchase Cost approved by the Commission for FY 2021-22

Sr. No.	Power Purchase from other sources	Units (MU)	Fixed Charge (INR/kWh)	Fixed Charge (INR Crore)	SFC of HSD (ml/kWh)	Total HSD Consumption (Ltr)	Total Cost of Fuel (INR Crore)	Total Cost of Energy (INR Crore)
		A	B	C=A*B/10	D	E=A*D	F=INR 54.79*E	G=C+F
1	HPP- I	28.56	1.05	3.00	274	7,817,779	42.83	45.83
2	HPP-II	76.65	1.17	8.97	258	19,742,708	108.16	117.13
3	NTPC DG Power Plant	35.04	1.45	5.08	270	9,476,373	51.92	57.00
4	NTPC DG Power Plant	70.08	1.45	10.16	270	18,952,747	103.84	114.00
5	DG Power Plant at Niel	3.00	1.00	0.30	270	811,333	4.45	4.75
6	G/Charama (SPV) NTPC	6.08	7.70	4.68				4.68
7	HPP - others	0.54	31.53	1.70	269	145,008	0.79	2.50
8	**Total**	**219.95**		**33.90**		**56,945,949**	**311.99**	**345.88**

Renewable Purchase Obligation (RPO)

The Commission in accordance to JERC (Procurement of Renewable Energy) Regulations, 2010 and subsequent amendments thereof had approved the target for RPO compliance for the second control period from FY 2019-20 to FY 2021-22 in Business Plan order dated 31st December 2018 as follows:

Table 53: RPO target approved by the Commission for FY 2019-20 to FY 2021-22

Description	FY 2019-20	FY 2020-21	FY 2021-22
Sales (MU)	**295.06**	**310.95**	**327.86**
Less: Hydro Sources (MU)	**12.81**	**12.81**	**12.81**
Sales Excluding Hydro Sources (MU)	**282.25**	**298.14**	**315.05**
RPO Obligation (%)			
Solar	4.70%	6.10%	8.00%
Non-Solar	6.80%	8.00%	9.00%
Total Solar & Non-Solar (%)	**11.50%**	**14.10%**	**17.00%**
RPO Obligation for the Year (MU)			
Solar	13.27	18.19	25.20
Non-Solar	19.19	23.85	28.35
Total Solar & non-solar (MU)	**32.46**	**42.04**	**53.55**

The Commission has observed that the Petitioner has not proposed any power purchase plan to comply with the RPO targets approved by the Commission in the Business Plan Order. However, considering the Petitioner submission in Business Plan Petition, the Commission has considered that the Petitioner shall be complying with the Solar RPO targets approved through partially from the purchase of solar power from roof top projects and other solar power plants within the UT of Andaman & Nicobar Administration while the balance solar obligation shall be met through purchase of Renewable Energy Certificates (REC). Further, RPO towards non-solar power shall be met through EDA&N's own hydro power plants and the shortfall in the RPO requirement for the same is proposed to be met by purchase of non-solar REC's.

Accordingly, the Commission has considered the considered the rate of purchase of REC as floor price of INR 1000/MWh for Solar and Non-Solar, which shall be subject to APR and / or True Up as follows:

Table 54: Summary of RPO compliance and its Cost of Power Purchase for FY 2019-20 to FY 2021-22

Description	FY 2019-20	FY 2020-21	FY 2021-22
Solar RPO (MU)	**13.27**	**18.19**	**25.20**
Own Existing Solar Plant (MU)	0.92	0.92	0.92
Power Purchase from Solar Plants (MU)	6.08	6.08	6.08
Total (MU)	**7.00**	**7.00**	**7.00**
Purchase of Solar REC	6.27	11.19	18.20
Cost of Purchase of Solar REC (INR Crore)	**0.63**	**1.12**	**1.82**
Non-Solar RPO (MU)	**19.19**	**23.85**	**28.35**
Own Renewable Energy Plant (MU)	12.68	12.68	12.68
Total (MU)	**12.68**	**12.68**	**12.68**
Purchase of Non-Solar REC	6.51	11.17	15.67
Cost of Purchase of Non-Solar REC (INR Crore)	**0.65**	**1.12**	**1.57**

Summary of Power Purchase and Own Generation approved by the Commission for FY 2019-20 to FY 2021-22 is as follows:

Table 55: Summary of Cost of Fuel and Power Purchase approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Sr. No.	Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
		Claimed	Approved	Claimed	Approved	Claimed	Approved
1	**Cost of Own Generation**	**248.93**	**191.74**	**298.50**	**219.62**	**358.62**	**252.97**
2	Power Purchase from other Sources	418.11	348.43	437.52	348.41	457.89	345.88
3	Cost of Purchase of Non-Solar REC	-	0.65	-	1.12	-	1.57
4	Cost of Purchase of Solar REC	-	0.63	-	1.12	-	1.82
5	**Sub-Total Cost of Power Purchase (5=2+3+4)**	**418.11**	**349.71**	**437.52**	**350.65**	**457.89**	**349.27**
6	**Total**	**667.04**	**541.45**	**736.02**	**570.26**	**816.51**	**602.24**

5.6 GFA and Capitalisation

Petitioner Submission

The Petitioner has submitted that the opening GFA for FY 2018-19 has been considered as per the Fixed Asset Register for FY 2017-18 and the same has been increased by estimated addition of assets during the FY 2018-19. Thereafter, planned additions during FY 2019-20, FY 2020-21 and FY 2021-22 have been considered as approved in the Business Plan by the Commission. Accordingly, GFA has been computed for the Control Period from FY 2019-20 to FY 2021-22 is as given in the following Table.

Table 56: GFA details submitted by Petitioner (INR Crore)

Particulars	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Opening GFA	222.07	231.21	236.82	243.14	273.44
Asset Capitalised	9.15	5.61	6.32	30.30	9.55
Closing GFA	231.21	236.82	243.14	273.44	282.99

Commission View

It is observed that the true up for the Petitioner has only been completed till FY 2014-15 and the Commission has approved the true -up for FY 2015-16 in this Order. The Commission vide deficiency note directed the Petitioner to submit the audited account for FY 2015-16 to FY 2017-18. In reply the Petitioner submitted the audited accounts for FY 2015-16. For FY 2016-17 the accounts are prepared but yet to be audited by AG and the same is submitted. Further, the accounts for FY 2017-18 is still under preparation. The GFA movement from FY 2014-15 to FY 2018-19 has been considered as per the audited account of FY 2015-16, approved capitalisation for FY 2016-17 to FY 2018-19 as per respective years tariff orders as given in the following Table:

Table 57: GFA movement from FY 2014-15 to FY 2018-19 (INR Crore)

Particulars	FY 2014-15	FY 2015-16		FY 2016-17		FY 2017-18		FY 2018-19	
	True Up FY 2014-15	Approved in TO FY 2015-16	True-Up FY 2015-16	Approved in TO FY 2016-17	Revised	Approved in TO FY 2017-18	Revised	Approved in TO FY 2018-19	Revised
Opening GFA	112.57	202.51	130.80	183.15	130.80	204.53	152.18	226.11	173.76
Addition	18.23	68.23	0.00	21.38	21.38	21.58	21.58	18.70	18.70
Deletion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing GFA	130.80	270.74	130.80	204.53	152.18	226.11	173.76	244.81	192.46

The Commission has considered the closing GFA for FY 2018-19 as per revised estimate as shown above as the opening GFA for FY 2019-20. The year wise capitalisation for the Second Control Period has been considered by the Commission as approved in the Business Plan Order. Accordingly, the approved GFA capitalisation for the control period is as follows:

Table 58: GFA Approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Opening GFA	192.46	198.78	229.08

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Addition	6.32	30.30	9.55
Deletion	0.00	0.00	0.00
Closing GFA	198.78	229.08	238.63

5.7 Depreciation

Petitioner Submission

The Petitioner has computed the Depreciation rate for FY 2019-20 to FY 2021-22 based on the average depreciation rate as per the audited financial statement for the FY 2015-16 and the average assets for the respective financial year. Accordingly, the Petitioner has proposed depreciation for the 2nd Control Period (FY 2019-20 to FY 2021-22) as given in the following Table:

Table 59: Depreciation submitted by the Petitioner for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Opening GFA	236.82	243.14	273.44
Addition	6.32	30.30	9.55
Deletion	0.00	0.00	0.00
Closing GFA	243.14	273.44	282.99
Average GFA	239.98	258.29	278.22
Depreciation Rate	2.85%	2.85%	2.85%
Depreciation	**6.84**	**7.36**	**7.93**

Commission View

Regulation 32 of the MYT Tariff Regulation, 2018 specifies as follows:

"30. Depreciation

30.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided also that the no depreciation shall be allowed on the assets financed through consumer contribution, deposit work, capital subsidy or grant.

30.2 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.

30.3 Land other than the land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets.

30.4 In case of existing assets, the balance depreciable value as on April 1, 2019, shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to March 31, 2018, from the gross depreciable value of the assets.

30.5 The depreciation shall be chargeable from the first Year of commercial operations. In case of projected commercial operation of the assets during the Year, depreciation shall be computed based on the average of opening and closing value of assets:

Provided that depreciation shall be re-calculated during truing-up for assets capitalised at the time of truing up of each Year of the Control Period, based on documentary evidence of asset capitalised by the Applicant, subject to the prudence check of the Commission.

.....

30.7 The depreciation for a Distribution Licensee shall be calculated annually, based on the Straight Line Method, over the Useful Life of the asset at rates specified in Appendix I of the Regulations."

In addition to allowable depreciation, the Distribution Licensee shall be entitled to advance against depreciation (AAD), computed in the manner given hereunder:

AAD = Loan (raised for capital expenditure) repayment amount based on loan repayment tenure, subject to a ceiling of 1/10th of loan amount minus depreciation as calculated on the basis of these Regulations:

Provided that advance against depreciation shall be permitted only if the cumulative repayment upto a particular Year exceeds the cumulative depreciation upto that Year:

Provided further that advance against depreciation in a Year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation upto that Year.

30.9 The Distribution Licensee shall provide the list of assets added during each Year of Control Period and list of assets completing 90% of depreciation in the Year along with Petition for annual performance review, true-up and tariff determination for ensuing Year.

30.10 The remaining depreciable value for a Distribution Licensee shall be spread over the balance useful life of the asset, on repayment of the entire loan."

Considering that the Petitioner has not submitted fixed asset register till FY 2015-16 and in absence of details of the assets reaching 90% of their depreciable value. The Commission has determined the depreciation for the 2nd control period from FY 2019-20 to FY 2021-22 based on the approved GFA and depreciation rates as per actual depreciation for FY 2015-16 as per audited accounts for FY 2015-16, which shall be subject to Annual performance Review and / or True Up. Further, it is observed that the entire assets have been funded through equity only, hence the petitioner is not eligible for AAD. Accordingly, the approved depreciation for FY 2019-20 to FY 2021-22 is as given in the Table:

Table 60: Depreciation approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Opening GFA	236.82	192.46	243.14	198.78	273.44	229.08
Addition	6.32	6.32	30.30	30.30	9.55	9.55
Deletion	0.00	0.00	0.00	0.00	0.00	0.00

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Closing GFA	243.14	198.78	273.44	229.08	282.99	238.63
Average GFA	239.98	195.62	258.29	213.93	278.22	233.86
Depreciation Rate	2.85%	2.90%	2.85%	2.90%	2.85%	2.90%
Depreciation	**6.84**	**5.68**	**7.36**	**6.21**	**7.93**	**6.79**

5.8 Operation and Maintenance Expense

Petitioner Submission

Employee Expenses

The Petitioner has submitted that the expense head of employee cost consists of salary and allowance, bonus, Leave Travel Concession (LTC) & Honorarium etc. The Petitioner has projected the employee expenses for the 2nd Control Period (FY 2019-20 to FY 2021-22), in accordance to Regulation 41 of the MYT Regulations, 2018 by escalating actual employee expenses for FY 2017-18 by average increase in CPI from FY 2015-16 to FY 2017-18 i.e. 4.28%. Further, the Petitioner has computed the Growth Factor (Gn) for the respective year for meeting the additional manpower requirement. Accordingly, the Petitioner has proposed Employee Expenses for the Control Period is as given in the following Table:

Table 61: Employee Expenses projected by the Petitioner for FY 2019-20 to FY 2021-22

Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Opening No. of Employees	2272	2378	2455	2567
Addition	222	197	217	223
Retirement	116	120	105	126
Closing No. of Employees	2378	2455	2567	2664
Employee Cost of previous year (INR Crore)	125.09	136.53	146.98	160.27
Growth Factor (Gn)	5.00%	3.00%	5.00%	4.00%
CPI Inflation (%)	4.28%	4.28%	4.28%	4.28%
Employee Cost (INR Crore)	136.53	146.98	160.27	173.44

A&G Expenses

A&G expenses comprise of the following broad subheads of expenditure, viz.

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

The Petitioner has projected the A&G expenses for the 2nd Control Period (FY 2019-20 to FY 2021-22), in accordance to Regulation 41 of the MYT Regulations, 2018 by escalating the A&G expenses for FY 2017-18 by average increase in CPI from FY 2015-16 to FY 2017-18 i.e. 4.28%.

The proposed A&G Expenses for the 2nd control period (FY 2019-20 to FY 2021-22) is as follows:

Table 62: A&G Expenses projected by the Petitioner for FY 2019-20 to FY 2021-22

Particular	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
A&G Expense of previous year (INR Crore)	16.63	17.34	18.08	18.85
CPI Inflation (%)	4.28%	4.28%	4.28%	4.28%
Projected A&G Expense (INR Crore)	**17.34**	**18.08**	**18.85**	**19.66**

R&M Expenses

The Petitioner has submitted that it has been undertaking various Repairs and Maintenance activities as a step towards improvement of systems, reduction in breakdowns, reduction in response time and increasing preventive maintenance. The R&M expenses for the 2nd control period (FY 2019-20 to FY 2021-22), in accordance to Regulation 41 of the MYT Regulations, 2018 considering K factor as per Regulation 41.3 of the MYT Regulations, WPI as per average increase in FY 2015-16 to FY 2017-18 i.e. 0.33% and GFA at the beginning of the respective years. Accordingly, the proposed R&M Expenses for the 2nd Control period is as follows:

Table 63: R&M Expenses projected by the Petitioner for FY 2019-20 to FY 2021-22

Particular	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Opening GFA (INR Crore)	231.21	236.82	243.14	273.44
Addition to GFA (INR Crore)	5.61	6.32	30.30	9.55
Closing GFA (INR Crore)	236.82	243.14	273.44	282.99
Average GFA (INR Crore)		**239.98**	**258.29**	**278.22**
K Factor (%)		27.13%	27.13%	27.13%
WPI Inflation (%)		0.33%	0.33%	0.33%
R&M Expense (INR Crore)		**64.47**	**66.19**	**74.44**

Commission View

Regulation 60 of the MYT Tariff Regulations, 2018 stipulates as follows:

"60.4 O&M expenses for the nth Year of the Control Period shall be approved based on the formula given below:

O&Mn = (R&Mn + EMPn + A&Gn) x (1 - Xn) + Terminal Liabilities

Where,

R&Mn = K x GFAn-1 x (WPIinflation)

EMPn = (EMPn-1) x (1+Gn) x (CPIinflation)

A&Gn = (A&Gn-1) x (CPIinflation)

'K' is a constant (expressed in %). Value of K for each Year of the Control Period shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

CPIinflation – is the average increase in Consumer Price Index (CPI) for immediately preceding three (3) Years before the base Year;

WPIinflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three (3) Years before the base Year;

EMPn – Employee expenses of the Distribution Licensee for the nth Year;

A&Gn – Administrative and General expenses of the Distribution Licensee for the nth Year;

R&Mn – Repair and Maintenance expenses of the Distribution Licensee for the nth Year;

GFAn-1 – Gross Fixed Asset of the transmission Licensee for the n-1th Year;

Xn is an efficiency factor for nthYear. Value of Xn shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate;

Gn is a growth factor for the nth Year. Value of Gn shall be determined by the Commission for each Year in the Multi Year Tariff Order for meeting the additional manpower requirement based on Licensee's filings, benchmarking, approved cost by the Commission in past and any other factor that the Commission feels appropriate:

Provided that in case the Distribution Licensee has been in operation for less than three (3) Years as on the date of effectiveness of these Regulations, O&M Expenses shall be determined on case to case basis."

The O&M expenses include Employee expenses, R&M expenses and A&G expenses. In accordance with Regulation 60 of the Tariff Regulations, 2018, the O&M expenses for the first year of the 2nd Control Period (FY 2019-20 to FY 2021-22) shall be determined by the Commission taking into account actual O&M expenses of the previous years and any other factors considered appropriate by the Commission. The submissions of the Petitioner and the Commission's analysis on the O&M expenses for the 2nd Control Period (FY 2019-20 to FY 2021-22) is detailed below.

Employee Expense

The Commission in its Business Plan Order dated December 31, 2018 has directed the Petitioner to submit the following with regards to Employee Expense in the MTY Petition for the 2nd control period (FY 2019-20 to FY 2021-22).

- Break-up of proposed employee addition at various levels during the Control Period.
- Manpower assessment plan for determining the proposed additional manpower.
- Steps taken for the proposed employees' recruitment during the Control Period.

- Actual manpower addition during FY 2016-17, FY 2017-19 and FY 2018-19 (Till October 2018) vis-à-vis approved figures in the Order on Business Plan.

- Concrete action plan for the manpower addition during the 2nd control period (FY 2019-20 to FY 2021-22).

The Petitioner has submitted the details as shown below:

Table 64: Break-up of Manpower at various level as submitted by the Petitioner

Particular	Sanctioned	As-Is Manpower at EDA&N	Total Proposed	Proposed In-house	Proposed Outsourced
Executives (AEE/AE & Above)	51	29	22	22	0
Non-Executives (JE & Below)	674	509	165	165	0
Non-Executives – Group D	2,428	1,734	694	694	0
Total	**3,153**	**2,272**	**881**	**881**	**0**

The Commission has observed that the Petitioner has submitted the audited accounts for the FY 2015-16 and provisional accounts for FY 2016-17 and unable to submit the audited accounts for FY 2017-18. Hence, in order to compute the employee expense for the control period, the Commission has no option other than to consider the audited accounts for FY 2015-16 and provisional accounts for FY 2016-17 as submitted by the Petitioner. The Commission has computed the growth factor based on the employee addition plan submitted by the Petitioner.

Further, the employee expenses for the FY 2017-18 has been arrived by escalating the average employee expense for FY 2014-15 to FY 2016-17 by percentage increase in CPI inflation for FY 2016-17, which is shown as follows:

Table 65: Revised computation of Employee Expense for FY 2015-16 to FY 2017-18

Particular	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Gross Employee Expense as per Balance Sheet (INR Crore)	**73.61**	**75.31**	**92.54**	
Average of 3 Years for which actual figures / trued up figures are available (INR Crore)		80.49		
CPI Inflation			4.52%	3.59%
Revised Employee Expense (INR Crore)		**80.49**	**84.13**	**87.15**

Employee expenses for FY 2018-19 (INR 95.17 Crore) has been arrived at by escalating the revised employee expense of INR 87.15 Crore for FY 2017-18 as shown above with the average increase in CPI (4.34%) for preceding three years i.e. for FY 2015-16 to FY 2017-18 and actual Growth Factor of 4.67% for FY 2018-19. Further, the employee expense for the 2nd control period (FY 2019-20 to FY 2021-22) has been arrived at by escalating the employee expense for FY 2018-19 of INR 95.17 Crore by average increase in CPI (i.e. 4.34%) for preceding three years i.e. for FY 2015-16 to FY 2017-18 and growth factor for each year of the control period respectively.

Accordingly, the approved employee expense for the 2nd control period (FY 2019-20 to FY 2021-22) is as follows:

Table 66: Employee Expenses approved by the Commission for FY 2019-20 to FY 2021-22

Particulars	FY 2018-19		FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Estimated	Claimed	Approved	Claimed	Approved	Claimed	Approved
EMPn-1 (INR Crore)	125.09	87.15	136.53	95.17	146.98	102.52	160.27	111.85
Gn (%)	4.67%	4.67%	3.24%	3.24%	4.56%	4.56%	3.78%	3.78%
CPIinflation (%)	4.28%	4.34%	4.28%	4.34%	4.28%	4.34%	4.28%	4.34%
Gross Employee Expense EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation) (INR Crore)	**136.53**	**95.17**	**146.98**	**102.52**	**160.27**	**111.85**	**173.44**	**121.11**

A&G Expense

The Commission vide the deficiency note has asked the petitioner to submit the justification with regard to A&G expense projected for FY 2019-20 as INR 18.80 Crore which is approximately 884.29% higher than the A&G Expense approved by the Commission during FY 2018-19. In response, the Petitioner submitted that the Commission had approved A&G Expense at lesser level in the MYT Order for the first Control Period. However, based on the True-up submissions for FY 2014-15 the same was revised to INR 29.87 Crore in the True-up Order. Further the Petitioner submitted that it has made efforts and reduced the A&G Expenses from INR 29.87 Crore to INR 18.08 Crore in FY 2019-20. The Petitioner submitted the year wise statement of A&G Expense as shown below:

Table 67: Year-Wise Statement of A&G Expense submitted by the Petitioner (INR Crore)

Particular	As per Audited Accounts	As per Accounts	As per Accounts	As per Estimation	As per Projection	As per Projection	As per Projection
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Administration & General Expenses	15.41	15.53	16.63	17.34	18.08	18.85	19.66

The Commission observed from the audited account that the Petitioner has booked part of A&G expense under the Employee Expense. Therefore, the Commission has done the reclassification of the expenses for the projection for the 2nd control period (FY 2019-20 to FY 2021-22). The Commission has considered actual A&G Expense for FY 2014-15 as per the true up and for FY 2015-16 as per the audited accounts (post reclassification) and actual A&G expense for FY 2016-17 as per provisional accounts (post reclassification) submitted by the Petitioner. Accordingly, the A&G Expense for the FY 2017-18 has been arrived at by escalating the average of actual A&G expense for FY 2014-15 to FY 2016-17 by increasing the same with CPI inflation for FY 2016-17 and FY 2017-18 shown as follows:

Table 68: Revised computation of A&G Expense for FY 2015-16 to FY 2017-18

Particular	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Gross A&G Expense as per Balance Sheet/ True up (INR Crore)	**29.87**	**30.82**	**31.06**	
Average of 3 Years for which actual figures / trued up figures are available (INR Crore)		30.58		
CPI Inflation			4.52%	3.59%
Revised A&G Expense (INR Crore)		**30.58**	**31.97**	**33.11**

From above, it can be observed that the A&G expense computed by the Commission is higher than the actual A&G expense for FY 2017-18 as per petitioner submission i.e. INR 16.63 Crore because of reclassification of the expenses by the Commission. The Commission has projected the A&G Expense for FY 2018-19 and the control period by escalating the revised A&G expense for FY 2017-18 computed above by average increase in CPI inflation (i.e. 4.34%%) of preceding three years i.e. FY 2015-16 to FY 2017-18.

Accordingly, the approved A&G expense for FY 2019-20 to FY 2021-22 is as given in the Table:

Table 69: A&G Expenses approved by the Commission for FY 2019-20 to FY 2021-22

Particulars	FY 2018-19		FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Estimated	Claimed	Approved	Claimed	Approved	Claimed	Approved
A&Gn-1 (INR Crore)	16.63	33.11	17.34	34.55	18.08	36.05	18.85	37.62
CPIinflation (%)	4.28%	4.34%	4.28%	4.34%	4.28%	4.34%	4.28%	4.34%
Provision (INR Crore)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)	**17.34**	**34.55**	**18.08**	**36.05**	**18.85**	**37.62**	**19.66**	**39.25**

R&M Expenses

The Commission vide the deficiency note has asked the petitioner to submit the justification with regard to R&M expense projected for FY 2019-20 as INR 64.47 Crore which is approximately 56.06% higher than the R&M Expense approved by the Commission during FY 2018-19. In response to the same, the Petitioner submitted the year-wise statement of R&M Expense from FY 2015-16 to FY 2021-22 as shown below:

Table 70: Year-Wise Statement of R&M Expenses submitted by the Petitioner (INR Crore)

Particular	As per Audited Accounts	As per Accounts	As per Accounts	As per Estimation	As per Projection	As per Projection	As per Projection
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Repair & Maintenance Expenses	76.21	55.79	60.25	62.94	64.47	66.19	74.44

It is observed that the actual R&M expenses of the Petitioner increased exorbitantly from INR 8.24 Crore approved by the Commission in true up of FY 2014-15 to INR 76.21 Crore in FY 2015-16. Accordingly, the Commission sought justification for the same. However, the Petitioner did not submit any justification for the same. In absence, of any detailed reason for increase in R&M expenses for FY 2015-16, the Commission has computed the K factor considering the % of actual R&M expense to actual opening GFA for FY 2014-15 and FY 2016-17 as follow:

Table 71: Computation of K-Factor

Sr. No.	Particular	FY 2014-15	FY 2016-17
1	Actual R&M Expense (INR Crore)	8.24	55.79
2	GFAn-1 (Opening GFA) (INR Crore)	112.57	130.80
3	Actual R&M Expense as % of Opening GFA (4=1/2)	7.32%	42.65%
4	**K Factor (Average of Actual R&M Expense as % of Opening GFA)**	**24.99%**	

Further, the Commission has considered opening GFA for each year of the second control period from FY 2019-20 to FY 2021-22 as approved in this Tariff Order. The Commission has considered the WPI inflation of 0.33% which is the average increase in the Wholesale Price Index (WPI) for FY 2015-16 to FY 2017-18.

Accordingly, the R&M expenses approved by the Commission for the Second Control period from FY 2019-20 to FY 2021-22 is as follows:

Table 72: R&M Expenses approved by the Commission for FY 2019-20 to FY 2021-22

Particulars	FY 2018-19		FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Estimated	Claimed	Approved	Claimed	Approved	Claimed	Approved
K Factor		24.99%	27.13%	24.99%	27.13%	24.99%	27.13%	24.99%
GFAn-1 (INR Crore)		173.76	236.82	192.46	258.29	198.78	278.22	229.08
WPIinflation		0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%
R&Mn = K x (GFAn-1) x (1+WPIinflation) (INR Crore)	**62.94**	**43.56**	**64.47**	**48.25**	**66.19**	**49.83**	**74.44**	**57.43**

The Total O&M expense approved by the Commission for the Control period from FY 2019-20 to FY 2021-22 is as follows:

Table 73: Total O&M Expenses approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Employee Expense	146.98	102.52	160.27	111.85	173.44	121.11
A&G Expense	18.08	36.05	18.85	37.62	19.66	39.25
R&M Expense	64.47	48.25	66.19	49.83	74.44	57.43
Total O&M Expense	**229.53**	**186.82**	**245.31**	**199.30**	**267.54**	**217.79**

5.9 Interest & Finance Charges

Petitioner Submission

The EDA&N being a Government Department, the entire capital employed till date has been funded through equity infusion by the Central Government through budgetary support without any external borrowings. The interest on debt/loan has been calculated considering debt to be 70% of GFA. Repayment of loan has been considered equivalent to the depreciation of the respective years.

Interest on loan for the control period FY 2019-20, FY 2020-21 and FY 2021-22 has been calculated on the average loan for the respective year at SBI MCLR for 1 year tenor as on 1st April, 2018 plus 100 basis points as provided in Regulation 28.4 of MYT Regulations, 2018. The SBI MCLR for 1 year tenor as on 1st April,2018 was 8.15%, hence rate of interest considered for calculating interest on loan is 9.15%.

The proposed interest on loan for the control period is as follows:

Table 74: Interest Expenses projected by the Petitioner for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Opening Normative Loan	137.38	134.96	148.80
Add: Normative Loan during year (70% of Capitalisation)	4.42	21.21	6.69
Less: Normative Repayment	6.84	7.37	7.93
Closing Normative Loan	134.96	148.80	147.56
Average Normative Loan	**136.17**	**141.88**	**148.18**
Rate of Interest	9.15%	9.15%	9.15%
Interest on Normative Loan	**12.46**	**12.98**	**13.56**

Commission View

Regulation 28 of the MYT Tariff Regulations, 2018 stipulates as follows:

*"**28. Interest on Loan***

28.1 The loans arrived at in the manner indicated in Regulation 26 on the assets put to use, shall be considered as gross normative loan for calculation of interest on the loan:

Provided that interest and finance charges on capital works in progress shall be excluded:

Provided further that in case of De-capitalisation or retirement or replacement of assets, the loan capital shall be reduced to the extent of outstanding loan component of the original cost of the de-capitalised or retired or replaced assets, based on documentary evidence.

28.2 The normative loan outstanding as on April 1, 2019, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2018, from the gross normative loan.

28.3 Notwithstanding any moratorium period availed by the Transmission Licensee or the Distribution Licensee, as the case may be, the repayment of loan shall be considered from the first Year of commercial *operation of the project and shall be equal to the annual depreciation allowed in accordance with Regulation 30.*

28.4 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Transmission Licensee or the Distribution Licensee:

Provided that at the time of truing up, the weighted average rate of interest calculated on the basis of the actual loan portfolio during the Year applicable to the Transmission Licensee or the Distribution Licensee shall be considered as the rate of interest:

Provided also that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest for the actual loan shall be considered:

Provided further that if the Transmission Licensee or the Distribution Licensee does not have actual loan, then one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1)Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points shall be considered as the rate of interest for the purpose of allowing the interest on the normative loan.

28.5 The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest:

Provided that at the time of truing up, the normative average loan of the Year shall be considered on the basis of the actual asset capitalisation approved by the Commission for the Year.

28.6 For new loans proposed for each Financial Year of the Control Period, interest rate shall be considered as lower of (i) one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1)Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points, and (ii) weighted average rate of interest proposed by the Distribution Licensee.

28.7 The above interest computation shall exclude the interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, deposit work, capital subsidy or grant, carried out by Transmission Licensee or Distribution Licensee.

……”

Accordingly, the Commission has considered 70% of the GFA addition approved for the control period as normative loan. Further to arrive at the opening loan of FY 2019-20, the Commission has considered approved trued-up value of closing loan of FY 2015-16 and addition for FY 2016-17 to FY 2018-19 as approved by the Commission in previous tariff orders for FY 2016-17 to FY 2018-19 respectively.

Accordingly, the revised opening and closing loan balance for FY 2016-17 to FY 2018-19 is as follows:

Table 75: Revised loan for FY 2016-17 to FY 2018-19 (INR Crore)

Particulars	True Up FY 2014-15	FY 2015-16		FY 2016-17		FY 2017-18		FY 2018-19	
		Approved in TO FY 2015-16	Revised	Approved in TO FY 2016-17	Revised	Approved in TO FY 2017-18	Revised	Approved in TO FY 2018-19	Revised
Opening loan	6.05	108.04	18.20	126.38	14.40	131.65	19.68	136.01	24.04
Addition	12.76	47.76	0.00	14.97	14.97	15.11	15.11	13.09	13.09
Repayment	0.61	29.42	3.80	9.69	9.69	10.75	10.75	11.73	11.73
Closing loan	**18.20**	**126.38**	**14.40**	**131.65**	**19.68**	**136.01**	**24.04**	**137.38**	**25.40**

The revised closing loan balance for FY 2018-19 shown above has been considered as the opening loan for FY 2019-20. Interest rate on loan has been considered as per the provision of the Regulation as SBI MCLR as on 1st April 2018 plus 100 basis points. The Interest on Loan approved by the Commission for FY 2019-20 to FY 2021-22 is as follows:

Table 76: Interest Expenses approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Opening loan	137.38	25.40	134.96	24.14	148.80	39.14
Addition	4.42	4.42	21.21	21.21	6.69	6.69
Repayment	6.84	5.68	7.37	6.21	7.93	6.79
Closing loan	**134.96**	**24.14**	**148.80**	**39.14**	**147.56**	**39.03**
Average Normative Loan	**136.17**	**24.77**	**141.88**	**31.64**	**148.18**	**39.08**
Interest Rate	9.15%	9.15%	9.15%	9.15%	9.15%	9.15%
Interest on Loan	**12.46**	**2.27**	**12.98**	**2.89**	**13.56**	**3.58**

5.10 Return on Equity

Petitioner Submission

The Petitioner has submitted that it has computed the return on equity of 16% on the 30% equity considered as per Regulation. The proposed return on equity for the control period is as follows:

Table 77: Return on Equity projected by the Petitioner for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Opening Normative Equity	73.44	75.34	84.43
Addition During the year	1.90	9.09	2.87
Closing Normative Equity	75.34	84.43	87.29
Average Normative Equity	**74.39**	**79.89**	**85.86**

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Rate of Return	16.00%	16.00%	16.00%
Return on Equity	**11.90**	**12.78**	**13.74**

Commission View

Regulation 27 of the MYT Tariff Regulations, 2018 stipulates as follows:

"27. Return on Equity

27.1 Return on equity shall be computed on the paid up equity capital determined in accordance with Regulation 26 for the assets put to use for the Transmission Licensee and shall be allowed in accordance with the prevalent CERC Tariff Regulations for transmission system.

27.2 The return on equity for the Distribution Wires Business shall be allowed on the equity capital determined in accordance with Regulation 26 for the assets put to use at post-tax rate of return on equity specified in the prevalent CERC Tariff Regulations for transmission system.

27.3 The return on equity for the Retail Supply Business shall be allowed on the equity capital determined in accordance with Regulation 26 for the assets put to use, at the rate of sixteen (16) per cent per annum."

The Commission is of the view that historically, all the asset has been funded through budgetary support of the Government which is equivalent to equity infusion only. Therefore, the Commission has restricted the normative equity at 30% of the approved GFA. Further, the opening equity of FY 2019-20 has been arrived at by considering the opening equity of FY 2016-17 at 30% of the opening GFA of FY 2016-17 and thereafter considering the normative equity addition at 30% of the capitalisation for FY 2016-17 to FY 2018-19 as approved by the Commission in respective tariff orders.

Accordingly, the approved Return on Equity for FY 2019-20 to FY 2021-22 for FY is as follows:

Table 78: Revised Equity for FY 2016-17 to FY 2018-19 (INR Crore)

Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
	Approved in TO FY 2016-17	Revised	Approved in TO FY 2017-18	Revised	Approved in TO FY 2018-19	Revised
Opening Equity	54.95	39.24	61.36	45.65	67.83	52.12
Addition	6.41	6.41	6.47	6.47	5.61	5.61
Deletion / Adjustment	0.00	0.00	0.00	0.00	0.00	0.00
Closing equity	**61.36**	**45.65**	**67.83**	**52.12**	**73.44**	**57.73**

Accordingly, the approved Return on Equity for the second control period from FY 2019-20 to FY 2021-22 is as follows:

Table 79: Return on Equity approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Opening Equity	73.44	57.73	75.34	59.63	84.43	68.72
Addition	1.90	1.90	9.09	9.09	2.87	2.87
Deletion / Adjustment	0.00	0.00	0.00	0.00	0.00	0.00
Closing equity	**75.34**	**59.63**	**84.43**	**68.72**	**87.29**	**71.59**
Average Normative Equity	**74.39**	**58.68**	**79.89**	**64.18**	**85.86**	**70.15**
Rate of Return on Equity	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%
Return on Equity	**11.90**	**9.39**	**12.78**	**10.27**	**13.74**	**11.22**

5.11 Interest on Working Capital

Petitioner Submission

The Petitioner has submitted that working capital has been computed in accordance to Regulation 63.1 of the Tariff Regulations, 2018. Further, Interest on working capital for the control period FY 2019-20, FY 2020-21 and FY 2021-22 has been calculated on the working capital for the respective year at SBI MCLR for 1 year tenor as on April 1, 2018 plus 200 basis points as provided in Regulation 31.4 of MYT Regulations, 2018. The SBI MCLR for 1 year tenor as on 1st April,2018 was 8.15%, hence rate of interest considered for calculating interest on loan is 10.15%. The proposed Interest on Working Capital for the control period is as follows:

Table 80: Interest on Working Capital submitted by the Petitioner for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Two months receivables	30.85	32.36	33.96
Add: One Month O&M Expenses	19.13	20.44	22.30
Add: 40% of repair and maintenance expenses for one month	2.15	2.21	2.48
Less: Consumer Security Deposit excl. BG/FDR	0.00	0.00	0.00
Total working capital Requirement	**52.13**	**55.01**	**58.73**
Interest Rate	10.15%	10.15%	10.15%
Interest on Working Capital	**5.29**	**5.58**	**5.96**

Commission View

As per Regulation 31 and Regulation 52 of the MYT Tariff Regulations, 2018, Interest on Working Capital is to be computed as follows:

"31. Interest on Working Capital

.....

31.2 The norms for working capital for Distribution Wires Business and Retail Supply Business shall be as specified in Chapter 6 and Chapter 7 of these Regulations.

31.3 The interest on working capital shall be a 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 based on the normative figures.

31.4 The rate of interest on working capital shall be equal one (1)Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1)Year period, as may be applicable as on 1stApril of the Financial Year in which the Petition is filed plus 200 basis points."

"63. Norms of Working Capital for Retail Supply Business

63.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Retail Supply Business for the Financial Year, computed as follow4s:

(a) O&M Expenses for one (1) month; plus

(b) Maintenance spares at 40% of repair and maintenance expenses for one (1) month; plus

(c) Receivables equivalent to two (2) months of the expected revenue from Consumers at the prevailing tariff;

Less

(d) Amount, if any, held as security deposits under clause (b) of sub-section (1) of Section 47 of the Act from distribution system users except the security deposits held in the form of Bank Guarantees:

Provided that at the time of truing up for any Year, the working capital requirement shall be re-calculated on the basis of the values of components of working capital approved by the Commission in the truing up."

Based on the above Regulation, the Commission has worked out the interest on working capital for the control period, which is shown in table below:

Table 81: Interest on Working Capital approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
O&M expenses for 1 month	19.13	15.57	20.44	16.61	22.30	18.15
Maintenance Spares @ 40% of R&M expense of 1 month	2.15	1.61	2.21	1.66	2.48	1.91
Receivables for two months	30.85	33.89	32.36	36.44	33.96	38.57
Less: Adjustments for security deposits	0.00	0.00	0.00	0.00	0.00	0.00
Net Working Capital	**52.13**	**51.07**	**55.01**	**54.71**	**58.74**	**58.63**
Rate of Interest on Working Capital	10.15%	10.15%	10.15%	10.15%	10.15%	10.15%
Interest on Working Capital	**5.29**	**5.18**	**5.58**	**5.55**	**5.96**	**5.95**

5.12 Interest on Security Deposit

Petitioner Submission

The Petitioner has not claimed interest on security deposits for the second Control Period from FY 2019-20 to FY 2021-22.

Commission View

Regulation 28.11 of the MYT Tariff Regulations, 2018 stipulates as follows:

"28.11 Interest shall be allowed on the amount held as security deposit held in cash from Retail Consumers at the Bank Rate as on 1st April of the Financial Year in which the Petition is filed:

Provided that at the time of truing-up, the interest on the amount of security deposit for the Year shall be considered on the basis of the actual interest paid by the Licensee during the Year, subject to prudence check by the Commission."

However, the Petitioner has not considered any interest on consumer security deposit. Therefore, the Commission has not approved any interest on security deposits of the consumers for second Control Period from FY 2019-20 to FY 2021-22.

5.13 Non-tariff Income

Petitioner submission

The Petitioner has submitted that the Non-tariff income for the FY 2019-20, FY 2020-21 and FY 2021-22 has been projected by escalating the actual Non-tariff income of FY 2017-18 by 5% YOY. Accordingly, Non-tariff income for the FY 2019-20, FY 2020-21 and FY 2021-22 proposed at INR 2.94 Crore, INR 3.09 Crore and INR 3.25 Crore respectively.

Commission View

Regulation 53 of the MYT Tariff Regulations, 2018 stipulates as follows:

"53. Non-Tariff Income

53.1 The amount of Non-Tariff Income relating to the Distribution Wires Business as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in determining the wheeling charges of Distribution Wires Business of the Distribution Licensee:

Provided that the Distribution Licensee shall submit full details of its forecast of Non-Tariff Income to the Commission along with its application for determination of wheeling charges.

53.2 The Non-Tariff Income shall inter-alia include:

Income from rent of land or buildings;

(a) Income from sale of scrap;

(b) Income from statutory investments;

(c) Income from interest on contingency reserve investment;

(d) Interest on advances to suppliers/contractors;

(e) Rental from staff quarters;

(f) Rental from contractors;

(g) Income from hire charges from contactors and others;

(h) Income from advertisements, etc.;

(i) Miscellaneous receipts;

(j) Excess found on physical verification;

(k) Deferred Income from grant, subsidy, etc., as per Annual Accounts;

(l) Prior period income, etc.:"

The Commission considers the projected Non-Tariff Income as reasonable and accordingly, approves same for the MYT Control Period. The Non-Tariff Income approved by the Commission is tabulated below:

Table 82: Non-Tariff Income approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Non-Tariff Income	2.94	2.94	3.09	3.09	3.25	3.25

5.14 Income Tax

Petitioner Submission

The Petitioner has not submitted any details of Income Tax.

Commission View

Regulation 32 of the MYT Tariff Regulations, 2018 stipulates as follows:

"32. Tax on Income

32.1 The treatment of tax on income for a Transmission Licensee shall be in accordance with the prevalent CERC Tariff Regulations.

32.2 The Commission in its MYT Order shall provisionally approve Income Tax payable for each Year of the Control Period, if any, based on the actual income tax paid, including cess and surcharge on the same, if any, as per latest audited accounts available for the Distribution Licensee, subject to prudence check.

32.3 Variation between Income Tax actually paid, including cess and surcharge on the same, if any, and approved, if any, on the income stream of the Licensed business of the Distribution Licensees shall be reimbursed to/recovered from the Distribution Licensees, based on the documentary evidence submitted at the time of truing up of each Year of the Control Period, subject to prudence check.

32.4 Under-recovery or over-recovery of any amount from the Consumers on account of such tax having been passed on to them shall be adjusted every Year on the basis of income-tax assessment under the Income-Tax Act, 1961, as certified by the statutory auditors. The Distribution Licensee may include this variation in its truing up Petition:

Provided that tax on any income stream other than the core business shall not be a pass-through component in tariff and tax on such other income shall be borne by the Distribution Licensee."

It is observed that the Petitioner has not made any claim towards the tax on income, therefore the Commission has not approved any income tax for the second control period. The Commission will review the same at the time of truing up.

5.15 Aggregate Revenue Requirement for the 2nd MYT Control period (FY 2019-20 to FY 2021-22)

The Commission, based on the detailed analysis of the cost parameters, has considered the ARR for MYT Control Period as given in the table below:

Table 83: Summary of ARR for Second Control Period for FY 2019-20 to FY 2021-22 (INR Crore)

S. No.	Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
		Claimed	Approved	Claimed	Approved	Claimed	Approved
1	Cost of Fuel	248.93	191.74	298.50	219.62	358.62	252.97
2	Cost of power purchase	418.11	349.71	437.52	350.65	457.89	349.27
3	Depreciation	6.84	5.68	7.37	6.21	7.93	6.79
4	Employee expenses	146.98	102.52	160.27	111.85	173.44	121.11
5	A&G expenses	18.08	36.05	18.85	37.62	19.66	39.25
6	R&M expenses	64.47	48.25	66.19	49.83	74.44	57.43
7	Interest & Finance Charges	12.46	2.27	12.98	2.89	13.56	3.58
8	Return on Equity	11.90	9.39	12.78	10.27	13.74	11.22
9	Interest on Working Capital	5.29	5.18	5.58	5.55	5.96	5.95
10	Interest on Consumer Security Deposit	0.00	0.00	0.00	0.00	0.00	0.00
11	Income Tax	0.00	0.00	0.00	0.00	0.00	0.00
12	**Total Revenue Requirement**	**933.07**	**750.79**	**1,020.04**	**794.49**	**1,125.24**	**847.58**
13	Less: Non-Tariff Income	2.94	2.94	3.09	3.09	3.25	3.25

S. No.	Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
		Claimed	Approved	Claimed	Approved	Claimed	Approved
14	**Net Revenue Requirement**	**930.13**	**747.85**	**1,016.95**	**791.40**	**1,122.00**	**844.33**

5.16 Revenue at Existing tariff and Gap for FY 2019-20

Petitioner Submission

The estimated revenue and gap for the control period at existing tariff for the second control period from FY 2019-20 to FY 2021-22 projected by the Petitioner is as follows:

Table 84: Revenue and Gap at Existing Tariff submitted by the Petitioner for FY 2019-20 to FY 2021-22 (INR Crore)

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Net Revenue Requirement	930.10	1,016.95	1,122.00
2	Revenue from Sale of Power	185.12	194.15	203.74
3	**Net Gap During the Year**	**744.98**	**822.80**	**918.26**
4	Add: Previous Year Gap	-	-	-
5	**Total Gap**	**744.98**	**822.80**	**918.26**

Commission View

In accordance to Regulation 9.1 of the MYT Tariff Regulations, 2018, the Petitioner has proposed ARR for each year of the control period and tariff proposal for first year of the control period i.e. FY 2019-20. Accordingly, the Commission is of the view that since the tariff has to be approved for FY 2019-20 only, the revenue and revenue gap computations are accordingly required to be done for FY 2019-20 only. Based on the slab-wise information provided by the Petitioner and category-wise sales, connected load and number of consumers approved by the Commission, the computed revenue from sale of power for the FY 2019-20 by the Commission is as follows.

Table 85: Revenue at existing tariff determined by the Commission for FY 2019-20

Sr. No.	Category	Energy Sales (in MU)	Existing Tariff		Fixed Charges (INR Crore)	Energy Charges (INR Crore)	Total Revenue (INR Crore)
			Minimum Charges	Energy Charge (INR/Kwh)			
1	**Domestic**						

Sr. No.	Category	Energy Sales (in MU)	Existing Tariff		Fixed Charges (INR Crore)	Energy Charges (INR Crore)	Total Revenue (INR Crore)
			Minimum Charges	Energy Charge (INR/Kwh)			
	0 to 100 units	78.23	INR 30 per kVA per month	2.05		16.04	
	101 to 200 units	46.94		4.50		21.12	
	201 to 500 units	20.78		6.60		13.72	
	501 units & above	10.51		6.90		7.25	
	Sub-total	**156.46**				**58.13**	**58.13**
2	**Commercial**						
a)	**Commercial**						
	0-200 Units	22.16	INR 50 per kVA per month	7.00		15.51	
	201 to 500 Units	8.12		9.00		7.31	
	501 Units & above	6.65		11.00		7.32	
	Sub-total	**36.93**				**30.14**	**30.14**
b)	**Govt. Connection**						
	0-500 Units	5.27	INR 50 per kVA per month	8.70		4.58	
	501 units & above	21.06		10.10		21.27	
	Sub-total	**26.33**				**25.86**	**25.86**
	Total	**63.26**				**55.99**	**55.99**
3	**Industrial**						
	0-500 Units	15.56	a) INR 50.00 per HP b) INR 200.00 per month for rice, flour millers from rural areas who are having 15 HP capacity.	6.00		9.34	
	501 units & above	8.37		7.50		6.28	
	Sub-total	**23.93**				**15.61**	**15.61**
4	**Irrigation Pump**						
	All units	1.15	INR 15 per kVA per month	**1.60**		**0.18**	**0.18**

Sr. No.	Category	Energy Sales (in MU)	Existing Tariff		Fixed Charges (INR Crore)	Energy Charges (INR Crore)	Total Revenue (INR Crore)
			Minimum Charges	Energy Charge (INR/Kwh)			
5	**Public Lighting**						
	All units	8.65	INR 60 per kVA per month	**6.10**		**5.28**	**5.28**
6	**Bulk Category**						
	All units	41.60	INR 50 per kVA per month	12.00		**49.92**	**49.92**
	Total	**295.05**				**185.11**	**185.11**

Keeping in view the ARR and Revenue from sale of power approved above, the Commission has derived the revenue gap for the FY 2019-20 at existing tariff as shown in the following table:

Table 86: Total Gap approved by the Commission at existing tariff for FY 2019-20 (INR Crore)

S. No.	Particulars	FY 2019-20	
		Claimed	Approved
1	Net Revenue Requirement	930.13	747.85
2	Revenue from Sale of Power at Existing Tariff	185.12	185.11
3	**Net Gap during the year**	**745.01**	**562.74**
4	Add: Previous Year Gap	0.00	0.00
5	**Total Gap**	**745.01**	**562.74**

5.17 Average Cost of Supply

Petitioner Submission

The Petitioner has submitted the Average Cost of Supply (ACoS) for the control period as shown in the table below:

Table 87: ACoS as submitted by the Petitioner for FY 2019-20 to FY 2021-22

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Net Revenue Requirement (Rs. In Crore)	930.10	1,016.95	1,122.00
2	Energy Sales (MU's)	295.06	310.95	327.86
3	Average Cost of Supply (In Rs/unit)	31.52	32.70	34.22

Commission View

The Commission has computed the Average Cost of Supply for the Petitioner for FY 2019-20 as per the Net revenue requirement approved in previous sections as shown in table below:

Table 88: Approved ACoS at existing tariff by the Commission for FY 2019-20

Sr. No.	Particulars	FY 2019-20
1	Net Revenue Requirement (INR In Crore)	747.85
2	Revenue from Existing Tariff (INR In Crore)	185.11
3	Energy Sales (MU's)	295.06
4	Average cost of supply/unit (INR/kWh)	25.35
5	Average Billing Rate (INR/kWh)	6.27
6	**Gap (INR/kWh)**	**19.07**

6. Chapter 6: Tariff Principles and Design

6.1 Overall Approach

The Commission while designing retail tariffs for the FY 2019-20 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, 2018.

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 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.

6.2 Applicable Regulations

Regulation 19 of MYT Regulations, 2018 states the following:

"19. Annual determination of tariff

19.1 The Commission shall determine the tariff of a Generating Company, Transmission Licensee and Distribution Licensee covered under a Multi Year Tariff framework for each Year during the Control Period, in accordance with timelines specified in Regulation 17, having regard to the following:

a) The approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges of the Generating Company, Transmission Licensee and Distribution Licensee for such Financial Year, including modifications approved at the time of Mid-term Review, if any; and

b) Approved gains and losses, including the incentive available, to be passed through in tariff, following the truing up of previous Year."

Further, Regulation 67 of the MYT Tariff Regulations, 2018 stipulates as follows:

"67. Determination of Tariff

67.1 The Commission may categorize Consumers on the basis of their load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required and any other factor as considered appropriate by the Commission.

67.2 The Commission shall endeavour to determine cost of supply for each category/ sub-category of Consumers.

67.3 The Commission shall endeavour to reduce gradually the cross-subsidy between Consumer categories with respect to the cost of supply in accordance with the provisions of the Act.

67.4 The tariff proposal by Licensee and the tariff determination by the Commission shall be based on the following principles:

(a) The tariff for all categories shall preferably be two part, consisting of fixed and variable charges.

(b) The fixed charges in tariff shall progressively reflect actual fixed cost incurred by Distribution Licensee;

(c) The overall retail supply tariff for different Consumer categories shall progressively reflect the cost of supply for respective categories of Consumers;

(d) The tariff for residential Consumers shall be set considering the affordability of tariff for various class of Consumers;

(e) The tariff shall be set in such a manner that it may not present a tariff shock to any category of Consumers."

It may be noted that in case of Andaman and Nicobar islands, the source of power is own generation and purchase from Hired Power Plants (HPP) and Diesel Power plant & solar plant of NTPC.

Since sales are predominantly in the LT category, the Commission is of the view that the functional demarcation of costs will not have substantial impact on the present tariff structure. Additionally, due to practical constraints, open access is not an option for the consumers of Andaman and Nicobar Islands.

In view of the above, the tariff needs to be designed in such a way that cross subsidy between different categories of consumers is progressively brought within ±20% of Average Cost of Supply and that even for BPL category consumers, tariff rates are close to 50% of the Average Cost of Supply. The Commission has taken a considerate view in this regard balancing the interest of the utility and the consumer, thus compensating the department with additional revenue and providing a reasonable hike in consumers' tariff.

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

6.3 Cumulative Revenue Gap/ (Surplus) at Existing Tariff

Petitioner's Submission

The Petitioner has proposed revenue gap of INR 745.01 Crore for FY 2019-20 at existing tariff. The revenue gap submitted by the Petitioner for FY 2019-20 is as follows:

Table 89: Revenue Gap at existing tariff submitted by the Petitioner for FY 2019-20 (INR Crore)

Sr. No.	Particulars	FY 2019-20
1	Net Revenue Requirement	930.13
2	Revenue from Sale of Power at existing Tariff	185.12
3	**Net Gap during the year**	**745.01**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**745.01**

Commission's View

The Commission based on the ARR and Revenue from sale of power computed above, has derived revenue gap for the FY 2019-20 at existing tariff as shown in table below:

Table 90: Revenue Gap determined by the Commission at existing tariff for FY 2019-20 (INR Crore)

Sr. No.	Particulars	FY 2019-20
1	Net Revenue Requirement	747.85
2	Revenue from Sale of Power at existing Tariff	185.11
3	**Net Gap during the year**	**562.74**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**562.74**

Accordingly, the Commission determined the revenue gap of INR 562.74 Crore for FY 2019-20 at existing tariff.

6.4 Treatment of Gap /(Surplus) and Tariff Design

From above, it can be seen that at existing tariff, there is revenue gap of INR 562.74 Crore for FY 2019-20. However, the Commission has approved marginal tariff hike in tariff for FY 2019-20 as compared to tariff for FY 2018-19 in view of the budgetary support by the Government to meet the balance revenue gap.

6.4.1 Tariff Proposal

Petitioner Submission

1. The Petitioner has proposed that at existing tariff, the average cost of supply comes to INR 31.52 per unit, whereas the Average Billing Rate (ABR) is INR 6.27 per unit. Thus, there is a gap of INR 25.25 per unit.
2. The Petitioner has not proposed any revision in tariff from tariff applicable for FY 2018-19.
3. The Petitioner has proposed to introduce Fixed Charges for all category of consumers replacing Minimum Charges.
4. The Petitioner has proposed to introduce new category for Charging Stations for Electric Vehicles.

Accordingly, the tariff proposal submitted by the Petitioner for FY 2019-20 for individual category is as follows:

Table 91: Tariff proposal submitted by the Petitioner for FY 2019-20

Existing			Proposed		
Category	**Minimum charge per connected load or part thereof per month**	**Energy Charge (INR/kWh)**	**Category**	**Minimum charge per connected load or part thereof per month**	**Energy Charge (INR/kWh)**
Domestic Connection			**Domestic Connection**		
0 to 100 units	INR 30.00 per kVA connected load or part thereof per month	2.05	0 to 100 units	INR 30.00 per kVA connected load or part thereof per month	2.05
101 to 200 units		4.50	101 to 200 units		4.50
201 to 500 units		6.60	201 to 500 units		6.60
501 units & above		6.90	501 units & above		6.90
Commercial			**Commercial**		
0-200 Units	INR 50.00 per kVA connected Load or part thereof per month	7.00	0-200 Units	INR 50.00 per kVA connected Load or part thereof per month	7.00
201 to 500 Units		9.00	201 to 500 Units		9.00
501 units & above		11.00	501 units & above		11.00
Govt. Connection			**Govt. Connection**		
0-500 Units	INR 50.00 per kVA connected load or part thereof per month	8.70	0-500 Units	INR 50.00 per kVA connected load or part thereof per month	8.70
501 units & above		10.10	501 units & above		10.10
Industrial			**Industrial**		
0 to 500 units	a) INR 50.00 per H.P. connected load or part thereof. b) INR 200.00 per month for rice, flour millers of rural areas with 15 HP capacity	6.00	0 to 500 units	a) INR 50.00 per H.P. connected load or part thereof. b) INR 200.00 per month for rice, flour millers of rural areas with 15 HP capacity	6.00
501 units & above		7.50	501 units & above		7.50

Existing			Proposed		
Category	**Minimum charge per connected load or part thereof per month**	**Energy Charge (INR/kWh)**	**Category**	**Minimum charge per connected load or part thereof per month**	**Energy Charge (INR/kWh)**
Bulk Supply	INR 50.00 per kVA connected load or part thereof	12.00	**Bulk Supply**	INR 50.00 per kVA connected load or part thereof	12.00
Public Lighting	INR 60.00 per kVA connected load or part thereof per month	6.10	**Public Lighting**	INR 60.00 per kVA connected load or part thereof per month	6.10
Irrigation Pumps & Agriculture	INR 15.00 per kVA connected load or part thereof per month	1.60	**Irrigation Pumps & Agriculture**	INR 15.00 per kVA connected load or part thereof per month	1.60
			EV Charging Stations		
	-		Domestic EV Charging Stations		As applicable to Domestic category
			Public EV Charging Stations		ACoS + 15%

Accordingly, the computation of impact of proposed tariff on revenue for FY 2019-20 is as follows:

Table 92: Average Tariff Hike for FY 2019-20 as submitted by the Petitioner

Sr. No.	Particulars	Units	FY 2019-20	
			Existing	Proposed
1	Net ARR for FY 2019-20	INR Crore	930.13	930.13
2	Revenue for FY 2019-20	INR Crore	185.12	185.12
3	Gap (1-2)	INR Crore	745.01	745.01
4	Total Sales	MU	295.06	295.06
5	Average Cost of Supply	INR/kWh	31.52	31.52
6	Average Revenue	INR/kWh	6.27	6.27
7	Pure Gap	INR/kWh	25.25	25.25
8	Average Tariff Hike	INR/kWh		0.00
9	Tariff Hike in %	%		0.00

The Commission vide order dated March 21, 2018 directed the Petitioner for introduction of Fixed Charge in place of Minimum Charge as follows:

"The Commission observes that under the present tariff structure, the ED-A&N is charging minimum monthly charges. Applicability of such minimum charges has been discontinued and fixed charges have been introduced across majority of the states in India in line with the provisions of the Tariff Policy. The Commission intends to introduce fixed charges in place of minimum charges in the subsequent Tariff Order for ED-A&N. Therefore, the Petitioner is directed to submit a detailed tariff proposal for introduction of fixed charges across categories supported by details of number of consumers, connected load / contracted demand, etc. in the subsequent tariff filing. Details of existing number of consumers, connected load and contracted demand is also required to be provided along with the Business Plan for the next Control Period."

However, the Petitioner did not comply with the direction. Therefore, the Commission during the interaction with the Petitioner directed to submit the proposal for introduction of Fixed Charges in place of Minimum charge for FY 2019-20.

Accordingly, the Petitioner submitted the revised tariff proposal as follows:

Table 93: Revised Tariff proposal submitted by the Petitioner for FY 2019-20

Existing			Revised Proposed		
Category	**Minimum charge per connected load or part thereof per month**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
Domestic Connection			**Domestic Connection**		
0 to 100 units	INR 30.00 per kVA connected load or part thereof per month	2.05	0 to 100 units	INR 20 per connection per month or part thereof for Single Phase & INR 100 per connection per month for three phase or part thereof	2.05
101 to 200 units		4.50	101 to 200 units		4.50
201 to 500 units		6.60	201 to 500 units		6.60
501 units & above		6.90	501 units & above		6.90
Commercial			**Commercial**		
0-200 Units	INR 50.00 per kVA connected Load or part thereof per month	7.00	0-200 Units	INR 30 per connection per month or part thereof for Single Phase & INR 125 per connection per month for three phase or part thereof	7.00
201 to 500 Units		9.00	201 to 500 Units		9.00
501 units & above		11.00	501 units & above		11.00
Govt. Connection			**Govt. Connection**		
0-500 Units	INR 50.00 per kVA connected load or	8.70	0-500 Units	INR 100 per connection per	8.70

Existing			Revised Proposed		
Category	**Minimum charge per connected load or part thereof per month**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
501 units & above	part thereof per month	10.10	501 units & above	month or part thereof for Single Phase & INR 125 per connection per month for three phase	10.10
Industrial			**Industrial**		
0 to 500 units	a) INR 50.00 per H.P. connected load or part thereof. b) INR 200.00 per month for rice, flour millers of rural areas with 15 HP capacity	6.00	0 to 500 units	INR 100/kVA/Month or part thereof	6.00
501 units & above		7.50	501 units & above		7.50
Bulk Supply	INR 50.00 per kVA connected load or part thereof	12.00	**Bulk Supply**	INR 250/kVA/Month or part thereof	12.00
Public Lighting	INR 60.00 per kVA connected load or part thereof per month	6.10	**Public Lighting**		6.10
Irrigation Pumps & Agriculture	INR 15.00 per kVA connected load or part thereof per month	1.60	**Irrigation Pumps & Agriculture**		1.60
			EV Charging Stations		
	-		Domestic EV Charging Stations		As applicable to Domestic category

Existing			Revised Proposed		
Category	**Minimum charge per connected load or part thereof per month**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
			Public EV Charging Stations		ACoS + 15%

Further, the Commission sought details of the category wise single phase and three phase consumers for FY 2018-19, which was submitted by the Petitioner.

Commission View

The Commission, after analysis of the various components of the ARR for FY 2019-20, has come to the conclusion that the utility has to increase the average tariff from the existing level of INR 6.27 per unit, as given in **Table 88: Approved ACoS at existing tariff by the Commission for FY** 2019-20 of Chapter 5, to INR 25.35 per unit to recover the full amount of ARR as approved for FY 2019-20.

In view of the socio-economic constraints of the people residing in the licensee's area, the Commission feels that aligning the tariff with Average Cost of Supply would be unjust to the consumers. Duly considering the difficult terrain where people reside in remote areas spread across the various islands with limited access to basic amenities, the Commission, in order to avoid tariff shock, has marginally increased the tariff of FY 2019-20 over the FY 2018-19.

Accordingly, considering the revised tariff proposal submitted by the Petitioner for FY 2019-20 and the net ARR approved by the Commission for FY 2019-20, the Commission has approved the tariffs for FY 2019-20. The Commission has also given due consideration to the guiding principles as stated in the Electricity Act 2003, the Tariff Policy, MYT Tariff Regulations 2018, the suggestions/observations of the stakeholders in this regard and the Petition submitted by EDA&N, while deciding the tariff for FY 2019-20. Accordingly, the Commission has considered a marginal increase in tariff for FY 2019-20.

The approved tariff for FY 2019-20 is as follows:

Table 94: Existing vs. Tariff approved by the Commission for FY 2019-20

Existing			Approved		
Category	**Minimum charge per connected load or part thereof per month**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
			Life Line Connection		
			0 to 50 units	INR 10 per connection per month or part thereof	2.05
Domestic Connection			**Domestic Connection**		
0 to 100 units	INR 30.00 per kVA connected load or part thereof per month	2.05	0 to 100 units	INR 20per connection per month or part thereof for Single Phase & INR 70 per connection per month for three phase or part thereof for three phase	2.25
101 to 200 units		4.50	101 to 200 units		5.00
201 to 500 units		6.60	201 to 500 units		7.20
501 units & above		6.90	501 units & above		7.50
Commercial			**Commercial**		
0-200 Units	INR 50.00 per kVA connected Load or part thereof per month	7.00	0-200 Units	INR 30 per connection per month or part thereof for Single Phase & INR 125 per connection per month for three phase or part thereof for three phase	7.50
201 to 500 Units		9.00	201 to 500 Units		9.50
501 units & above		11.00	501 units & above		12.00
Govt. Connection			**Govt. Connection**		
0-500 Units	INR 50.00 per kVA connected load or part thereof per month	8.70	0-500 Units	INR 35 per connection per month or part thereof for Single Phase & INR 125 per connection per month for three phase or part thereof for three phase	9.20
501 units & above		10.10	501 units & above		10.60

Existing			Approved		
Category	**Minimum charge per connected load or part thereof per month**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
Industrial			**Industrial**		
0 to 500 units	a) INR 50.00 per H.P. connected load or part thereof. b) INR 200.00 per month for rice, flour millers of rural areas with 15 HP capacity	6.00	0 to 500 units	INR 50/kVA/Month or part thereof	6.00
501 units & above		7.50	501 units & above		8.00
Bulk Supply	INR 50.00 per kVA connected load or part thereof	12.00	**Bulk Supply**	INR 100/kVA/Month or part thereof	12.50
Public Lighting	INR 60.00 per kVA connected load or part thereof per month	6.10	**Public Lighting**	INR 150/kVA/Month or part thereof	6.10
Irrigation Pumps & Agriculture	INR 15.00 per kVA connected load or part thereof per month	1.60	**Irrigation Pumps & Agriculture**	INR 50/kVA/Month or part thereof	1.60
			EV Charging Stations[2]	INR 100/kVA/Month or part thereof	6.89
Temporary Supply	Three times the rate applicable to the relevant category of consumers.		**Temporary Supply**	1.5 times the rate applicable to the relevant category of consumers.	

[2] **EV Charging Station:** The Commission has not projected any revenue under this category for FY 2019-20.

6.4.2 *Revenue from Approved Retail Tariff for FY 2019-20*

Based on the retail tariff approved above, the revenue at revised tariff approved by the Commission for FY 2019-20 is given in the following Table:

Table 95: Revenue at tariff approved by the Commission for FY 2019-20

Sr. No.	Category	No. of Consumers	Energy Sales (in MU)	Approved Tariff		Fixed Charges (INR Crore)	Energy Charges (INR Crore)	Total Revenue (INR Crore)
				Fixed Charges	Energy Charge (INR/Kwh)			
1	**Life line Connection**							
	0 to 50 units		7.98	INR 10 per connection per month or part thereof	2.05		1.64	1.64
2	**Domestic**							
	0 to 100 units	118077	70.25	INR 20 per connection per month or part thereof for Single Phase & INR 70 per connection per month for three phase or part thereof for three phase	2.25	2.97[3]	15.81	
	101 to 200 units		46.94		5.00		23.47	
	201 to500 units		20.78		7.20		14.96	
	501 units & above		10.51		7.50		7.88	
	Sub-total		**148.48**			**2.97**	**62.12**	**65.09**
3	**Commercial**							
	0-200 Units	18585	22.16	INR 30 per connection per month or part thereof for Single Phase & INR 125 per connection per month for three phase or part thereof for three phase	7.50	0.96[4]	16.62	
	201 to 500 Units		8.12		9.50		7.72	
	501 units & above		6.65		12.00		7.98	
	Sub-total		**36.93**			**0.96**	**32.31**	**33.27**

[3] **Domestic Category:** As per the data submitted by the Petitioner for FY 2018-19, the Commission has considered 98.02% connections having Single Phase supply (to be billed at INR 20 per connection per month) and remaining 1.98% connections having Three Phase supply (to be billed at INR 70 per connection per month).

[4] **Commercial Category:** As per the data submitted by the Petitioner for FY 2018-19, the Commission has considered 86.43% connections having Single Phase supply (to be billed at INR 30 per connection per month) and remaining 13.57% connections having Three Phase supply (to be billed at INR 125 per connection per month).

Sr. No.	Category	No. of Consumers	Energy Sales (in MU)	Approved Tariff		Fixed Charges (INR Crore)	Energy Charges (INR Crore)	Total Revenue (INR Crore)
				Fixed Charges	Energy Charge (INR/Kwh)			
4	**Govt. Connection**							
	0-500 Units	2697	5.27	INR 35 per connection per month or part thereof for Single Phase & INR 125 per connection per month for three phase or part thereof for three phase	9.20	0.23[5]	4.85	
	501 units & above		21.06		10.60		22.32	
	Sub-total		**26.33**			**0.10**	**27.17**	**27.41**
5	**Industrial**							
	0-500 Units	**614**	15.56	INR 50 per kVA per month or part thereof	6.00	**1.68[6]**	9.34	
	501 units & above		8.37		8.00		6.70	
	Sub-total		**23.93**			**1.68**	**16.03**	**17.71**
6	**Bulk Supply**							
	All units	**68**	**41.60**	INR 100 per kVA per month or part thereof	12.50	**0.16[7]**	**52.00**	**52.16**
7	**Public Lighting**							
	All units	**704**	**8.65**	INR 150 per kVA per month or part thereof	6.10	**0.57**	**5.28**	**5.84**
8	**Irrigation Pumps & Agriculture**							
	All units	**464**	**1.15**	INR 50 per connection per month or part thereof	1.60	**0.03**	**0.18**	**0.21**
9	**Electric Vehicle Charging Station**	-	-	INR 100/- per KVA per month or part thereof	6.89	-	-	-

[5] **Government Connections Category:** As per the data submitted by the Petitioner for FY 2018-19, the Commission has considered 58.52% connections having Single Phase supply (to be billed at INR 35 per connection per month) and remaining 41.48% connections having Three Phase supply (to be billed at INR 125 per connection per month).

[6] **Industrial Category:** Connected load has been taken at the level as approved in the Business Plan Order for second control period i.e. 25197 kW at PF of 0.9.

[7] **Bulk Supply:** Connected load has been taken at the level as approved in the Business Plan Order for second control period i.e. 13886 kW at PF of 0.9.

Sr. No.	Category	No. of Consumers	Energy Sales (in MU)	Approved Tariff		Fixed Charges (INR Crore)	Energy Charges (INR Crore)	Total Revenue (INR Crore)
				Fixed Charges	Energy Charge (INR/Kwh)			
10	**Temporary Supply**							
	All units	-	-	1.5 times the rate applicable to the relevant category of consumers.		-	-	-
11	**Total**	**141208**	**295.05**			**6.59**	**196.74**	**203.33**

The revenue gap at the revised tariff approved by the Commission is given in the Table below:

Table 96: Revenue gap at tariff approved by the Commission for FY 2019-20 (in INR crore)

S. No.	Particulars	FY 2019-20	
		Claimed	Approved
1	Net Revenue Requirement	930.13	747.85
2	Revenue from Sale of Power at Revised Tariff	185.12	203.33
3	**Net Gap during the year**	**745.01**	**544.52**
4	Add: Previous Year Gap	0.00	0.00
5	**Total Gap**	**745.01**	**544.52**

The following comparative chart gives the overview of the category-wise levels of percentage recovery of Average Cost of Supply at existing and revised tariffs.

Table 97: Percentage recovery of ACOS at existing and tariff approved by the Commission for FY 2019-20

S. No.	Category	Existing Tariff		% Hike	Approved Tariff	
		Average Billing Rate (INR/unit)	% of AcoS		Average Billing Rate (INR/unit)	% of AcoS
1	**Life Line Connection (Upto 50 Units)**	0.00	0.00%	-	**2.05**	8.09%
2	**Domestic**	3.72	14.66%	**18.01%**	4.38	17.30%
3	**Commercial**	8.16	32.20%	**10.40%**	9.01	35.55%
4	**Government Connection**	9.82	38.74%	**6.00%**	10.41	41.07%
5	**Industrial**	6.52	25.74%	**13.44%**	7.40	29.20%
6	**Irrigation Pumps & Agriculture**	1.60	6.31%	**15.13%**	1.84	7.27%
7	**Public Lighting**	6.10	24.07%	**10.73%**	6.75	26.65%
8	**Bulk Supply**	12.00	47.35%	**4.48%**	12.54	49.47%
9	**Overall**	6.27	24.75%	**9.84%**	6.89	27.19%

Table 98: Approved ACoS and ABR by the Commission at approved tariff for FY 2019-20

Sr. No.	Particulars	FY 2019-20
1	Net Revenue Requirement (INR Crore)	747.85
2	Revenue from Revised Tariff (INR Crore)	203.33
3	Energy Sales (MU's)	295.06
4	Average cost of supply/unit (INR/kWh)	25.35
5	Average Billing Rate (INR/kWh)	6.89
6	**Gap (INR/kWh)**	**18.46**

The highlights of the tariff structure approved by the Commission for FY 2019-20 is as follows:

1. The Commission has introduced a new category of Life line Connection for consumers having consumption upto 50 units in order to provide benefit of lower tariffs to the larger section of the society having consumption upto 50 units per month. The tariff for this life line category will be applicable only for the consumers consuming upto 50 units per month. For consumers having consumption higher than 50 units per month, the tariff as specified for Domestic Connection shall be applicable.

2. The Commission has also introduced two part tariff for the all consumer categories comprising of Energy Charges and Fixed Charges and the Commission has abolished the Minimum Charge for all the categories.

3. The Commission has increased the average tariff for FY 2019-20 by 9.84% from the existing tariff of FY 2018-19

4. The Commission has approved the average revenue for FY 2019-20 as INR 6.89/kWh as against the approved Average Cost of Supply of INR 25.35/kWh.

5. The Commission believes that the demand for charging infrastructure for electric vehicles will increase in the near future due to increased commercialization. Furthermore, the Commission is of the opinion that to impart the necessary impetus for the adoption of E-Vehicles in the Territory a sustainable framework has to be developed and having a designated electricity tariff is the first step towards achieving it. Therefore, keeping in view the anticipated demand and need, the Commission introduces a new category namely Electric Vehicle Charging Stations for consumers setting up infrastructure for charging of Electric vehicles/ Electric rickshaws etc. and has fixed the tariff as per the guidelines of Ministry of Power, Govt. of India.

The Commission observes that the Revenue Gap of the previous years was funded by the Government as a Budgetary Support. The Commission vide deficiency note had asked the Petitioner to submit the treatment of the proposed revenue gap for FY 2019-20. In reply, the Petitioner has submitted that revenue gap shall be funded through Budgetary Support from Government of India. Accordingly, the Commission has approved the revenue gap of INR 544.52 Crore to be funded through Budgetary Support from Government of India.

7.Chapter 7: Tariff Schedule

7.1 Tariff Schedule

Sr. No.	Category	Fixed Charges	Energy Charge (INR/kWh)
1.	**Life Line Connection**		
	0 to 50 units	INR 10/- per service connection per month or part thereof	2.05
2.	**Domestic Connection**		
	0 to 100 units	INR 20/- per connection per month or part thereof for single phase INR 70/- per connection per month or part thereof for three phase	2.25
	101 to 200 units		5.00
	201 to 500 units		7.20
	501 units & above		7.50
3.	**Commercial**		
	0-200 Units	INR 30/- per connection per month or part thereof for single phase INR 125/- per connection per month or part thereof for three phase	7.50
	201 to 500 Units		9.50
	501 and above		12.00
4.	**Govt. Connection**		
	0-500 Units	INR 35/- per connection per month or part thereof for single phase INR 125/- per connection per month or part thereof for three phase	9.20
	501 Units & above		10.60
5.	**Industrial**		
	0-500 Units	INR 50/- per KVA per month or part thereof	6.00
	501 Units & above		8.00
6.	**Bulk Supply**		
	All Units	INR 100/- per KVA per month or part thereof	12.50
7.	**Public Lighting**		
	All Units	INR 150/- per KVA per month or part thereof	6.10
8.	**Irrigation Pumps and Agriculture**		
	All Units	INR 50/- per KVA per month or part thereof	1.60
10	**Electric Vehicle Charging Station**	INR 100/- per KVA per month or part thereof	6.89

Sr. No.	Category	Fixed Charges	Energy Charge (INR/kWh)
9	**Temporary supply**		
	All Units	1.5 times the rate applicable to the relevant category of consumers.	

7.2 Applicability

Sr. No.	Category	Applicability	Point of Supply news
1	Life Line	Applicable to domestic consumers with monthly consumption of upto 50 units and below.	Note: The Domestic Consumer having consumption above 50 units shall be charged according to the slabs defined under Domestic Category.
2	Domestic	This schedule will apply for single delivery point including light, fan, domestic pumping sets and household appliances. a) Single private house/flat b) Housing colonies and multi-storeyed flats/buildings as defined in the Electricity Supply Code Regulations notified by the JERC	NOTE: Where a portion of the dwelling is used for mixed load purposes, the connection will be billed for the purpose for which the tariffs are higher
3	Commercial	This schedule will apply to all consumers, using electrical energy for light, fans, and appliances like pumping sets, motors of up to 3 HP used for commercial purpose, central air conditioning plants, lifts, welding sets, small lathe machines, electric drills, heaters, battery chargers, embroidery machines, printing presses, ice candy, dry cleaning machines, power presses, small motors in commercial establishments/ non-residential private premises such as printing presses, hotels, rest houses, restaurants, hostels, nursing homes, bus stands, clubs, auditoriums, communication, cinema theatres, operas, circus, exhibitions, and bakeries, and grinders and installations for private gains, etc. Commercial supply will also be applicable to multi-consumer complex including commercial complexes as defined in the Electricity Supply Code Regulations notified by JERC. This schedule will also apply to the places of worship like temples, mosques, churches, gurudwaras, Buddhist Pongi Chung (except residential areas), public Pooja celebrations and religious ceremonies. No separate circuit/connection for power load including pumping set/ central air conditioning plant, lifts, etc., is permitted.	Note: It has come to notice of the Commission that the hotels are being charged industrial tariff though as per the rate schedule approved by the Commission, categorises it under Commercial Category. Therefore, the Commission directs the Petitioner to charge tariff applicable for Commercial category to all the hotel establishment, failing which, the Commission may take an appropriate view considering the incompliance of Commission's direction.

Sr. No.	Category	Applicability	Point of Supply news
4	Government Connection	This schedule will apply to all government connections.	The supply will be given through a single delivery and metering point and a single voltage.
5	Industrial Supply	The schedule will apply for supply of energy for lighting, fan and power to industrial establishments & industries such as wood-based, cottage, small scale, medium-scale, finishing shell based and any other establishments/ organisations engaged in the manufacturing and processing of goods for sale, rice mills, flour mills, workshops, dry docks, factories base repair organisations, public water works & gem cutting units	The supply will be given through a single delivery and metering point and at a single voltage.
6	Bulk Supply	This schedule will apply to general or mixed loads receiving supply of energy through a bulk energy meter at either HT or LT supply and distribution is maintained by them. For dedicated transformers, the complete cost of technical transmission lines of transformer sub-station, switch gear & installation is to be borne by the consumer.	The supply will be given through a single delivery and metering point and at a single voltage.
7	Public Lighting	This schedule will apply for lighting on public roads, footpaths, streets and thoroughfares in parks & markets, etc.	Cost of spares, materials and labour required for maintenance is to be borne by respective panchayati raj institution / local body.
8	Irrigation Pumps & agriculture	This schedule will apply to all consumers for use of electrical energy for irrigation and agricultural purposes including animal husbandry.	The supply will be given through a single delivery and metering point and at a single voltage.
9	Electric Vehicle Charging Station	This tariff schedule shall apply to consumers that have set up Public Charging Stations (PCS) in accordance with the technical norms/ standards/specifications laid down by the Ministry of Power, GoI and Central Electricity Authority (CEA) from time to time. The tariff for domestic consumption shall be applicable for domestic charging (LT/HT)	
10	Temporary Supply	The supply may be given for a limited period as per the provisions of JERC Supply Code Regulations, 2018, and amendments thereon.	

7.3 General conditions of HT and LT Supply

The above mentioned LT/HT Tariffs are subjected to the following conditions, applicable to all category of consumers.

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

4) Fixed charges, as applicable, will be charged on pro-rata basis from the date of release of connection.

5) If the connected load of a domestic category is found to be at variance from the sanctioned/contracted load as a result of increase of load or due to replacement of lamps, fans, fuses, switches, low-voltage domestic appliances, fittings, etc., it will fall neither under unauthorised use of electricity (Section 126 of Electricity Act, 2003) nor under theft of electricity (Section 135 of Electricity Act, 2003).

6) The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 85% of the 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 Regulations notified by JERC. If such over-drawl is more than 20% of the contract demand then the connection shall be disconnected immediately.

   Explanation: Assuming the contract demand as 100 KVA, maximum demand at 120 KVA and total energy consumption as 12000 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.

7) 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. Amounts less than 50 paisa shall be ignored and amounts 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 upto the month of permanent disconnection.

8) **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 will 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, will be credited to the account of the consumer.

9) **Prompt Payment Rebate:** If payment is made at least 7-days in advance of the due date of payment of the current bill a rebate for prompt payment @ 0.25 % of the bill amount amount shall be given. Those consumers having arrears shall not be entitled for such rebate.

   Provided that in case the payment is made by cheque, the prompt payment discount will be applicable only if the payment by cheque is made 3 days prior to date of availing the prompt payment discount i.e. before 10 days from the due date of payment.

10) **Surcharge for Low Power Factor/Non Installation of Required rated LT Shunt Capacitors**

(a) Consumers with L.T connections where the meter provided by the licensee has the power factor recording feature, shall install shunt capacitors of adequate rating to ensure power factor of 85% or above failing which low power factor surcharge at the rates noted below will be levied.

S. No.	Power Factor range	Surcharge
1.	85% and above	NIL
2.	Below 85% and upto 80%	2% of billed energy charges of that month for every 1% fall in P.F from 85%
3.	Below 80% and upto 75%	2.5% of billed energy charges of the month for every 1% fall in P.F from 80%
4.	Below 75%	3% of billed energy charges of that month for every 1% fall in P.F from 75%

The conditions for disconnection of a consumer supply in case of non-achievement of minimum level of power factor as prescribed in the Supply Code Regulations notified by JERC, shall apply.

11) **Unauthorized use of Electricity:** The unauthorized use of electricity shall be treated as specified in the Supply Code Regulations notified by JERC.

12) **Taxes and duties**

The tariff does not include any tax or duty etc. on electricity energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall be payable by the consumer in addition to the tariff charges.

7.4 Schedule of Miscellaneous Charges

S. No.	PARTICULARS	Rate (INR)
METER RENT CHARGES		
A	Application processing charges for new connection/ enhancement of load/ reduction of load	
i	Domestic Supply	NIL
ii	Non-Domestic Supply	NIL
iii	Small Power, Medium Supply and Street Lighting Supply	NIL
iv	Large and Bulk Supply	NIL
V	Agriculture Power Supply	NIL
vi	Temporary Metered Supply	NIL
B	Charges for Re-fixing/ Changing of meter/ Meter Board in the same premise on consumer request when no additional material is required. (When the cause leading to subsequent change/ replacement of meter is either manufacturing defect or Department's fault then, it shall be free of cost and further, if shifting of meter is done in the interest of department work then it is free of cost.)	
i	Single phase meter	385
ii	Three phase meter without CT	570

S. No.	PARTICULARS	Rate (INR)
C	Meter Inspection & Testing Charges (In case correctness/ accuracy of a meter belonging to the Licensee is challenged by the consumer)	
i	Single Phase	
ii	3-phase whole current i.e. without CT	
iii	L.T. meter with CTs	
D	Re-sealing charges (irrespective of the number of seals involved against each item below and where seals found to have been broken by the consumer)	
i	Meter cover or Meter Terminal cover (single phase) Push Type	285
ii	Meter cover or Meter Terminal cover (single phase) Sintex Type	1,530
iii	Meter cover or Meter Terminal cover (3-phase) Sintex Type	5,030
E	Reconnection Charges	
i	Single Phase	25
ii	Three Phase	50
iii	Meter Reading Cards/ Passbook (New/ Replacement)	Free
F	Meter Rentals	
i	Single Phase	15
ii	Three Phase	30
G	Amount of Security Deposit for new/ extension of load	As per procedure prescribed in clause 5.130 of the JERC Electricity Supply Code Regulation 2018.
H	Charges recoverable from the consumer when the meter is found damaged/ burnt owing to negligence or default on the part of consumer	Three times the cost of Energy Meter
I	Special Meter reading charges in case of change in occupancy/ vacation of premises for domestic consumers	NIL
J	Supply of Duplicate copies of Electricity Bills	Free
K	Review of Electricity Bills (If the accuracy of licensee's bill is challenged by the consumer and a review of the bills is demanded)	Free

8. Chapter 8: 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 most 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 orders that the Petitioner will now compulsorily submit:

- ***The detailed action plan for compliance of all the directives within 1 month of issuance of this Order.***
- ***The quarterly progress report as per the detailed action plan for all the directives issued in the subsequent sections within 10 days after the end of each quarter of the calendar year.***

8.1 Directives continued in this Tariff Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it has been observed that some of the directives issued in the previous Tariff Orders have not been fully complied with by the Petitioner.

These Directives are important for the functioning of department and the Commission has directed to continue with the following directives:

8.1.1 Collection of arrears

Originally issued in Tariff Order dated 04th June 2012
Commission's latest directive in Tariff Order dated 26th February 2018 *The Commission appreciates that the Petitioner has made efforts to identify and categorize outstanding arrears. The Commission directs the Petitioner to submit consumer-wise details of post-tsunami arrears along with amount of arrears and approximate amount of arrears pertaining to the pre-tsunami period that the department is proposing to write-off by 30th September 2018.*
Petitioner's response in the present Tariff Petition *It is submitted that the consumers wise arrears details are being complied however, being very old it may take some more time to identify & categorize. The department shall submit the same along with the next petition. Hon'ble Commission may kindly allow the same.*
Commission's response *The Commission has noted the submission of the Petitioner. The Commission directs the Petitioner to expedite the work and submit the details of the outstanding arrears at the earliest.*

8.1.2 *Filing of Review and True-up Petitions for previous years*

Originally issued in Tariff Order dated 04th June 2012
Commission's latest directive in Tariff Order dated 26th February 2018 *The Petitioner is directed to fast-track the finalization of audited accounts for FY 2015-16 and FY 2016-17 and submit the Truing-up for the respective years along with the next tariff filing.*
Petitioner's response in the present Tariff Petition *It is submitted that the Annual Accounts for the FY2015-16 & FY 2016-17 has been finalized and submitted to AG for audit. True-up petition shall be submitted after completion of audit. Hon'ble Commission may kindly allow the same.*
Commission's response The Commission has observed that the Petitioner has submitted the Audited Accounts for FY 2015-16 and has filed true up Petition. However, the Petitioner has still not submitted the audited accounts for FY 2016-17 and its True Up Petition. The Commission directs the Petitioner to get the audited accounts of FY 2016-17 and file the true up Petitions for this year within two months from the issuance of this Tariff Order. Further, the Commission directs the Petitioner to prepare the accounts for FY 2017-18 & FY 2018-19 and get the same audited to enable the Petitioner to file the true up petitions for the said years with the next tariff filing for FY 2020-21. Similar method was followed by Electricity Wing of Engineering Department, Chandigarh where commercial accounts were got audited from CAG for multiple years together to clear the back log and now their true up is done timely. Further, the Petitioner is directed to file APR for FY 2019-20 along with the tariff petition for FY 2020-21.

8.1.3 *Bill Payment*

Originally issued in Tariff Order dated 04th June 2012
Commission's latest directive in Tariff Order dated 26th February 2018 *The Petitioner has not submitted any documentary evidence/ supporting details to substantiate its claim for implementation of web-based billing/payment software. Therefore, the Petitioner is directed to submit island wise detail of the implementation status of web-based billing system along with the next tariff filing.*
Petitioner's response in the present Tariff Petition *The list of site offices having web-based billing software is given below:*

District	Site Office	Remarks
South Andaman	Aberdeen Bazar	These Site Offices are connected to State Data Centre (SDC) through leased line. The Web-based Billing Application is hosted at SDC. It is to be noted that though the said site offices are connected to the network but still not exposed to internet. The online energy billing software is under development and is about to be completed. Once the online bill payment facility gets implemented, the said site offices will start taking Bill payments through internet banking, debit/credit cards, UPI, BBPS and Bharat QR which just about to be implemented.
	Haddo	
	Premnagar	
	Phoneix Bay	
	Shadipur	
	Dairyfarm	
	Nayagaon	
	Dollygunj	
	Prothrapur	
	Birdline	
	Sippighat	

	Manglutan	
	Chouldari	
	Orgrabraj	
	Templemayo	
	Namunaghar	
	Ferrargunj	
	Wimberlygunj	
	Bambooflat	
	Soalbay	
	Jirkatang	
	Neil	These site offices are also running with web-Based Energy Software (WBBS) but are not operating in standalone mode and not connected to intra-net network.
	Havelock	
	Hut Bay	
	Hut Bay(Outer)	
North & Middle Andaman	Baratang	
	Kadamtala	
	Bakultala	
	Rangat Bazar	
	Rangat Bay	
	Betapur	
	Nimbudera	
	Mayabunder	
	Digipur HQ	
	Arial Bay	
	Laxmipur	
	Long Island	
	Kalighat	

It has been programmed to implement the web-based billing application on standalone mode in the Nicobar district within next month.

Commission's response

The Commission appreciates the efforts taken by the Petitioner for implementation of the Web based billing / payment software. However, the Commission directs the Petitioner to expedite the process of initiation of bill payments through web services, which will not only ease out the problems faced by the consumers in bill payment, but also improve collection efficiency of the Petitioner. Accordingly, the Petitioner is directed to submit the quarterly report on the island wise status of the implementation of the web billing / payment software within 3 months of the completion of each quarter.

8.1.4 Preparation of Fixed Asset Register

Originally issued in Tariff Order dated 04th June 2012

Commission's latest directive in Tariff Order dated 26th February 2018

The Petitioner is directed to finalize the FARs from FY 2014-15 onwards and submit the same to the Commission along with the next tariff filing.

Petitioner's response in the present Tariff Petition

It is submitted that the Fixed Asset Register (FAR) is being submitted separately.

Commission's response

The Commission has observed that the Petitioner has not submitted the Fixed Asset Register till FY 2017-18. Accordingly, the Commission directs the Petitioner to submitted the Fixed Asset Register till FY 2017-18 within three months otherwise the Commission may take appropriate action against the Petitioner.

8.1.5 Energy Audit

Originally issued in Tariff Order dated 04th June 2012
Commission's latest directive in Tariff Order dated 26th February 2018 *The Petitioner is directed to submit a quarterly status report to the Commission on the progress of energy audit and timelines for its completion.*
Petitioner's response in the present Tariff Petition *It is submitted that the investment Grade Energy audit of 9 large building was under taken and the work was awarded to Petroleum Conservation Research Association (PCRA), Kolkata during February, 2018 for energy auditing of 5 building viz. Raj Niwas, Secretariat Building, CE, AWPD Office Building, Chatham Power House and Phoenix Bay Power House. PCRA submitted the draft Energy Audit Report of the five Govt. Building during May, 2018. Energy Auditing of four Govt. Building viz. Marine Workshop and Dockyard, DBRAIT, CARI and DHS, Matter taken up with PCRA. PCRA has provided the technical details (Feedback Form) of the 5 building in prescribed format in November, 2018.*
Commission's response The Commission has noted the submission of the Petitioner and directs the Petitioner to conduct the DT wise and Feeder wise energy audit.

8.1.6 Island-wise data/Information

Originally issued in Tariff Order dated 29th March 2017
Commission's latest directive in Tariff Order dated 26th February 2018 *The Petition is directed to maintain island -wise information for category-wise sales, number of consumers, connected load, peak load, T&D losses, plant-wise generation on monthly basis for all years, fuel consumption in each plant, etc. and submit the aforementioned details along with the next tariff filing, failing with the Commission will be constrained not to take the Truing up of the remaining years.*
Petitioner's response in the present Tariff Petition *It is submitted that the details for FY 2017-18 is being compiled and shall be submitted separately.*
Commission's response It is observed that the Petitioner has not submitted all the details of the actual island-wise information for category-wise sales, number of consumers, connected load, peak load, T&D losses, plant-wise generation on monthly basis, fuel consumption in each plant, etc. for FY 2015-16 in compliance to above direction. The Petitioner is directed to submit the above details till FY 2017-18 within 3 months from the date of issuance of this Order.

8.1.7 Notified Tariff Categories

Originally issued in Tariff Order dated 29th March 2017

Commission's latest directive in Tariff Order dated 26th February 2018 *The Commission observed that the Petitioner has submitted the bifurcation of sales for the category of Government Connections for FY 2018-19 based on the actual sales for two months of FY 2017-18. The Petitioner is directed to provide complete details of number of consumers and connected load along with the full year sales figure in the Business Plan for the next Control Period.*
Petitioner's response in the present Tariff Petition *It is submitted that the details of the Government Connections is submitted in the MYT Petition.*
Commission's response The Commission has noted the submission of the Petitioner.

8.1.8 State load Dispatch Centre

Originally issued in Tariff Order dated 26th February 2018
Commission's latest directive in Tariff Order dated 26th February 2018 *The Petitioner is directed to take steps for establishment of an independent SLDC for demand forecasting and better scheduling of Power in the UT of A&N Islands at the earliest. The Petitioner shall prepare a roadmap for this purpose and submit the same to the Commission within 3 months from the date of the Order.*
Petitioner's response in the present Tariff Petition *As per the decision taken by the Hon'ble minister of Power on dated 10.01.2018, PGCIL will be establishing an Energy Management Centre (EMC) at Port Blair inter connecting all the power generating sources (Conversion & Renewable) and the existing & proposed sub-stations at Port Blair and South Andaman. This EMC shall have the provision of generation forecasting and better scheduling of power in Port Blair and South Andaman. Subsequently, after the communication network is improved between islands, this EMC shall be inter connected with all power generating sources and sub-stations in entire UT of A&N Islands.* *PGCIL has already floated the tenders and bids will be opened on 6th February, 2019 which will be finalized by April/ May, 2019 as per the information received by PGCIL. The LoA shall be placed by May/June, 2019 subject to receipt of funds from Ministry of Power which has been in-principle agreed and is under process. The EMC is expected to be commissioned by Mid-2020.*
Commission's response The Commission has noted the submission of the Petitioner. The Commission directs the Petitioner to submit the quarterly progress report within one month from the completion of each quarter.

8.1.9 Slab wise details

Originally issued in Tariff Order dated 26th February 2018

Commission's latest directive in Tariff Order dated 26th February 2018 *The Petitioner is directed to provide the month-wise and slab-wise detailed break up of number of consumers, connected load and energy sales under each consumer category in the Business Plan for the next Control Period. Also, the Petitioner is required to provide the basis of category-wise, slab-wise bifurcation of sales.*
Petitioner's response in the present Tariff Petition *It is submitted that the slab-wise details of number of consumers & sales is being submitted separately.*
Commission's response The Commission again directs the Petitioner to provide the island-wise, month-wise and slab-wise detailed break up of number of consumers, connected load and energy sales under each consumer category for the last five years within three months of the issuance of this order. Further, the Commission also directs the Petitioner to maintain and submit monthly island-wise information for category-wise sales, number of consumers, connected load, T&D losses, plant-wise generation/purchase, fuel cost, etc. on quarterly basis.

8.1.10 Introduction of Fixed charges

Originally issued in Tariff Order dated 26th February 2018
Commission's latest directive in Tariff Order dated 26th February 2018 *The Commission observes that under the present tariff structure, the ED-A&N is charging minimum monthly charges. Applicability of such minimum charges has been discontinued and fixed charges have been introduced across majority of the states in India in line with the provisions of the Tariff Policy. The Commission intends to introduce fixed charges in place of minimum charges in the subsequent Tariff Order for ED-A&N. Therefore, the Petitioner is directed to submit a detailed tariff proposal for introduction of fixed charges across categories supported by details of number of consumers, connected load / contracted demand, etc. in the subsequent tariff filing. Details of existing number of consumers, connected load and contracted demand is also required to be provided along with the Business Plan for the next Control Period.*
Petitioner's response in the present Tariff Petition *It is submitted that the department is not proposing any change in the tariff structure with respect to the minimum charges. The same shall be proposed with the next Tariff petition.*
Commission's response The Commission observed that the Petitioner has not proposed replacement of Minimum Charges with Fixed Charges, accordingly, the Commission vide additional information sought proposal for the same. The Petitioner in reply has submitted its proposal for introduction of Fixed Charges in place of Minimum Charges. The Commission considering the Petitioner's submission has appropriately approved tariff as detailed in **Chapter 7** of this Order. Further, the Petitioner is required to maintain separate details of the revenue earned from fixed Charges and Energy charges which is to be submitted along with the tariff filing for the next year.

8.1.11 Details of O&M Expenses

Originally issued in Tariff Order dated 26th February 2018
Commission's latest directive in Tariff Order dated 26th February 2018 *The Commission has observed that the Petitioner has not submitted detailed break-up of Employee Expenses, R&M Expenses and A&G expenses in the current Tariff Petition. The Petitioner is directed to maintain a detailed record of these expenses and report the same in their Audited accounts and submit the same in the requisite tariff filing formats.*
Petitioner's response in the present Tariff Petition *The details are being submitted in the present petition.*
Commission's response It is observed that the Petitioner has submitted the details for the actual O&M Expense for FY 2015-16 as per the audited account. However, on the analysis of the audited account for FY 2015-16 and the Petitioner submission, it is observed that the R&M Expense increased from 8.24 Crore approved in True Up of FY 2014-15 vide order dated 26th February 2018 to Rs. 76.21 Crore claimed by the Petitioner as per audited account. In this regard, the Petitioner is required to submit the detailed justification for exorbitant increase in R&M Expense for FY 2015-16 within three months from the date of issuance of this Order.

8.1.12 T&D Losses

Originally issued in Tariff Order dated 26th February 2018
Commission's latest directive in Tariff Order dated 26th February 2018 *The Commission notes that the Petitioner has not been able to meet the T&D loss targets as approved by the Commission in the past years. The Petitioner is directed to take appropriate steps for bringing down its T&D loss as per the approved T&D loss target for the respective year. Also a status report of the initiatives taken in this regard needs to be submitted along with the tariff filing for the next year.*
Petitioner's response in the present Tariff Petition *It is submitted that the status report on the initiatives taken to reduce the T&D loss is being submitted separately.*
Commission's response It is observed that the Petitioner has not submitted the status report on the initiatives taken to reduce T&D loss in compliance to above direction. Accordingly, the Commission directs the Petitioner to submit the status report within three months from the date of issuance of this Order, failing which, the Commission may take appropriate action against the Petitioner.

8.1.13 Details of upcoming Power Plants

Originally issued in Tariff Order dated 26th February 2018

Commission's latest directive in Tariff Order dated 26th February 2018 *In response to one of the directives of the Commission in the previous Tariff Order, the Petitioner had submitted that instead of reviving the existing solar plants, new solar plants will be established by REIL, NTPC, NLC, CSPU etc. Further, the Petitioner had submitted details of various power plants proposed to be established.* *The Petitioner is directed to submit the details of ongoing and proposed power plants in the UT of A&N in the Business Plan for the next Control Period.*
Petitioner's response in the present Tariff Petition *It is submitted that the details of the ongoing & Proposed power plants has been submitted along with the Business Plan.*
Commission's response The Commission has noted the details submitted by the Petitioner and directs the Petitioner to submit the status of upcoming power plants on quarterly basis.

Annexure 1: List of Stakeholders

The following is the list of stakeholders who have submitted Comments/suggestions:

Sr. No.	Name
1	Shri Alok Samadar
2	Shri Abla Mirdha