TARIFF ORDER

Annual Performance Review for FY 2020-21 and Aggregate Revenue Requirement (ARR) and Determination of Retail Tariff for the FY 2021-22

Petition No. 44/2021

For

Electricity Department Andaman & Nicobar Administration (EDA&N)

31st May 2021

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

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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

Petition No. 44/2021

In the matter of

Approval for the Annual Performance Review for the FY 2020-21, Aggregate Revenue Requirement (ARR) and Retail Tariff for the FY 2021-22.

And in the matter of

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

ORDER

Dated: 31st May 2021

1) This Order is passed in respect of a Petition filed by the Electricity Department Andaman & Nicobar Administration (EDA&N) (herein after referred to as "The Petitioner" or "EDA&N" or "The Licensee") for approval of Annual Performance Review for the FY 2020-21, Aggregate Revenue Requirement (ARR) and Retail Tariff for the FY 2021-22 before the Joint Electricity Regulatory Commission (herein after referred to as "The Commission" or "JERC").

2) The Commission scrutinised the said Petition and generally found it in order. The Commission admitted the Petition on 23rd April 2021. The Commission thereafter requisitioned further information/ clarifications on the data gaps observed to take a prudent view of the said Petition. The Commission also held a Technical Validation Session to determine sufficiency of data and the veracity of the information submitted. Further, suggestions/ comments/ views and objections were invited from the Stakeholders and Electricity Consumers. Further, due to the COVID-19 pandemic that had adversely impacted the movement of people as per the guidelines of GoI which had suggested avoiding of travel and gathering of people as far as possible, the Commission had decided to conduct the Public Hearing virtually. The virtual Public Hearing was held on 18th May 2021, and all the Stakeholders/Electricity Consumers present in the Public Hearing were heard.

3) In order to mitigate the hardship of Electricity Consumers and DISCOMs/EDs in view of nationwide lockdown due to COVID-19, the Commission had issued SUO MOTU ORDER NO. JERC/LEGAL/SMP/27/2020 on 10th April, 2020 wherein the Commission provided relief to industrial and commercial consumers and acknowledged the need for additional working capital requirement by the Distribution Licensees. Further, the Commission viewed that the lockdown will also impact certain other parameters of ARR like sales/sales mix, power purchase quantum and cost and revenue. The Commission opined that it will consider all such additional costs and variations in parameters

appropriately while evaluating the APR of FY 2020-21 and thereafter in True-up of FY 2020-21. Accordingly, the Commission has considered the impact of lower sales, rebate received in power purchase cost and some other parameters due to COVID 19 as part of APR for FY 2020-21. Further, the Commission will consider the actual impact of COVID 19 on various parameters of ARR while carrying out the truing up for FY 2020-21.

4) The Commission could not carry out the True-up for FY 2017-18, FY 2018-19 and FY 2019-20, since the Petitioner has not submitted the true-up petition for FY 2017-18, FY 2018-19 and FY 2019-20. The Commission shall revisit the ARR for the FY 2017-18, FY 2018-19 and FY 2019-20 after the submission of true-up petition along with audited accounts by the Petitioner.

5) The Commission based on the Petitioner's submissions, relevant MYT Regulations, facts of the matter, rules and provisions of the Electricity Act, 2003 and after proper due diligence and prudence check has approved the APR of FY 2020-21 and ARR along with Retail Tariff for the FY 2021-22.

6) A Summary has been provided as follows:

(a) The following table provides ARR, Revenue and gap as submitted by the Petitioner and approved by the Commission in the APR of FY 2020-21:

Table 1: Standalone Revenue Gap/ (Surplus) approved for FY 2020-21 (INR Crore)

S. No	Particulars	Petitioners submission	Approved by Commission
1	Net Revenue Requirement	801.89	629.00
2	Revenue from Retail Sales at Existing Tariff	166.97	153.19
3	**Net Gap /(Surplus)**	**634.92**	**475.80**

(b) The following table provides ARR, Revenue and gap as submitted by the Petitioner and approved by the Commission for FY 2021-22:

Table 2: Standalone Revenue Gap/ (Surplus) approved for FY 2021-22 (INR Crore)

S. No	Particulars	Petitioners submission	Approved by Commission
1	Net Revenue Requirement	906.14	715.75
2	Revenue from Retail Sales at Approved Tariff	192.17	166.19
3	**Net Gap /(Surplus)**	**713.97**	**549.56**

(c) The Petitioner has proposed a hike of 17.01% in the energy charges. If any gap remains will be met through the budgetary support. The Petitioner has also submitted a letter with reference No. EL/PL/10-1/2021/2004 dated May 27, 2021 stating that any revenue gap remaining shall be met through budgetary support as being done in past years.

(d) The Commission has approved a marginal tariff hike of 3.36% for FY 2021-22 over the tariff for FY 2020-21.

(e) The Commission has approved the ABR for FY 2021-22 as INR 6.85/kWh as against the approved Average Cost of Supply of INR 29.51/kWh.

(f) This Order shall come into force with effect from 1st June 2021 and shall, unless amended or revoked, continue to be in force till further orders of the Commission.

The licensee shall publish the Tariff Schedule and salient features of Tariff as determined by the Commission in this Order 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 and also upload the Tariff Order on its website.

7) Ordered accordingly. The documents giving detailed reasons, grounds and conditions attached in this order are its Integral part.

Sd/-

(M.K. Goel)

Chairperson

Place: Gurugram
Date: 31st May 2021

(Certified Copy)

RKumar

(Rakesh Kumar)

Secretary

1. Chapter 1: Introduction

1.1. About Joint Electricity Regulatory Commission (JERC)

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

JERC is a statutory body responsible for regulation of the Power Sector in the State of Goa and the Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Dadra & Nagar Haveli and Daman & Diu 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 the interest of consumers and ensuring the 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 and a designated Union Territory of India. 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

1.3. About 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 Diesel 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 therewith 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 current demand mainly comprises of the domestic and commercial category, which contributed approximately 75% to the total sales of the EDA&N.

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 (hereinafter referred to as MYT Regulations, 2018) on August 10, 2018. These Regulations are applicable in the 2nd MYT Control Period comprising of three financial years from FY 2019- 20 to FY 2021-22. These Regulations are applicable to all the generation companies, transmission and distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Dadra & Nagar Haveli and Daman & Diu and Puducherry.

1.5. Filing and Admission of the Present Petition

The present Petition was admitted on April 23, 2021 and marked as Petition No. 44/2021. The Commission and the Petitioner subsequently uploaded the Petition on their respective websites.

1.6. Interaction with the Petitioner

A preliminary scrutiny/analysis of the Petition was conducted, and certain deficiencies were observed. Accordingly, discrepancy notes were issued to the Petitioner. Further, additional information/clarifications were solicited from the Petitioner as and when required. The Commission and the Petitioner also discussed various concerns of the Petitioner and key data gaps, which included retail sales, revenue from retail tariff, capitalization, tariff proposal etc. The Petitioner submitted its response to the issues through various letters/emails.

The Commission conducted the Technical Validation Session (TVS) with the Petitioner through video conference, during which the discrepancies in the Petition were conveyed and additional information required by the Commission was sought. Subsequently, the Petitioner submitted replies to the issues raised in this session and provided documentary evidence to substantiate its claims regarding various submissions. The following table provides the list of interactions with the Petitioner along with the dates:

Table 3: List of interactions with the Petitioner

S. No	Subject	Date
1	Issue of First Discrepancy Note	26.04.2021
2	Reply received from the Petitioner with regard to first discrepancy Note	04.05.2021
3	Issue of Second Discrepancy Note	30.04.2021
4	Reply received from the Petitioner with regard to Second discrepancy Note	11.05.2021
5	Issue of Third Discrepancy Note	12.05.2021
6	Technical Validation Session	12.05.2021
7	Reply received from the Petitioner with regard to Third discrepancy Note	22.05.2021
8	Virtual Public hearing	18.05.2021

S. No	Subject	Date
9	Petitioner's reply to the Stakeholders' comments sought by the Commission	25.05.2021

1.7. Notice for Public Hearing

The Petitioner published the Public Notices for inviting suggestions/ comments from stakeholders on the Tariff Petition as given below:

Table 4: Details of Public Notices published by the Petitioner

S. No.	Date	Name of Newspaper	Language
1	April 23, 2021	Sanmarg	Hindi
2	April 27, 2021	Sanmarg	Hindi
3	May 14, 2021	Sanmarg	Hindi
4	April 23, 2021	Arthik Lipi	Bengali
5	April 27, 2021	Arthik Lipi	Bengali
6	May 14, 2021	Arthik Lipi	Bengali
7	April 23, 2021	Andaman Express	English
8	May 14, 2021	Andaman Express	English
9	April 23, 2021	The Echo of India	English
10	May 14, 2021	The Echo of India	English

In the absence of publication of regular newspapers in the UT of Andaman & Nicobar Islands, the Commission directed the Petitioner to make public announcements and to advertise in the local cable network giving wide publicity to the Public Hearing mentioning the date and time.

The Petitioner uploaded the Petition on its website (https://vidyut.andaman.gov.in/) for inviting objections and suggestions on the Petition. The Commission also uploaded the Tariff Petition and the Public Notice on its website www.jercuts.gov.in giving due intimation to stakeholders, consumers, objectors and the public at large about the Public Hearing to be conducted by the Commission on May 18, 2021 through Video Conferencing due to ongoing COVID19 pandemic.

1.8. Public Hearing

The COVID-19 pandemic has adversely impacted the movement of people as per the guidelines of GoI. These guidelines have also suggested avoiding of travel and gathering of people as far as possible. In view of above, the physical conduct of proceedings by the Commission was not possible. So, the Commission deemed it fit to provide an access to all the stakeholders by conducting proceedings remotely, by the use of audio and video enabled hearings in the matters of Petition submitted by Electricity Department Andaman & Nicobar Administration. Therefore, the Commission has decided that the comments/suggestions of the stakeholders need to be heard virtually through video conferencing for seeking their opinion.

Accordingly, the Virtual Public Hearing was held on May 18, 2021 from 11:30 AM to discuss the issues, if any, related to the Petition filed by the Petitioner. The issues and concerns raised by the stakeholders in writing and as voiced by them during the Public Hearing have been examined by the Commission. The names of the stakeholders who attended the Public Hearing are provided in Annexure-I. The major issues discussed, the responses of the Petitioner thereon and the views of the Commission have been summarized in Chapter 2 of this Order.

2. Chapter 2: Public Hearing

2.1. Regulatory Process

On admitting the Petition, the Commission directed the Petitioner to make copies of the Petition available to the public, upload the Petition on the website and also publish the same in the newspapers in an abridged form in the given format duly inviting suggestions/ comments from the public as per the provisions of the MYT Regulations, 2018.

The Public Hearing was held on 18th May 2021 through Video Conferencing on the Petition for the APR of the FY 2020-21, Aggregate Revenue Requirement (ARR) and Tariff for the FY 2021-22. During the Public Hearing, a few stakeholders who had submitted their comments in writing also presented their views in person before the Commission. Other participants from the general public, who had not submitted written suggestions/ comments earlier, were also given an equal opportunity to present their views/ suggestions in respect to the Petition.

The list of the Stakeholders is attached as **Annexure 1** of this Order.

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

The Commission is appreciative of the efforts of various stakeholders in providing their suggestions/ comments/ observations to make the Electricity Distribution Sector responsive and efficient. The Commission has noted the concerns of all the stakeholders and has tried to address them to the extent possible in the Chapters on tariff design and Directives. The Commission while finalizing the Tariff Order has suitably considered relevant observations. The submissions of the stakeholders, Petitioner's response and views of the Commission are summarized below:

2.2.1. Free Electricity

Stakeholders' Comments

The stakeholder submitted that rental free electricity upto 100 unit as done by Delhi for initial 200 units may be introduced.

Petitioner's Response

It is submitted that the proposal of Tariff Petition containing Tariff Schedule for FY 2021-22 for different categories with various slabs approved by Administration has been submitted to JERC which will be implemented after according approval of the Commission. However, the revision in tariff schedule as proposed may be considered in the next Tariff for FY 2022-23 in consultation with the commission and in view of APR & ARR.

Commission's View

The Commission would like to highlight that the average cost of supply in case of Andaman & Nicobar Islands is very high in comparison to Delhi, thereby making it difficult to provide rental free electricity. Further, UT Administration is already providing budgetary support to Electricity Department thus subsiding the consumers to great extent. The Commission has discussed the principles adopted for approving the Tariff in Chapter 7 of the Tariff Order.

2.2.2. Rebate on advance payment

Stakeholders' Comments

Stakeholder submitted that one month free electricity or 15% rebate (whichever is beneficial for consumer) may be approved on advance payment may be kept in the domestic connection.

Petitioner's Response

It is submitted that the proposal of Tariff Petition containing Tariff Schedule for FY 2021-22 for different categories with various slabs approved by Administration has been submitted to JERC which will be implemented after according approval of the Commission. However, the revision in tariff schedule as proposed may be considered in the next Tariff for FY 2022-23 in consultation with the commission and in view of APR & ARR.

Commission's View

The Commission appreciates the stakeholder's submission and informs the stakeholder to take benefit of advance payment rebate or prompt payment rebate as per the terms and conditions of the Tariff Order.

2.2.3. Reduced Tariffs in higher slab for Domestic and Commercial Category

Stakeholders' Comments

Stakeholder submitted that the energy charges for the domestic connection may be reviewed and fixed @ INR 3.50 upto 300 Unit and similarly, for the commercial connection may be reviewed and fixed @ 9.50 upto 500 Units.

Petitioner's Response

It is submitted that the proposal of Tariff Petition containing Tariff Schedule for FY 2021-22 for different categories with various slabs approved by Administration has been submitted to JERC which will be implemented after according approval of the Commission. However, the revision in tariff schedule as proposed may be considered in the next Tariff for FY 2022-23 in consultation with the commission and in view of APR & ARR.

Commission's View

The Commission has noted the concern of the stakeholder's and the same is discussed in the principles adopted for approving the Tariff in Chapter 7 of the Tariff Order.

2.2.4. Steep tariff hike for Commercial and Industrial Category

Stakeholders' Comments

Some of the stakeholders submitted that the proposed increase in commercial tariff from present INR 12.00 to INR 13.50 for unit consumed between 500 to 1000 and from INR 12.00 to INR 15.00 beyond 1000 units which is a new addition to the slabs. In case of Hotel sector where the electricity is the basic ingredient it is bound to be more than 1000 units per month as we known each room need to have A/C, Geyser, TV apart from different Freeze in the kitchen etc. and the illumination has to be more than normal in this sector. Thus, we find a straight 25% increase in the Hotel sector. This is beyond a logical increase of any price.

Similarly, the proposed increase in the industrial category from INR 8.00 to INR 12.00 for units consumed between 500 to 1000 units and INR 8.00 to INR 15.00 for units more than 1000. Since, the Hotels will fall in the 1000 Plus category and the increase is 87.5%. This is unimaginable and beyond any logic. We are to mention here that there is a judgement to charge industrial rate of tariff to the Hotels in these Islands and the same is before the Hon'ble Court for implementation. Under the present circumstances if this is accepted giving the industry status to the Hotel sector is not going to benefit the sector in any manner rather ultimately tariff equal to commercial will be charged even if this is giving an industry status.

Similar concerns were raised by the Cinema exhibition business and other business owners.

Petitioner's Response

It is submitted that the factors and rational behind new tariff structure for F.Y. 2021-22 are:

(i) A hike of more than 6-7% in fuel cost over the last one year is also a factor to be considered for proposing increase in the tariff rates in tariff schedule and structure for further reduction in net gap between net revenue requirement and revenue realized.

(ii) It is observed that the high value consumers (1000 & above) have average consumption to the tune of 5-25 times as compared to average consumption of normal consumers in all categories which is on higher side.

(iii) The Demand Side Management and Energy Conservation needs to be promoted by encouraging consumers to use energy efficient appliances instead of conventional appliances and to install Rooftop Solar plants so as to reduce consumption thereby reducing the consumption of depleting fossil fuels.

Commission's View

The steep hike proposed by the Petitioner will be detrimental to the industrial and commercial category consumers in addition to the hardship being faced due to the ongoing COVID19 pandemic and therefore, the Commission has only approved a marginal hike in the existing tariff while keeping the existing slab structure. Further, the Commission has discussed the principles adopted for approving the Tariff in Chapter 7 of the Tariff Order.

2.2.5. Hike in Government Connections Category

Stakeholders' Comments

Stakeholder submitted that the Domestic, Industrial and Commercial consumers have been targeted the most and the Government consumers have been untouched, if other have been considered for increased tariff, why the Government consumers have been left untouched.

Petitioner's Response

It is submitted that the Government consumers in the A&N Islands also includes Schools, Institutions, Hospitals, Hostels etc. Hence, a separate methodology / category will be scrutinized and shall be proposed under different Govt. categories during the next tariff proposal F.Y. 2022-23 by taking into consideration various rationales in consultation with the Commission.

Commission's View

The Commission has noted the concern of the stakeholder's and discussed the principles adopted for approving the Tariff in Chapter 7 of the Tariff Order.

2.2.6. Reduction in cost of generation

Stakeholders' Comments

Stakeholder submitted that the A&N Administration should take actions for reducing their cost of generation instead of passing on their burden directly to its consumers. The Administration should take more steps to harness alternate sources of energy generation apart from the present Diesel based Generation.

Petitioner's Response

It is submitted that the various steps have been taken by the A&N Administration:

(i) Solar Tariff to encourage consumers to adopt Rooftop Solar Plants and to reduce their dependency on the grid.

(ii) Thrust given for installation of Renewable and Clean Source of Energy.

Commission's View

The Commission appreciates the stakeholder's suggestions and directs the Petitioner to explore the avenues of increasing the renewable generation including solar and wind energy. Further, the Commission welcomed the proposal for solar tariffs and allowed the same in the previous tariff order and directs the Petitioner to replace the diesel-based generation with the cheaper sources of alternate generation to the maximum extent possible.

2.2.7. Discounts due to ongoing pandemic

Stakeholders' Comments

Stakeholder submitted that it is shocking to know that the Electricity Department of Andaman and Nicobar is proposing to increase the tariff for FY 2021-22 when the country is ravaged by the pandemic. The hike in tariff has been proposed for not only commercial but also for domestic and industrial. The burden of such tariff hike will be detrimental to public and commercial establishments at large. This will hamper our road to recovery when the Pandemic ends. The department instead of proposing such a hike in tariff should instead give rate cuts and discounts which will aid our recovery. But what is being proposed is the exact opposite of recovery.

Petitioner's Response

It is submitted that the proposal of Tariff Petition containing Tariff Schedule for FY 2021-22 for different categories with various slabs approved by Administration has been submitted to JERC which will be implemented after according approval of the Commission. However, the revision in tariff schedule as proposed may be considered in the next Tariff for FY 2022-23 in consultation with the commission and in view of APR & ARR.

Commission's View

The Commission has noted the concerns of the stakeholder's and understands that proposed increase in tariff will burden the consumers and slow down the already crippling industry in the UT of Andaman & Nicobar Islands and therefore, the Commission has only approved a marginal hike in the existing tariff while keeping the existing slab structure. Further, the Commission has discussed the principles adopted for approving the Tariff in Chapter 7 of the Tariff Order.

2.2.8. Non-Compliance of the Commission's Directives

Stakeholders' Comments

Stakeholder submitted that as per the Tariff Order in earlier petition No 23/2019 dated 18.05.2020 several directions has not been compiled. For example, in chapter 2.2.2, the commission's direction for modifying the billing system has not been adhered thereby defeating the very purpose of the suggestions of the stakeholders and due to which the consumers could not avail the benefit of the proposed incentive for making advance payment. The petitioner has not yet conducted the energy audit again as already directed in the order dated 18.05.2020. In absence of the significant energy audit, the proposal for revision of the tariff may not be entertained until the petitioner conducts an independent energy audit. The employees cost shown in format 15 is inadequate. The detailed break up in the revenue from existing tariff may be obtained in format 26 in full shape. The tariff norms for energy are incomplete in the Format 2G wherein it is stated that "details provided vide separate Annexure" is missing in the petition. The direction of the commission for furnishing of slab wise details not yet compiled. Similarly, separate and breakup of O&M expenses, station wise has not been prepared in Format11G. In Format 14 at Sl .No 5, the number of employees recruited has been mentioned which seems to false and incorrect. A per my knowledge, no selection process has been taken place during this period. However, the Veracity of the same to be ascertained.

Petitioner's Response

It is submitted that the proposal of Tariff Petition containing Tariff Schedule for FY 2021-22 for different categories with various slabs approved by Administration has been submitted to JERC which will be implemented after according approval of the Commission. However, the revision in tariff schedule as proposed may be considered in the next Tariff for FY 2022-23 in consultation with the commission and in view of APR & ARR.

Commission's View

The Commission appreciates the views of the stakeholder's and is concerned about the non-compliance of the Commission's directives in said Order. The Commission directs the Petitioner to modify the billing system immediately to incorporate the rebate on early payment and comply with the pending directives within the time frame stipulated for each directive as discussed in Chapter 8 of this Order.

2.2.9. Charging of Hotel industry consumers under the Commercial Category

Stakeholders' Comments

Stakeholder submitted that those Hotels which are recognized as an Industry under the MSME Act are to be charged Industrial rate, presently capped at Rs.8 per/kWh (kilowatt hour). This applicability was confirmed by the Ld. JERC, Gurugram vide Order dt- 02.12.2020 in Petition No. 30 of 2020 titled "Sea Shell Hotels and Resorts &Ann vs. Supt. Engineer, EDA&N', wherein the Ld. JERC was pleased to direct the Electricity Dept. to charge the Hotels in the Industrial Category (@ Rs,8 per kWh) in place of Commercial Category (which was @ Rs.12 per kWh) as directed by the Ld. JERC through its Tariff Order dated 20.05.2019 (which was assailed in the said Petition). The aforesaid Order was passed on the basis of an Affidavit filed by the Electricity Dept acknowledging its mistake of wrongly charging the Hotels under the Commercial category and in fact prayed before the Ld. Commission that Hotels, fulfilling the required criteria be charged as an Industry.

Despite the aforesaid acknowledgment by the Dept. itself and in complete violation of the direction passed by Ld. JERC, the EDA&N has wrongfully been over-charging the Hotels at Commercial rates. To our shock and dismay, the Department has now served a Notice to one of our member Hotel, asking to pay the enhanced commercial rates, failing which it would disconnect their electricity connection. Such act by the Department is completely contrary and in derogation of the directions passed by the Ld. Commission and is liable to be punished for being in willful contempt of the said Order. We, therefore, request the Ld. Commission to exercise its power under Regulation 70(i) of the (Conduct of Business) Regulations, 2009 and take suo-moto cognizance of the blatant violation and take appropriate action against the Department, which has approached the Ld. Commission with unclean hands and is liable to be penalized/punished. For completeness, it is also pertinent to submit that a writ petition has already been preferred by a few consumer Hotels before the Hon'ble Calcutta High Court in this regard and the same is pending adjudication.

Petitioner's Response

It is submitted that hoteliers in A&N Islands vide Administrative Order No 3-20(2)/2017/Power dated 27.05.2011 were charged under industrial category. As per JERC's Tariff order dated 20.05.2019, the Hotel establishments were charged under commercial category from industrial category. A draft review petition in respect of JERC Order dated 02.12.2020 is under approval of competent authority for filing before JERC as implementation of the above order at this instance will incur huge arrears to be paid by the exchequer.

Commission's View

The Commission noted the concerns of the stakeholder's and directs the Petitioner to strictly comply with the Review Order dated December 2, 2020. Wherein the Hotel industry consumers have been categorised under the Industrial category and charging them under the Commercial category is considered as the non-compliance of the Commission's said Order which attracts penal action in the Electricity Act, 2003.

3. Chapter 3: True-up of FY 2017-18, FY 2018-19 and FY 2019-20

3.1. Background

The True-up for the FY 2017-18 and FY 2018-19 has to be carried out in accordance with Regulation 8(2) of the MYT Regulations, 2014, stated as follows:

"(2) After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures or the provisional actual accounts as available 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'.

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

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

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

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

Further, the True-up of FY 2019-20 has to be carried out in accordance with Regulation 11 of the MYT Regulations, 2018, stated as follows:

"11 Annual Performance Review, Truing-up and tariff determination during the Control Period

11.1 The Generating Company, Transmission Licensee and Distribution Licensee shall be subject to annual performance review and truing up of expenses and revenue during the Control Period in accordance with these Regulations.

11.2 The Generating Company, Transmission Licensee and Distribution Licensee shall file an application for the annual performance review of the current year, truing up of the previous Year or the Year for which the audited accounts are available and determination of tariff for the ensuing Year on or before 30th November of each Year, in formats specified by the Commission from time to time :

Provided that the Generating Company, Transmission Licensee or Distribution Licensee, as the case may be, shall submit to the Commission information in such form as may be specified by the Commission, together with the audited accounts, extracts of books of account and such other details as the Commission may require to assess the reasons for and extent of any variation in financial performance from the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges.

11.3 The scope of the annual performance review, truing up and tariff determination shall be a comparison of the performance of the Generating Company, Transmission Licensee or Distribution Licensee with the *approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges and shall comprise of the following:*

a) True-up: a comparison of the audited performance of the Applicant for the Financial Year for which the true up is being carried out with the approved forecast for such previous Financial Year, subject to the prudence check;…..”

3.2. Approach for True-up for FY 2017-18, FY 2018-19 and FY 2019-20

Petitioner’s submission:

The Petitioner has not submitted the True-Up Petition for FY 2017-18, FY 2018-19 and FY 2019-20 as the accounts for FY 2017-18, FY 2018-19 and FY 2019-20 are pending for audit. Further, the Petitioner has submitted that the financial statements for FY 2017-18, FY 2018-19 and FY 2019-20 have been finalised and the true-up petition shall be filed as soon as accounts audit is complete.

Commission’s analysis:

The Commission in its previous Orders had stressed upon the requirement of the audited accounts to reflect the true picture and bring in accuracy in the estimates made by the Commission. The JERC MYT Regulations, 2014 and JERC MYT Regulations, 2018 also require the licensee to file the True up along with the audited accounts in the filing.

The Commission directs that the audit of the financial accounts to be completed on priority. The Commission reiterates its direction to the Petitioner to prepare and submit the audited accounts for FY 2017-18, FY 2018-19 and FY 2019-20 based on commercial principles along with the True-up Petitions by 30th November 2021.

The True-up would therefore be taken up only after submission of the audited accounts. Accordingly, the Commission has decided not to take up True-up for the FY 2017-18, FY 2018-19 and FY 2019-20 in the current Order. Any parameter considered for the determination of ARR and revenue gap/surplus in the subsequent chapters will be considered as per the Commission’s Tariff Order for the FY 2020-21 dated 18th May 2020 and MYT Order dated 20th May 2019. Further, the Commission directs the Petitioner to submit the audited accounts for the FY 2017-18, FY 2018-19 and FY 2019-20 along with Petition for determination of ARR for the FY 2022-23 by 30th November 2021.

4. Chapter 4: Annual Performance Review of FY 2020-21

4.1. Background

The Tariff Order for the FY 2020-21 was issued by the Commission on May 18, 2020 approving the ARR and Retail Tariff for the FY 2020-21. This Chapter covers the Annual Performance Review (APR) of the FY 2020-21 vis-à-vis the cost parameters approved by the Commission in the Tariff Order dated May 18, 2020. The Annual Performance Review for the FY 2020-21 is to be carried out as per provisions of Regulation 11 of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2018.

4.2. Approach for Review for the FY 2020-21

The review of the Aggregate Revenue Requirement requires assessment of the quantum of energy sales, energy loss as well as the various cost elements like Power Purchase Cost, O&M Expenses, interest on long-term loans, interest on working capital loans, depreciation etc. The Annual Performance Review for the FY 2020-21 has been done based on the actual data as provided by the Petitioner for the initial 11 months of FY 2020-21 including the Power Purchase Quantum and the Cost, Energy Sales, Capitalisation etc. depending on which the estimates for the remaining months of the financial year have been made. The various cost elements constituting the Aggregate Revenue Requirement have been approved based on the actual information submitted by the Petitioner, the MYT Regulations, 2018 and on the basis of the norms approved in the MYT Order dated May 20, 2019 and Tariff Order dated May 18, 2020.

4.3. Energy Sales, Connected Load and Number of Consumers

Petitioner's Submission

The Petitioner has submitted a revised estimate of energy sales as 250.34 MU for the FY 2020-21, based on the actual energy sales for first half of FY 2020-21. Similarly, the Petitioner has proposed the number of consumers as 141,743 respectively for FY 2020-21.

Commission's Analysis

The Commission has considered the actual category wise sales data for initial 11 months of FY 2020-21 and the Petitioner's submission for calculating the category wise sales, connected load and number of consumers respectively for FY 2020-21.

4.3.1. Energy Sales

The Commission has projected the category wise sales data for FY 2020-21 by grossing up the category wise actual sales for initial 11 months of FY 2020-21 as submitted by the Petitioner as shown in the following table:

Table 5: Sales projected for FY 2020-21 (MU)

S. No.	Category	Actual Sales for initial 11 months of FY 2020-21	Projected Sales for FY 2020-21
1	Domestic	127.49	139.08
2	Commercial	42.42	46.28
3	Industry	8.08	8.81
4	Bulk	26.52	28.93
5	Public Lighting	5.64	6.15
6	Irrigation, Pumps & Agriculture	0.91	0.99
7	**Total Sales**	**211.06**	**230.25**

The table below provides the energy sales approved by the Commission in the Tariff Order, the Petitioner's submission and now approved by the Commission:

Table 6: Energy Sales (MU) approved for FY 2020-21 by the Commission

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	150.56	145.08	139.08
2	Commercial	68.22	57.76	46.28
3	Industry	19.27	9.26	8.81
4	Bulk	33.61	30.59	28.93
5	Public Lighting	6.67	6.62	6.15
6	Irrigation, Pumps & Agriculture	1.17	1.03	0.99
7	**Total Sales**	**279.51**	**250.34**	**230.25**

4.3.2. Number of Consumers

The Commission has considered the category wise number of consumers for FY 2020-21 as per the number of consumers in initial eleven months of FY 2020-21 as shown in table below:

Table 7: Number of Consumers projected for FY 2020-21 (MU)

S.No.	Category	Actual Consumers Apr'20 – Feb'21	Projected Number of Consumers for FY 2020-21
1	Domestic	116,991	116,991
2	Commercial	20,885	20,885
3	Industry	471	471
4	Bulk	66	66
5	Public Lighting	734	734
6	Irrigation, Pumps & Agriculture	457	457
7	**Total Consumers**	**139,604**	**139,604**

The following table provides the number of consumers approved by the Commission in the Tariff Order, the Petitioner's submission and now approved by the Commission.

Table 8: Number of Consumers approved for FY 2020-21 by the Commission

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	119,645	118,753	116,991
2	Commercial	21,499	21,243	20,885
3	Industry	616	477	471
4	Bulk	68	67	66
5	Public Lighting	705	751	734
6	Irrigation, Pumps & Agriculture	473	452	457
7	**Total Consumers**	**143,005**	**141,743**	**139,604**

4.3.3. Connected Load

Similarly, the Commission has considered the category wise connected load for FY 2020-21 as per the connected load for initial eleven months of FY 2020-21 as shown in table below:

Table 9: Connected Load projected for FY 2020-21 (kW)

S. No.	Category	Actual Connected Load Apr'20 – Feb'21	Projected Connected Load for FY 2020-21
1	Domestic	182,955	182,955
2	Commercial	92,813	92,813
3	Industry	14,591	14,591
4	Bulk	14,331	14,331
5	Public Lighting	2,786	2,786
6	Irrigation, Pumps & Agriculture	1,210	1,210
7	**Total Connected Load**	**308,688**	**308,688**

The table below provides the category wise connected load approved by the Commission in the Tariff Order, the Petitioner's submission and now approved by the Commission:

Table 10: Connected Load approved by the Commission for FY 2020-21 (kW)

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	186,107	182,955	182,955
2	Commercial	65,684	92,813	92,813
3	Industry	26,816	14,591	14,591
4	Bulk	13,885	14,331	14,331
5	Public Lighting	2,870	2,786	2,786
6	Irrigation, Pumps & Agriculture	3,420	1,210	1,210
8	**Total Connected Load**	**298,781**	**308,688**	**308,688**

The Commission approves energy sales of 230.25 MU, connected load of 308,688 kW and number of consumers as 139,604 in the APR of FY 2020-21.

4.4. Intra-State Transmission and Distribution (T&D) loss

Petitioner's submission

The Petitioner has proposed Intra-State T&D loss level at 20.00% against an approved loss of 13.84% in the Tariff Order.

Commission's analysis

The Commission had approved loss level of 13.84% for FY 2020-21 in the MYT Order dated May 20, 2019 and subsequently, in the Tariff Order dated May 18, 2020 while determining ARR for the FY 2020-21. The Commission, in the Business Plan Order dated December 31, 2018, had set the loss trajectory for the 2nd Control Period considering the actual loss of 15.34% in FY 2017-18. The Petitioner has not provided any justification for the revision distribution losses for FY 2020-21. The Commission in the APR of FY 2020-21 finds it appropriate to consider the loss level of 13.84% as approved in the MYT Order for FY 2020-21. The following table provides the Intra-State distribution loss approved in the Tariff Order, the Petitioners submission and now approved by the Commission.

Table 11: Intra-State distribution loss (%)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Intra-State distribution loss	13.84%	20.00%	13.84%

The Commission approves Intra-State T&D loss of 13.84% in the APR of FY 2020-21.

4.5. Energy Balance

Petitioner's submission

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

Table 12: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	250.34
2	Distribution losses (%)	20.00%
	Distribution losses (MU)	62.59
3	**Energy Requirement @ periphery**	**312.93**
B	**Energy Availability**	
1	Power Purchase	244.55
2	Own Generation	68.38
3	**Total Energy Availability**	**312.93**
C	**Total shortfall/(Surplus)**	**0.00**

Commission's analysis

The Commission has determined the Energy Balance based on the revised estimates of energy sales. The table below provides the Energy Balance as approved by the Commission in the Tariff Order of FY 2020-21, the Petitioner's submission and the Energy Balance now approved by the Commission.

Table 13: Energy Balance (MU) approved by the Commission for FY 2020-21

S. No.	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**			
1	Total Sales within the UT	279.51	250.34	230.25
2	Distribution losses (%)	13.84%	20.00%	13.84%
	Distribution losses (MU)	44.90	62.59	36.98

S. No.	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
3	**Energy Requirement @ periphery**	**324.41**	**312.93**	**267.23**
B	**Energy Availability**			
1	Power Purchase	253.15	244.55	244.55
2	Own Generation	71.25	68.38	85.82
3	**Total Energy Availability**	**324.41**	**312.93**	**330.37**
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**(63.14)**

In the APR of FY 2020-21, the Commission has estimated an energy surplus of 63.14 MU.

4.6. Power Purchase Quantum & Cost

Petitioner's 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. Accordingly, the Petitioner has claimed the fuel cost of INR 120.13 crore as against the approved cost of INR 106.61 crore and the power purchase cost of INR 403.40 crore as against the approved cost of INR 445.44 crore in the Tariff Order dated May 18, 2020. The Petitioner has submitted the IPP and HPPs wise power generation, fuel consumption and power purchase cost including own generation for FY 2020-21 as presented in the following tables:

Table 14: Power Purchase Quantum and Cost from IPPs and Fuel Cost for Own Generation for FY 2020-21

S. No.	Particulars	Units generated (MU)	Cost of HSD (INR Cr)	Cost of Lube (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
1	Own Generation (HSD)	61.26	118.39	1.74	0.00	120.13
2	KHEP (Kalpong Hydro)	10.08	0.00	0.00	0.00	0.00
3	Solar(Own)	14.49	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	39.09	61.55	0.00	4.21	65.76
5	HPP-2 (10MW)	60.47	94.05	0.00	7.07	101.12
6	NTPC - SPV	4.84	0.00	0.00	4.52	4.52
7	Other HPPs	0.31	0.60	0.00	0.37	0.97
8	NTPC DG 5MW	45.00	69.26	0.00	6.39	75.65
9	NTPC DG 10MW	70.80	115.54	0.00	9.52	125.06
10	DG P/Plant Niel 0.96MW	2.76	4.82	0.00	0.25	5.07
11	DG P/Plant Havelock 3 MW	0.22	0.36	0.00	0.03	0.39
12	SECI Solar	0.96	0.00	0.00	0.47	0.47
13	M/s. MUNDRA	3.01	0.00	0.00	0.67	0.67
14	NLC	7.47	0.00	0.00	4.98	4.98
15	Mona Generator	9.62	17.55	0.00	1.19	18.74
16	**Total**	**330.37**	**482.13**	**1.74**	**39.66**	**523.53**

Commission's Analysis

As per Regulation 12.1 of the MYT Regulations, 2018, power purchase and fuel cost are uncontrollable parameters. Thus, the power purchase and fuel cost must be revisited every year by the Commission based on the audited accounts. The Commission has considered that the power requirement shall be met mainly from own generation apart from procurement of power from the IPPs and other generators. The Petitioner has considered the power purchase quantum and own generation units as proposed in energy balance. Accordingly, the

Commission approves the power purchase quantum and own generation units as determined in the energy balance.

Based on scrutiny of the data submitted by the Petitioner, the Commission sought whether the Petitioner has taken a prior approval of the Commission while signing the new PPAs. In response, the Petitioner submitted that the new PPAs were signed to bridge the additional energy demand and an application for the approval shall be filed shortly. The Commission has decided to allow the power purchase cost in the APR on provisional basis and directs the Petitioner to get the PPAs approved on the priority basis failing which the Power Purchase Cost in respect to new PPAs signed shall be disallowed in the true-up of FY 2020-21. The Commission further directs the Petitioner to get PPA approved by the Commission before procuring power from any generating station.

Further, the Commission has noted that while claiming the power purchase cost for fully owned renewable generation has been submitted as Nil considering the same are being considered in the Gross Block in lieu of the power purchase fixed costs. The Petitioner is directed to file a separate tariff determination petition for fully owned renewable generation to get the charges notified in order to bring transparency in the power procurement plan and accordingly, the same may be deducted from the gross block of the Assets.

The Commission has observed that the Petitioner has considered different SFC of HSD and Lube oil for various IPPs and HPPs vis-à-vis the values approved by the Commission in the MYT Order dated May 20, 2019. Further, the Commission has determined the plant wise per unit cost for HSD, lube oil and fixed charges as per the fuel bills submitted by the Petitioner. Accordingly, the Commission has computed the fuel requirement for various IPPs, HPPs and own generation considering the approved values of specific fuel consumption as shown in table below:

Table 15: Fuel Requirement for various IPPs, HPPs & Own generations as approved by the Commission

Particulars	Units generated (MU)	SFC of HSD (ml/kWh)	Per Litre cost of HSD (INR)	Total Consumption of HSD (Litre)	SFC of Lube (ml/kWh)	Per Litre cost of Lube (INR)	Total Lube Consumption (Litre)
Own Generation (HSD)	61.26	304.00	60.30	18622362.74	0.98	197.99	60032.62
HPP -1 (5 MW)	39.09	273.51	60.30	10691315.07	0.00	0.00	0.00
HPP-2 (10MW)	60.47	258.46	60.55	15629291.10	0.00	0.00	0.00
Other HPPs	0.31	269.00	61.63	83390.00	0.00	0.00	0.00
NTPC DG 5MW	45.00	270.25	59.63	12161249.01	0.00	0.00	0.00
NTPC DG 10MW	70.80	270.25	60.64	19133698.44	0.00	0.00	0.00
DG P/Plant Niel 0.96MW	2.76	270.25	60.64	745889.94	0.00	0.00	0.00
DG P/Plant Havelock 3 MW	0.22	269.00	60.64	59180.00	0.00	0.00	0.00
Mona Generator	9.61	269.00	68.01	2587780.00	0.00	0.00	0.00
Total	**289.53**			**79714156.30**			**60032.62**

The Commission has considered the fixed cost for various power plants as submitted by the Petitioner. Accordingly, the Commission has computed the power purchase cost for various sources as shown in following table:

Table 16: Power Purchase Cost approved by the Commission for FY 2020-21

S. No.	Particulars	Units generated (MU)	Cost of HSD (INR Cr)	Cost of Lube (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
1	Own Generation (HSD)	61.26	112.29	1.19	0.00	113.48

S. No.	Particulars	Units generated (MU)	Cost of HSD (INR Cr)	Cost of Lube (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
2	KHEP (Kalpong Hydro)	10.08	0.00	0.00	0.00	0.00
3	Solar (Own)	14.49	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	39.09	64.47	0.00	4.21	68.68
5	HPP-2 (10MW)	60.47	94.64	0.00	7.07	101.71
6	NTPC - SPV	4.84	0.00	0.00	4.53	4.53
7	Other HPPs	0.31	0.51	0.00	0.37	0.88
8	NTPC DG (5MW)	45.00	72.52	0.00	6.39	78.91
9	NTPC DG (10MW)	70.80	116.03	0.00	9.52	125.55
10	DG P/Plant Niel (0.96MW)	2.76	4.52	0.00	0.25	4.77
11	DG P/Plant Havelock (3 MW)	0.22	0.36	0.00	0.03	0.39
12	SECI Solar	0.96	0.00	0.00	0.46	0.46
13	M/s. MUNDRA	3.01	0.00	0.00	0.66	0.66
14	NLC	7.47	0.00	0.00	4.98	4.98
15	Mona Generator	9.62	17.60	0.00	1.19	18.79
16	**Total**	**330.37**	**482.94**	**1.19**	**39.66**	**523.78**

The approved cost towards diesel-based generation consists of cost incurred towards consumption of HSD oil and Lube oil only 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 revised for the department as a whole in subsequent sections. Accordingly, no separate cost has been approved for own renewable based generation also.

Further, as per the energy balance approved by the Commission, there is an energy surplus of 63.14 MU. The Commission has deducted the power purchase cost pertaining to the energy surplus at Average Power Purchase Cost computed as below:

Table 17: Average Power Purchase Cost and the total Power Purchase cost approved for FY 2020-21

S. No.	Particulars	Value
1	Energy Availability (MU)	330.37
2	Net Energy Excluding Renewable & Hydro generation (MU)	297.00
3	**Total Power Purchase Cost as computed by the Commission (INR Crore)**	**523.78**
4	Net Power Purchase Cost Excluding Renewable & Hydro generation (INR Crore)	518.14
5	**Average Power Purchase Cost (Rs/Unit) (4/2*10)**	**17.45**
6	**Excess Energy (MU) (As per Energy Balance)**	**63.14**
7	Total cost to be deducted from the approved Power Purchase Cost (INR Crore) (5*6/10)	-110.15
8	**Net Power Purchase Cost approved by the Commission for FY 2020-21 (INR Crore) (3-7)**	**413.63**

**The excess energy has been computed considering the approved sales and T&D loss, further, T&D loss has considered as per MYT Order which is less than the T&D loss claimed by the Petitioner.*

The table below provides the power purchase cost and fuel cost approved in the Tariff Order, claimed by the Petitioner and now approved by the Commission:

Table 18: Power Purchase & Fuel Cost approved for FY 2020-21 (INR crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Fuel Cost	106.61	120.13	413.63
2	Power Purchase Cost	445.44	403.40	
3	**Total Cost**	**552.06**	**523.53**	**413.63**

The Commission approves power purchase quantum of 267.23 MU and cost of INR 413.63 Crore in the APR of FY 2020-21.

4.7. Renewable Purchase Obligations (RPOs)

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

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

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and revised the RPO targets, according to which the Petitioner had to purchase 14.10% of its total consumption (including 6.10% from Solar) from renewable sources for the FY 2020-21.

For the FY 2020-21, the Commission approves the RPO target of 31.04 MU comprising of 13.43 MU Solar and 17.61 MU Non-Solar. Out of which, the Petitioner has claimed to purchase the solar energy of around 23.30 MU and non-solar energy of around 10.08 MU. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2020-21:

Table 19: Cumulative RPO compliance till FY 2020-21

Particulars	FY 18	FY 19	FY 20	FY 21
Solar Target	2.50%	3.60%	4.70%	6.10%
Non-Solar Target	4.20%	5.40%	6.80%	8.00%
Total Target	6.70%	9.00%	11.50%	14.10%
Sales Within UT	**233.50**	**237.82**	**262.75**	**220.17**
RPO Target				
Solar	5.84	8.56	12.35	13.43
Non-Solar	9.81	12.84	17.87	17.61
Total RPO Target	**15.64**	**21.40**	**30.22**	**31.04**
RPO Compliance (Actual Purchase)				
Solar	7.00	8.11	10.13	23.30
Non-Solar	12.82	16.56	5.75	10.08
Total RPO Compliance (Actual Purchase)	**19.81**	**24.68**	**15.89**	**33.37**
RPO Compliance (REC Certificate Purchase)				
Solar	0.00	0.00	0.00	0.00
Non-Solar	0.00	0.00	0.00	0.00
Total RPO Compliance (REC Certificate)	**0.00**	**0.00**	**0.00**	**0.00**

Particulars	FY 18	FY 19	FY 20	FY 21
RPO Compliance (REC+ Actual)				
Solar	7.00	8.11	10.13	23.30
Non-Solar	12.82	16.56	5.75	10.08
Total RPO Compliance	**19.81**	**24.68**	**15.89**	**33.37**
Net Shortfall/(Surplus) for this year	-4.17	-3.27	14.33	-2.33
Cumulative Shortfall in RPO Compliance till current year	**0.00**	**0.00**	**14.33**	**12.00**

The Commission notes that there is a net surplus in RPO compliance for FY 2020-21 (2.33 MU) and cumulative shortfall of 12.00 MU till FY 2020-21. The Commission directs the Petitioner to complete the RPO obligation on priority.

4.8. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). Regulation 51 of the MYT Regulation, 2018 states the following:

"51.1 The Operation and Maintenance expenses for the Distribution Wires Business shall be computed in accordance with this Regulation.

51.2 Operation and Maintenance (O&M) expenses shall comprise of the following:

a) Employee expenses - salaries, wages, pension contribution and other employee costs;

b) Administrative and General expenses including insurance charges if any; and

c) Repairs and Maintenance expenses.

51.3 The Distribution Licensee shall submit the required O&M expenses for the Control Period as a part of Multi Year Tariff Petition. O&M expenses for the base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the transmission Licensee, estimates of the actuals for the Base Year, prudence check and any other factors considered appropriate by the Commission.

51.4 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 (WPI inflation)

EMPn = (EMPn-1) x (1+Gn) x (CPI inflation)

A&Gn = (A&Gn-1) x (CPI inflation)

'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;

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

WPI inflation – 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;

Xn is an efficiency factor for nth Year. 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 nthYear. 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.

51.5 Terminal liabilities of employees of Licensee including pension expenses etc. shall be approved as per actuals submitted by the Licensee, subject to prudence check or be established through actuarial studies. Additionally, any variation due to changes recommended by the pay commission shall be allowed separately by the Commission, subject to prudence check.

51.6 For the purpose of estimation, the same value of factors – CPIinflation and WPIinflation shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors – CPIinflation and WPIinflation during the truing up exercise for the Year for which true up is being carried out and true up the O&M Expenses for that Year, only to the extent of inflation."

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

In accordance with above Regulations, the Commission has approved the Employee Expenses, A&G Expenses and R&M Expenses as elaborated below.

4.8.1. Employee Expenses

Petitioner's submission

The Petitioner has submitted employee expenses of INR 137.88 Crore against the approved expenses of INR 111.58 Crore in the Tariff Order.

Commission's analysis

In accordance with the MYT Regulations, 2018, the Commission has determined the Employee expenses for each year of the MYT Control Period in MYT Order. The Regulation 6 of the MYT Regulations, 2018 stipulates the following:

"*6. Values for Base Year*

6.1 The values for the Base Year of the Control Period shall be determined on the basis of the audited accounts or provisional accounts of last three (3) Years, and other factors considered relevant by the Commission:

Provided that, in absence of availability of audited accounts or provisional accounts of last three (3) Years, the Commission may benchmark the parameters with other similar utilities to establish the values for Base Year:

Provided further that the Commission may change the values for Base Year and consequently the trajectory of parameters for Control Period, considering the actual figures from audited accounts."

In accordance with MYT Regulations, the Employee expenses shall be revised to the extent of change in inflation and growth rate during the control period. Accordingly, the Commission has considered the approved value of employee expenses for FY 2018-19 for computation of revised employee expenses of FY 2020-21. The Commission has considered the employee growth rate for FY 2019-20 and FY 2020-21 as submitted by the Petitioner along with the average CPI of previous three years to arrive at the employee expenses for FY 2020-21.

The CPI Inflation has been computed as follows:

Table 20: Computation of CPI Inflation (%)

FY	Increase in CPI Index	Average increase in CPI Index over 3 years	Average increase in CPI Index over 3 years
2016-17	4.12%	4.22%	
2017-18	3.08%		5.35%
2018-19	5.45%		
2019-20	7.53%		

Table 21: Employee recruitment plan as submitted by the Petitioner

S. No	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Opening Employee	2378	2455	2567
2	Recruitment	197	217	223
3	Retirement	120	105	126
4	Closing Employee	2455	2567	2664
5	Growth rate	3.24%	4.56%	3.78%

Table 22: Employee Expenses approved for FY 2020-21 (INR Crore)

S. No	Particulars	FY 2019-20	FY 2020-21
1	EMPn-1 (INR Crore)	95.17	102.39
2	Gn (%)	3.24%	4.56%
3	CPIinflation (%)	4.22%	5.35%
4	**Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)**	**102.39**	**112.80**

Table 23: Employee Expenses approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	EMPn-1 (INR Crore)	102.39	**137.88**	102.39
2	Gn (%)	4.56%		4.56%
3	CPIinflation (%)	4.22%		5.35%
4	**Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)**	**111.58**		**112.80**

The Commission now approves employee expenses of INR 112.80 Crore in the APR of the FY 2020-21.

4.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted a revised estimate of A&G expenses of INR 16.16 crore as against the approved value of INR 37.53 crore in the Tariff Order.

Commission's analysis

In accordance with MYT Regulations, the A&G expenses shall be revised to the extent of change in inflation during the control period. Accordingly, the Commission has considered the approved value of A&G expenses for FY 2018-19 for computation of revised A&G expenses of FY 2020-21. The A&G expenses for FY 2018-19 has been escalated with the average CPI of previous three years as computed above to arrive at the A&G expenses for FY 2019-20 and subsequently, for FY 2020-21.

The table below provides the A&G expenses approved in Tariff Order, Petitioner's Submission and now approved by the Commission:

Table 24: A&G Expenses approved for FY 2020-21 (INR Crore)

S. No	Particulars	FY 2019-20	FY 2020-21
1	A&Gn-1 (INR Crore)	34.55	36.01
2	CPIinflation (%)	4.22%	5.35%
3	Provision (INR Crore)	0.00	0.00
4	**Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)**	**36.01**	**37.93**

Table 25: A&G Expenses approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	A&Gn-1 (INR Crore)	36.01	**16.16**	36.01
2	CPIinflation (%)	4.22%		5.35%
3	Provision (INR Crore)	0.00		0.00
4	**Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)**	**37.53**		**37.93**

The Commission now approves the Administrative & General (A&G) expenses of INR 37.93 Crore in the APR of the FY 2020-21.

4.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has submitted a revised estimate of R&M expenses of INR 61.32 crore as against the approved value of INR 45.66 crore in the Tariff Order dated May 18, 2020.

Commission's analysis

In accordance with MYT Regulations, the R&M expenses shall be revised to the extent of change in inflation during the control period. The Commission has considered the k-Factor as approved in the MYT Order and multiplied the same with the opening GFA of FY 2020-21. The resultant amount is then escalated by average WPI Inflation of previous three years to arrive at the R&M expenses for FY 2020-21.

The WPI Inflation has been computed as follows:

Table 26: Computation of WPI Inflation (%)

FY	Increase in WPI Index	Average increase in WPI index over 3 years
2016-17	2.92%	**2.96%**
2017-18	4.28%	
2018-19	1.68%	

The R&M expenses as approved by the Commission for FY 2020-21 have been provided in the following table:

Table 27: R&M Expenses approved by Commission for FY 2020-21 (INR Crore)

S. No	Particulars	FY 2020-21
1	Opening GFA (GFA_{n-1})	175.38
2	K factor approved (K) (%)	24.99%
3	Avg. WPI Inflation (%)	2.96%
4	**R&M Expenses = K x (GFA_{n-1}) x ($1+WPI_{inflation}$)**	**45.12**

Table 28: R&M Expenses approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	**Repair & Maintenance Expenses (R&M)**	**45.66**	**61.32**	**45.12**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 45.12 Crore in the APR of FY 2020-21.

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

The following table provides the O&M expenses approved in the ARR of FY 2020-21, Petitioner's submission and now approved by the Commission.

Table 29: O&M Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	111.58	137.88	112.80
2	Administrative & General Expenses (A&G)	37.53	16.16	37.93
3	Repair & Maintenance Expenses	45.66	61.32	45.12
	Total Operation & Maintenance Expenses	**194.77**	**215.36**	**195.86**

The Commission approves the Operation & Maintenance (O&M) Expenses of INR 195.86 Crore in the APR of FY 2020-21.

4.9. Capital Expenditure & Capitalisation

Petitioner's submission

The Petitioner has submitted revised capitalisation of INR 37.17 Crore as against the approved capitalisation of INR 30.30 Crore in the Tariff Order dated May 18, 2020.

Commission's analysis

The Commission with regard to the capitalisation proposed to be undertaken during the year, directed the Petitioner to submit the details of the schemes to be undertaken during the year along with the supporting documents. In accordance with the submission of the Petitioner and the Capital Expenditure and Capitalisation approved in MYT Order, the Commission approves the capital expenditure and capitalisation for the year as shown in the following table:

Table 30: Capitalisation approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Capitalisation	30.30	37.17	37.17

The Commission approves capitalisation of INR 37.17 Crore in the APR of FY 2020-21. The same shall be trued up at the time of True-up.

4.10. Capital Structure

Petitioner's Submission

The Petitioner has submitted that all the capital assets have been created out of equity contribution from Andaman & Nicobar Administration.

Commission's analysis

Regulation 26 of the MYT Regulations, 2018 specifies the following:

"26. Debt to Equity Ratio

26.1 In case of Existing Projects, debt to equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2018 shall be considered:

Provided that in case of retirement or replacement or De-capitalization of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or De-capitalization of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

26.2 For New Projects, the debt-equity ratio as on the Date of Commercial Operation shall be 70:30 of the amount of capital cost approved by the Commission under Regulation 23, after prudence check for determination of tariff:

Provided that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of tariff:

Provided also that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a normative loan for the Licensee for determination of tariff:

Provided also that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

Provided further that the premium, if any, raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the scheme, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the transmission system or the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

26.3 Any expenditure incurred or projected to be incurred on or after April 1, 2019, as may be admitted by the Commission, as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in this Regulation."

The Petitioner has submitted that they have finalized the Fixed Asset Register up-to 31.03.2020. The closing GFA as per the FAR as on 31.03.2020 is Rs.516.24 crores. The Petitioner have incorporated several Fixed Assets pertaining to previous years which were omitted from the Accounts in the FAR after reconciliation with the accounts. Further, the Petitioner has submitted that the depreciation pertaining to previous years amounting to Rs.74.31 crores on account of these assets have also been accounted for prior period depreciation in the Proforma Accounts for the FY 2019-20. The Proforma Accounts for the FY 2017-18, FY 2018-19 & FY 2019-20 has been compiled with above updated asset details and the same is under Audit.

The Commission has noted that there is an abrupt increase of INR 338.83 crore in the opening GFA for FY 2020-21 as claimed by the Petitioner vis-à-vis the opening GFA as approved by the Commission in the Tariff Order dated May 18, 2020. Accordingly, the Commission directs the Petitioner to submit the details of assets additionally recognized in the fixed asset register along with the commissioning date, funding sources, depreciation accounted and the detailed reasons for not recognising these assets in previous tariff petitions along with the true-up petition. Accordingly, the Commission will analyse the Petitioner's submission and shall take the appropriate decision. For the purpose of calculating the opening value of GFA in FY 2020-21, the Commission has considered the closing value of GFA for FY 2016-17 as approved in Tariff Order dated May 18, 2020 and capitalisation for FY 2017-18, FY 2018-19 and FY 2019-20 as submitted by the Petitioner as shown in following table:

Table 31: Capitalisation for FY 2017-18, FY 2018-19 and FY 2019-20 as submitted by the Petitioner (INR Crore)

Particulars	FY 2017-18	FY 2018-19	FY 2019-20
Opening GFA	130.81	152.39	171.09
Additions during the FY	21.58	18.70	4.29
Adjustment/Retirement During the FY	0.00	0.00	0.00
Closing GFA	152.39	171.09	175.38

In accordance with the MYT Regulations, 2018, the Commission has determined the Capital Structure for FY 2020-21 as follows:

Table 32: GFA addition approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	177.41	516.24	175.38
2	Addition During the FY	30.30	37.17	37.17
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	207.71	553.41	212.55

Table 33: Normative Loan addition approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	14.80	185.77	13.43
2	Add: Normative Loan During the year	21.21	26.02	26.02

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
3	Less: Normative Repayment equivalent to Depreciation	7.01	16.93	7.05
4	Closing Normative Loan	29.00	194.86	32.39

**Depreciation calculated in next section*

Table 34: Normative Equity addition approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	53.22	154.87	52.61
2	Additions on account of new capitalisation	9.09	11.15	11.15
3	Closing Equity	62.31	166.02	63.77

4.11. Depreciation

Petitioner's submission

The Petitioner has submitted the depreciation of INR 16.93 crore as per MYT Regulations 2018 as against the approved depreciation of INR 7.01 crores in the Tariff Order dated May 18, 2020.

Commission's analysis

Regulation 30 of the MYT Regulations, 2018 stipulates the following:

"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: In the ARR Order, the Commission approved the following asset wise depreciation rate as per the CERC Tariff Regulations, 2014:

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.

30.6 For Transmission Licensee, the depreciation shall be calculated at rates and norms specified in the prevalent CERC Tariff Regulations for transmission system.

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.

30.8 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."

The Commission has derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in MYT Regulations, 2018, provided in the following table:

Table 35: Depreciation Rate (%)

Description	Rate
Plant & Machinery	3.60%
Buildings	1.80%
Furniture & Fixtures	6.00%
Land	0.00%
Vehicles	18.00%
Computers	6.00%
Office Equipments	6.00%

The overall depreciation rate is considered as the weighted average depreciation rate calculated based on the asset wise depreciation rates and asset classification as per the Fixed Asset Register for FY 2019-20. The opening and closing GFA has been considered as approved in the *Section 4.10: Capital Structure* of this Order. Further, depreciation has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during each year.

The following table provides the calculation of depreciation as approved in the tariff order, Petitioner's submission and now approved by the Commission.

Table 36: Depreciation approved by the Commission for FY 2020-21 (In INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	177.41	516.24	175.38
2	Addition During the FY	30.30	37.17	37.17
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	207.71	553.41	212.55
5	Average Gross Fixed Assets	192.56	534.83	193.97
6	Weighted Average Depreciation rate (%)	3.64%	3.17%	3.64%
7	**Depreciation**	**7.01**	**16.93**	**7.05**

The Commission now approves depreciation of INR 7.05 Crore in the APR of the FY 2020-21.

4.12. Interest and Finance Charges

Petitioner's submission

The Petitioner has estimated the Interest and Finance charges as per the JERC MYT Regulations, 2018 for the year FY 2020-21. The Petitioner has submitted that the majority of capital assets are created out of the equity contribution from Andaman & Nicobar Administration only. The rate of interest considered is SBI MCLR as on 1st April of that relevant year plus 100 basis points. Further based on the reconciliation of assets in the fixed asset register and the closing loan balances for FY 2016-17 as per Tariff order dated May 20, 2020, the Petitioner has claimed the opening loan balances of INR 185.77 crore considering the 70% of the additional assets recognised as the normative loan and adjustment on account of prior period depreciation as the repayment.

Commission's analysis

Regulation 28 of the MYT Regulations, 2018 stipulates the following:

"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-capitalization 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 capitalization 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.

28.8 The finance charges incurred for obtaining loans from financial institutions for any Year shall be allowed by the Commission at the time of Truing-up, subject to prudence check.

28.9 The excess interest during construction on account of time and/or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission:

Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Transmission Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:

Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

28.10 The Transmission Licensee or the Distribution Licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the equally between the beneficiaries and the Transmission Licensee or the Distribution Licensee and the Consumers of Distribution Licensee.

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."

Hence, the rate of interest to be considered while determining the ARR shall be the weighted average interest rate of the actual loan portfolio. However, in absence of detailed data with respect to the actual loan portfolio, the Commission has considered the SBI 1 Year MCLR rate plus 100 basis points as Rate of Interest, in accordance with the MYT Regulations, 2018.

In regard to addition in normative loan for the additional assets recognised, the Commission believes that most of the these assets were funded through the grant under the Tsunami Rehabilitation Programme, therefore, allowing the 70% of these assets as the normative loan would be in violation of the JERC MYT Regulations, 2018. Accordingly, the Commission shall take the appropriate view in the true-up order considering the actual funding of these assets.

As per the MYT Regulations, 2018, if the equity deployed is more than 30% of the capital cost, then equity in excess of 30% is considered as normative loan. The Interest on Loan has been has considered as the SBI 1 Year MCLR rate plus 100 basis points as Rate of Interest, in accordance with the MYT Regulations, 2018.

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

Table 37: Interest and Finance Charges approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	14.80	185.77	13.43
2	Add: Normative Loan During the year	21.21	26.02	26.02
3	Less: Normative Repayment equivalent to Depreciation	7.01	16.93	7.05
4	Closing Normative Loan	29.00	194.86	32.39
5	Average Normative Loan	21.90	190.31	22.91
6	Rate of Interest (%)	8.85%	8.75%	8.75%
7	**Interest on Loan**	**1.94**	**16.65**	**2.00**

The Commission approves Interest and Finance Charges of INR 2.00 Crore in the APR of the FY 2020-21.

4.13. Return on Equity (RoE)

Petitioner's submission

Return on Equity (RoE) is computed in accordance with the MYT Regulations 2018, RoE is computed on 30% of the capital base. Based on the reconciliation of assets in the fixed asset register and the closing equity for FY 2016-17 as per Tariff order dated May 20, 2020, the Petitioner has claimed the opening equity of INR 154.87 crore considering the 30% of the additional assets recognised as the equity addition. Accordingly, RoE is computed at 16% post-tax.

Commission's analysis

RoE has been calculated on normative basis on the average of opening and closing of equity during the year at the rate of 16% (on post-tax basis) with an opening equity considered equivalent to the closing equity of FY 2019-20 as derived in Section 4.10: Capital Structure above. Income Tax payable shall be considered taken on actual basis at the time of True-up. In regard to addition in equity for the additional assets recognised, the Commission believes that most of these assets were funded through the grant under the Tsunami Rehabilitation Programme, therefore, allowing the 30% of these assets as the equity would be in violation of the JERC MYT Regulations, 2018. Accordingly, the Commission shall take the appropriate view in the true-up order considering the actual funding of these assets.

The following table provides the RoE approved in the ARR of FY 2020-21, the Petitioner's submission and RoE now approved by the Commission.

Table 38: RoE approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	53.22	154.87	52.61
2	Additions on account of new capitalisation	9.09	11.15	11.15
3	Closing Equity	62.31	166.02	63.77
4	Average Equity	57.77	160.45	58.19
5	Rate of Return	16.00%	16.00%	16.00%
6	**Return on Equity**	**9.24**	**25.67**	**9.31**

The Commission approves the Return on Equity of INR 9.31 Crore in the APR of the FY 2020-21.

4.14. Interest on Security Deposits

Petitioner's submission

The Petitioner has submitted that it does not collect security deposit from consumers in cash. The consumers are required to create a Term Deposit in scheduled bank equivalent to the security amount and a lien is created in favour of the EDA&N towards security deposit. Hence, Interest on Security deposits is not payable to the consumers. Therefore, EDA&N has not claimed Interest on Security deposit in the ARR.

Commission's analysis

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 as the interest amount on fixed deposits is not available with Petitioner in cash.

Accordingly, the Commission approves Interest on Security Deposit as NIL in the APR of the FY 2020-21.

4.15. Interest on Working Capital

Petitioner's submission

Interest on Working Capital has been calculated based on the normative principles outlined in the JERC MYT Regulations, 2018.

The Petitioner has computed the Interest on Working Capital at rate of 9.75% as INR 6.84 crores.

Commission's analysis

The Commission has considered the receivables as proportionate revenue for 2 months as gap funding is done month on month basis from the Andaman & Nicobar Administration, the revised power purchase cost of FY 2020-21 as determined above and the average consumer security deposit amount during the year for computing the Working Capital Requirement for the year. The maintenance spares have been considered @40% of R&M expenses for 1 month.

The Commission has considered the SBI Base rate as on 1st April 2020 for calculation of interest, as stipulated in the MYT Regulations, 2018.

Accordingly, the Interest on Working Capital has been calculated, as shown in the following table:

Table 39: Interest on Working Capital approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	O&M Expense for 1 month	16.23	17.95	16.32
2	Maintenance spares at 40% of R&M expenses for one (1) month;	1.52	24.53	1.50
3	Receivables equivalent to two (2) months of the expected revenue at the prevailing tariff	32.14	27.69	25.53
4	Less: Amount held as security deposits	0.00	0.00	0.00
5	Net Working Capital	49.90	70.16	43.36
6	Rate of Interest (%)	10.55%	9.75%	9.75%
7	**Interest on Working Capital**	**5.26**	**6.84**	**4.23**

The Commission approves the Interest on Working Capital as INR 4.23 Crore in the APR of the FY 2020-21.

4.16. Provision for Bad & Doubtful Debts

Petitioner's submission

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

Commission's analysis

The Commission also has not considered any provision towards Bad & Doubtful Debts. The same shall be accounted for as per actuals in the True-up of FY 2020-21.

4.17. Non-Tariff Income

Petitioner's submission

The Petitioner has submitted the Non-Tariff Income of INR 3.09 Crore as approved by the Commission in the MYT Order.

Commission's analysis

The Commission also has considered the same NTI as submitted by the Petitioner. The NTI approved in the Tariff Order, the Petitioner's submission and the NTI now approved by the Commission is shown in the table below:

Table 40: Non-Tariff Income approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	**Non-Tariff Income**	**3.09**	**3.09**	**3.09**

The Commission approves Non-Tariff Income of INR 3.09 crore in the APR of FY 2020-21. The same shall be considered at actuals at the time of True-up of FY 2020-21.

4.18. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the Petitioner has submitted the net aggregate revenue requirement of INR 801.89 Crore after adjusting the Non -Tariff Income for FY 2020-21.

Commission's analysis

On the basis of the detailed analysis of the cost parameters of the ARR, the Commission has considered and approved the revenue requirement in the APR of the FY 2020-21 as provided in the table below:

Table 41: Aggregate Revenue Requirement approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost	445.44	403.40	413.63
2	Fuel Cost	106.61	120.13	
3	O&M Expenses	194.77	215.36	195.86
4	Depreciation	7.02	16.93	7.05
5	Interest and Finance charges	1.94	16.65	2.00
6	Interest on Working Capital	5.26	6.84	4.23
7	Return on Equity	9.24	25.67	9.31
8	Interest on Security Deposit	0.00	0.00	0.00
9	Income Tax	0.00	0.00	0.00
10	**Total Revenue Requirement**	**770.29**	**804.98**	**632.09**
11	Less: Non-Tariff Income	3.09	3.09	3.09
12	**Net Revenue Requirement**	**767.20**	**801.89**	**629.00**

The Commission now approves the net ARR of INR 629.00 crore in the APR of FY 2020-21.

4.19. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the revenue from the sale of power at existing tariff as INR 166.97 crore determined on the basis of energy sales in the territory for FY 2020-21.

Commission analysis

The category wise revenue at existing retail tariff is calculated as per the tariff rates applicable for FY 2020-21 as per tariff order dated May 18, 2020. The revenue from demand charges and the energy charges have been projected for each category. The revenue from demand charges and the energy charges have been projected for each category/ sub-category and slab in line with the methodology followed by the Commission in the MYT Order. The Commission has not projected any revenue from Power factor incentive etc. and the same shall be considered as per actuals while truing up of the FY 2020-21. The revenue from category/ sub-category/ slab-wise revenue as computed by the Commission for FY 2020-21 has been shown in the following table:

Table 42: Revenue at existing tariff computed by the Commission for FY 2020-21 (INR Crore)

S. No.	Category	Sales (MUs)	Revenue from Fixed Charges	Revenue from Energy charges	Total	ABR (INR/unit)
1	Life Line Connection	7.37	0.00	1.51	1.51	2.05
2	Domestic	131.71	2.95	55.10	58.05	4.41
3	Commercial	28.42	0.66	24.86	25.52	8.98
4	Government Connection	17.86	0.23	18.43	18.66	10.45
5	Industry	8.81	0.97	5.91	6.88	7.80
6	Bulk	28.93	1.91	36.16	38.07	13.16
7	Public Lighting	6.15	0.56	3.75	4.31	7.01
8	Irrigation, Pumps & Agriculture	0.99	0.03	0.16	0.19	1.88
9	**Total Revenue**	**230.25**	**7.30**	**145.89**	**153.19**	**6.65**

The Commission has determined revenue from the sale of power at existing tariff as INR 153.19 Crore in the APR of FY 2020-21.

4.20. Standalone Revenue Gap/Surplus

Petitioner's submission

Based on the ARR and the revenue from Retail tariff, the standalone revenue gap of INR 634.92 Crore is arrived at in the APR of FY 2020-21.

Commission analysis

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

Table 43: Standalone Revenue Gap/ Surplus at existing tariff for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Net Revenue Requirement	767.20	801.89	629.00
2	Revenue from Retail Sales at Existing Tariff	192.86	166.97	153.19
3	**Net Gap /(Surplus)**	**574.34**	**634.92**	**475.80**

The Commission approves the standalone gap at INR 475.80 Crore in the APR of FY 2020-21.

5. Chapter 5: Determination of Aggregate Revenue Requirement for the FY 2021-22

5.1. Background

In this Chapter, the Commission has determined the Aggregate Revenue Requirement (ARR) for the FY 2021-22. The determination of Aggregate Revenue Requirement has been done in accordance with the MYT Regulations, 2018.

5.2. Approach for determination of ARR for each year of the FY 2021-22

The Commission has computed the individual elements constituting the Aggregate Revenue Requirement for FY 2020-21 based on figures approved in the Business Plan and MYT Order, the actual information available of various parameters for the FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21. The ARR and revenue at existing tariff has been determined for FY 2021-22 to arrive at the revenue gap/surplus for the FY 2021-22.

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

Petitioner's Submission

The Petitioner has revised the number of consumers and energy sales considering the actual figures of FY 2019-20 and the first half of FY 2020-21. The table below provides the number of consumers and energy sales submitted by the Petitioner for FY 2021-22:

Table 44: Number of consumers and Energy Sales submitted by the Petitioner for the FY 2021-22

S. No.	Particulars	No. of Consumers	Energy Sales (MU)
1	Domestic	121128	152.08
2	Commercial	21671	73.81
3	Industry	488	14.10
4	Bulk	68	33.97
5	Public Lighting	766	6.73
6	Irrigation, Pumps & Agriculture	461	1.15
7	**Total Sales**	**144582**	**281.85**

Commission's Analysis

The Commission has considered the category wise sales data, connected load and number of consumers as approved for FY 2020-21 in APR and CAGR for various categories as approved in Business Plan order dated December 31, 2018 for calculating the category wise sales, connected load and number of consumers respectively for FY 2021-22.

5.3.1. Energy Sales

The Commission has extrapolated the approved sales data from the category wise sales figure of FY 2020-21 using the approved CAGR for each category of sales as shown in the following table:

Table 45: Sales projected for FY 2021-22 (MU)

S. No.	Category	Approved Sales for FY 2020-21	CAGR as approved in MYT Order	Projected Sales for FY 2021-22
1	Domestic	139.08	6.40%	147.98
2	Commercial	46.28	1.96%	47.18
3	Industry	8.81	10.00%	9.70
4	Bulk	28.93	5.30%	30.46
5	Public Lighting	6.15	0.00%	6.15
6	Irrigation, Pumps & Agriculture	0.99	3.39%	1.03
7	**Total Sales**	**230.25**		**242.50**

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

Table 46: Energy Sales (MU) approved by the Commission for FY 2021-22

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	177.13	152.08	147.98
2	Commercial	65.76	73.81	47.18
3	Industry	28.96	14.10	9.70
4	Bulk	46.13	33.97	30.46
5	Public Lighting	8.65	6.73	6.15
6	Irrigation, Pumps & Agriculture	1.23	1.15	1.03
7	**Total Sales**	**327.86**	**281.85**	**242.50**

5.3.2. Number of Consumers

Similarly, the Commission has extrapolated the category wise number of consumers for FY 2020-21 using the approved CAGR for each category for number of consumers as shown in table below:

Table 47: Number of Consumers projected for FY 2021-22 (MU)

S. No.	Category	Approved Number of consumers for FY 2020-21	CAGR as approved in MYT Order	Projected Number of Consumers for FY 2021-22
1	Domestic	116,991	3.35%	120,910
2	Commercial	20,885	3.01%	21,514
3	Industry	471	2.94%	485
4	Bulk	66	2.71%	68
5	Public Lighting	734	1.17%	743
6	Irrigation, Pumps & Agriculture	457	11.40%	509
7	**Total Consumers**	**139,604**		**144,228**

The following table provides the number of consumers approved by the Commission in the MYT Order, the Petitioner's submission and as now approved by the Commission.

Table 48: Number of Consumers approved by the Commission for FY 2021-22

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	126,119	121,128	120,910
2	Commercial	22,583	21,671	21,514
3	Industry	650	488	485
4	Bulk	71	68	68
5	Public Lighting	721	766	743
6	Irrigation, Pumps & Agriculture	576	461	509
7	**Total Consumers**	**150,721**	**144,582**	**144,228**

5.3.3. Connected Load

Similarly, the Commission has extrapolated the approved category wise connected load for FY 2020-21 using the approved CAGR for each category for connected load as shown in table below:

Table 49: Connected Load projected for FY 2021-22 (kW)

S. No.	Category	Connected Load for FY 2020-21	CAGR as approved in MYT Order	Projected Connected Load for FY 2021-22
1	Domestic	182,955	9.43%	200,208
2	Commercial	92,813	2.18%	94,837
3	Industry	14,591	8.00%	15,759
4	Bulk	14,331	5.87%	15,172
5	Public Lighting	2,786	0.00%	2,786
6	Irrigation, Pumps & Agriculture	1,210	7.19%	1,297
7	**Total Connected Load**	**308,688**		**330,059**

The table below provides the category wise connected load approved by the Commission in the MYT Order, the Petitioner's submission and as now approved by the Commission.

Table 50: Connected Load approved by the Commission for FY 2021-22 (kW)

S. No.	Category	Approved in MYT Order	Now Approved by Commission
1	Domestic	208,168	200,208
2	Commercial	62,868	94,837
3	Industry	29,389	15,759
4	Bulk	15,566	15,172
5	Public Lighting	2,832	2,786
6	Irrigation, Pumps & Agriculture	1,341	1,297
7	**Total Connected Load**	**320,164**	**330,059**

The Commission approves energy sales of 242.50 MU, connected load of 330,059 kW and number of consumers as 144,228 in the ARR of FY 2021-22.

5.4. Intra-State Distribution Loss

Petitioner's submission

The Petitioner has proposed Intra-State T&D loss level at 19.00% against an approved loss of 13.34% in the Business Plan Order.

Commission's analysis

The Commission, in the Business Plan Order dated December 31, 2018, had set the loss trajectory for the 2nd Control Period considering the actual loss of 15.34% in FY 2017-18. The Petitioner has not provided any justification for the revision distribution losses for FY 2021-22. The Commission approves the T&D loss for FY 2021-22 as approved in the Business Plan Order. The table below provides the T&D loss approved by the Commission in the MYT Order, the Petitioner's submission and as now approved by the Commission

Table 51: Intra-State Distribution Loss approved by the Commission for FY 2021-22 (%)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Intra-State Distribution Loss	13.34%	19.00%	13.34%

The Commission approves the Intra-State Distribution Loss of 13.34% for the FY 2021-22.

5.5. Energy Balance

Petitioner's submission

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

Table 52: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	281.85
2	Distribution losses (%)	19.00%
	Distribution losses (MU)	66.11
3	**Energy Requirement @ periphery**	**347.96**
B	**Energy Availability**	
1	Power Purchase	257.49
2	Own Generation	90.47
3	**Total Energy Availability**	**347.96**
C	**Total shortfall/(Surplus)**	**0.00**

Commission's analysis

The Commission has determined the Energy Balance based on the revised estimates of energy sales. The table below provides the Energy Balance as approved by the Commission in the MYT Order, the Petitioner's submission and the Energy Balance now approved by the Commission.

Table 53: Energy Balance (MU) approved by the Commission for FY 2021-22

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**			
1	Total Sales within the UT	327.86	281.85	242.50
2	Distribution losses (%)	13.34%	19.00%	13.34%
	Distribution losses (MU)	50.47	66.11	37.33
3	**Energy Requirement @ periphery**	**378.33**	**347.96**	**279.83**
B	**Energy Availability**			

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase	239.05	257.49	257.48
2	Own Generation	139.28	90.47	98.92
4	**Total Energy Availability**	**378.33**	**347.96**	**356.40**
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**(76.57)**

In the ARR of FY 2021-22, the Commission has estimated a (surplus) of 76.57 MU considering all the demand net of renewable generation shall be met by the Diesel generation.

5.6. Power Purchase Quantum & Cost

Petitioner's 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. Accordingly, the Petitioner has claimed the fuel cost of INR 172.49 crore as against the approved cost of INR 252.97 crore and the power purchase cost of INR 442.77 crore as against the approved cost of INR 349.27 crore in the MYT Order dated May 20, 2019. The Petitioner has submitted the IPP and HPPs wise power generation, fuel consumption and power purchase cost including own generation for FY 2021-22 as presented in the following tables:

Table 54: Power Purchase Quantum and Cost from IPPs and Fuel Cost for Own Generation for FY 2021-22

S. No.	Particulars	Units generated (MU)	Cost of HSD (INR Cr)	Cost of Lube (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
1	Own Generation (HSD)	88.87	169.99	2.50	0.00	172.49
2	KHEP (Kalpong Hydro)	0.00	0.00	0.00	0.00	0.00
3	Solar(Own)	10.05	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	40.96	67.73	0.00	4.41	72.14
5	HPP-2 (10MW)	63.38	103.52	0.00	7.41	110.93
6	NTPC - SPV	5.47	0.00	0.00	5.11	5.11
7	Other HPPs	0.32	0.66	0.00	0.38	1.04
8	NTPC DG 5MW	47.14	76.19	0.00	6.69	82.88
9	NTPC DG 10MW	74.17	127.09	0.00	9.97	137.06
10	DG P/Plant Niel 0.96MW	2.89	5.30	0.00	0.27	5.57
11	DG P/Plant Havelock 3 MW	0.23	0.40	0.00	0.03	0.43
12	SECI Solar	0.97	0.00	0.00	0.46	0.46
13	M/s. MUNDRA	2.77	0.00	0.00	0.61	0.61
14	NLC	9.29	0.00	0.00	6.37	6.37
15	Mona Generator	9.89	18.95	0.00	1.23	20.18
16	**Total**	**356.40**	**569.84**	**2.50**	**42.93**	**615.26**

Commission's Analysis

As per Regulation 12.1 of the MYT Regulations, 2018, power purchase and fuel cost are uncontrollable parameters. Thus, the power purchase and fuel cost must be revisited every year by the Commission based on the audited accounts. The Commission has considered that the power requirement shall be met mainly from own generation apart from procurement of power from the IPPs and other generators. The Petitioner has considered the power purchase quantum and own generation units as proposed in energy balance. Accordingly, the Commission approves the power purchase quantum and own generation units as determined in the energy balance.

Based on scrutiny of the data submitted by the Petitioner, the Commission sought whether the Petitioner has taken a prior approval of the Commission while signing the new PPAs. In response, the Petitioner submitted that the new PPAs were signed to bridge the additional energy demand and an application for the approval shall be filed shortly. The Commission has decided to allow the power purchase cost in the ARR on provisional basis and directs the Petitioner to get the PPAs approved on the priority basis failing which the Power Purchase Cost in respect to new PPAs signed shall be disallowed in the true-up of FY 2021-22. The Commission further directs the Petitioner to get PPA approved by the Commission before procuring power from any generating station.

Further, the Commission has noted that while claiming the power purchase cost for fully owned renewable generation has been submitted as Nil considering the same are being considered in the Gross Block in lieu of the power purchase fixed costs. The Petitioner is directed to file a separate tariff determination petition for fully owned renewable generation to get the charges notified in order to bring transparency in the power procurement plan and accordingly, the same may be deducted from the gross block of the Assets.

The Commission has observed that the Petitioner has considered different SFC of HSD and Lube oil for various IPPs and HPPs vis-à-vis the values approved by the Commission in the MYT Order dated May 20, 2019. Further, the Commission has determined the plant wise per unit cost for HSD, lube oil and fixed charges as per the fuel bills submitted by the Petitioner. The Commission has assumed an escalation of 10% in the HSD cost and 5% in Lube Oil as the hike due to inflation and past years volatility to bring them at the FY 2021-22 levels. Accordingly, the Commission has computed the fuel requirement for various IPPs, HPPs and own generation considering the approved values of specific fuel consumption as shown in table below:

Table 55: Fuel Requirement for various IPPs, HPPs & Own generations as approved by the Commission

Particulars	Units generated	SFC of HSD (ml/kWh)	Per Litre cost of HSD (INR)	Total Consumption of HSD (Litre)	SFC of Lube (ml/kWh)	Per Litre cost of Lube (INR)	Total Lube Consumption (Litre)
Own Generation (HSD)	73.88	304.00	66.33	22459310.85	0.98	207.88	72401.73
HPP -1 (5 MW)	40.96	273.51	66.33	11202769.64	0.00	0.00	0.00
HPP-2 (10MW)	63.38	258.46	66.61	16381420.05	0.00	0.00	0.00
Other HPPs	0.32	269.00	67.79	86080.00	0.00	0.00	0.00
NTPC DG 5MW	47.14	270.25	65.59	12739583.96	0.00	0.00	0.00
NTPC DG 10MW	74.17	270.25	66.70	20044440.86	0.00	0.00	0.00
DG P/Plant Niel 0.96MW	2.89	270.25	66.70	781022.44	0.00	0.00	0.00
DG P/Plant Havelock 3 MW	0.23	269.00	66.70	61870.00	0.00	0.00	0.00
Mona Generator	9.89	269.00	74.81	2660410.00	0.00	0.00	0.00
Total	**356.40**			**86416907.79**			**72401.73**

The Commission has considered the fixed cost for various power plants as submitted by the Petitioner. Accordingly, the Commission has computed the power purchase cost for various sources as shown in following table:

Table 56: Power Purchase Cost approved by the Commission for FY 2021-22

S. No.	Particulars	Units generated (MU)	Cost of HSD (INR Cr)	Cost of Lube (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
1	Own Generation (HSD)	73.88	148.97	1.51	0.00	150.48
2	KHEP (Kalpong Hydro)	10.56	0.00	0.00	0.00	0.00

S. No.	Particulars	Units generated (MU)	Cost of HSD (INR Cr)	Cost of Lube (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
3	Solar(Own)	14.49	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	40.96	74.31	0.00	4.41	78.72
5	HPP-2 (10MW)	63.38	109.11	0.00	7.41	116.52
6	NTPC - SPV	5.47	0.00	0.00	5.11	5.11
7	Other HPPs	0.32	0.58	0.00	0.38	0.96
8	NTPC DG (5MW)	47.14	83.56	0.00	6.69	90.25
9	NTPC DG (10MW)	74.17	133.70	0.00	9.97	143.67
10	DG P/Plant Niel (0.96MW)	2.89	5.21	0.00	0.27	5.48
11	DG P/Plant Havelock (3 MW)	0.23	0.41	0.00	0.03	0.44
12	SECI Solar	0.97	0.00	0.00	0.46	0.46
13	M/s. MUNDRA	2.77	0.00	0.00	0.61	0.61
14	NLC	9.29	0.00	0.00	6.37	6.37
15	Mona Generator	9.89	19.90	0.00	1.23	21.13
16	**Total**	**356.40**	**575.77**	**1.51**	**42.94**	**620.21**

The approved cost towards diesel-based generation consists of cost incurred towards consumption of HSD oil and Lube oil only 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 revised for the department as a whole in subsequent sections. Accordingly, no separate cost has been approved for own renewable based generation also.

Further, as per the energy balance approved by the Commission, there is an energy surplus of 76.57 MU. The Commission has deducted the power purchase cost pertaining to the energy surplus at Average Power Purchase Cost computed as below:

Table 57: Average Power Purchase Cost and the total Power Purchase cost approved for FY 2021-22

S. No.	Particulars	Value
1	Energy Availability (MU)	356.40
2	Net Energy Excluding Renewable & Hydro generation (MU)	322.15
3	Total Power Purchase Cost as computed by the Commission (INR Crore)	620.21
4	Net Power Purchase Cost Excluding Renewable & Hydro generation (INR Crore)	614.03
5	**Average Power Purchase Cost (Rs/Unit) (4/2*10)**	19.06
6	**Excess Energy (MU) (As per Energy Balance) ***	**76.57**
7	Total cost to be deducted from the approved Power Purchase Cost (INR Crore) (5*6/10)	-145.94
8	**Net Power Purchase Cost approved by the Commission for FY 2020-21 (INR Crore) (3-7)**	**474.27**

**The excess energy has been computed considering the approved sales and T&D loss, further, T&D loss has considered as per MYT Order which is less than the T&D loss claimed by the Petitioner.*

The table below provides the power purchase cost and fuel cost approved in the Tariff Order, claimed by the Petitioner and now approved by the Commission:

Table 58: Power Purchase & Fuel Cost approved for FY 2022-22 (INR crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Fuel Cost	252.97	172.49	474.27
2	Power Purchase Cost	349.27	442.77	
3	**Total Cost**	602.24	615.26	**474.27**

The Commission approves power purchase quantum of 279.83 MU and cost of INR 474.27 Crore in the ARR of FY 2021-22.

5.7. Renewable Purchase Obligation (RPO)

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

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

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and revised the RPO targets, according to which the Petitioner had to purchase 17.00% of its total consumption (including 8.00% from Solar) from renewable sources for the FY 2021-22.

For the FY 2021-22, the Commission approves the RPO target of 39.43 MU comprising of 18.56 MU Solar and 20.88 MU Non-Solar. Out of which, the Petitioner has claimed to purchase the solar energy of around 23.70 MU and non-solar energy of 10.56 MU, thereby resulting in a shortfall in RPO compliance. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2021-22:

Table 59: Cumulative RPO compliance till FY 2021-22

Particulars	FY 18	FY 19	FY 20	FY21	FY22
Solar Target	2.50%	3.60%	4.70%	6.10%	8.00%
Non-Solar Target	4.20%	5.40%	6.80%	8.00%	9.00%
Total Target	**6.70%**	**9.00%**	**11.50%**	**14.10%**	**17.00%**
Sales Within UT	233.50	237.82	262.75	220.17	231.95
RPO Target					
Solar	5.84	8.56	12.35	13.43	18.56
Non-Solar	9.81	12.84	17.87	17.61	20.88
Total RPO Target	**15.64**	**21.40**	**30.22**	**31.04**	**39.43**
RPO Compliance (Actual Purchase)					
Solar	7.00	8.11	10.13	23.30	23.70
Non-Solar	12.82	16.56	5.75	10.08	10.56
Total RPO Compliance (Actual Purchase)	**19.81**	**24.68**	**15.89**	**33.37**	**34.25**
RPO Compliance (REC Certificate Purchase)					
Solar	0.00	0.00	0.00	0.00	0.00
Non-Solar	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance (REC Certificate)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Particulars	FY 18	FY 19	FY 20	FY21	FY22
RPO Compliance (REC+ Actual)					
Solar	7.00	8.11	10.13	23.30	23.70
Non-Solar	12.82	16.56	5.75	10.08	10.56
Total RPO Compliance	**19.81**	**24.68**	**15.89**	**33.37**	**34.25**
Net Shortfall/(Surplus) for this year	-4.17	-3.27	14.33	-2.33	5.18
Cumulative Shortfall in RPO Compliance till current year	**0.00**	**0.00**	**14.33**	**12.00**	**17.18**

The Commission notes that there is a net shortfall of 5.18 MU in RPO compliance for FY 2021-22 and cumulative shortfall of 17.18 MU till FY 2021-22. The Commission directs the Petitioner to complete the RPO obligation on priority.

5.8. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). Regulation 51 of the MYT Regulation, 2018 states the following:

"51.1 The Operation and Maintenance expenses for the Distribution Wires Business shall be computed in accordance with this Regulation.

51.2 Operation and Maintenance (O&M) expenses shall comprise of the following:

a) Employee expenses - salaries, wages, pension contribution and other employee costs;

b) Administrative and General expenses including insurance charges if any; and

c) Repairs and Maintenance expenses.

51.3 The Distribution Licensee shall submit the required O&M expenses for the Control Period as a part of Multi Year Tariff Petition. O&M expenses for the base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the transmission Licensee, estimates of the actuals for the Base Year, prudence check and any other factors considered appropriate by the Commission.

51.4 O&M expenses for the nthYear 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 nth Year. 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 nthYear. 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.

51.5 Terminal liabilities of employees of Licensee including pension expenses etc. shall be approved as per actuals submitted by the Licensee, subject to prudence check or be established through actuarial studies. Additionally, any variation due to changes recommended by the pay commission shall be allowed separately by the Commission, subject to prudence check.

51.6 For the purpose of estimation, the same value of factors – CPIinflation and WPIinflation shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors – CPIinflation and WPIinflation during the truing up exercise for the Year for which true up is being carried out and true up the O&M Expenses for that Year, only to the extent of inflation."

In accordance with above Regulations, the Commission has approved the Employee Expenses, A&G Expenses and R&M Expenses as elaborated below.

5.8.1. Employee Expenses

Petitioner's submission

The Petitioner has determined the revised estimates of the employee cost for the FY 2021-22 based on the actual expenses for the FY 2019-20 & estimated expenses of the FY 2020-21. Accordingly, the Petitioner has claimed the employee expenses of INR 145.07 crore as against the approved employee expenses of INR 121.11 crore.

Commission's analysis

In accordance with the MYT Regulations, 2018, the Commission has determined the Employee expenses for each year of the MYT Control Period. The Regulation 6 of the MYT Regulations, 2018 stipulates the following:

"6. Values for Base Year

6.1 The values for the Base Year of the Control Period shall be determined on the basis of the audited accounts or provisional accounts of last three (3) Years, and other factors considered relevant by the Commission:

Provided that, in absence of availability of audited accounts or provisional accounts of last three (3) Years, the Commission may benchmark the parameters with other similar utilities to establish the values for Base Year:

Provided further that the Commission may change the values for Base Year and consequently the trajectory of parameters for Control Period, considering the actual figures from audited accounts."

In accordance with MYT Regulations, the Employee expenses shall be revised to the extent of change in inflation and growth rate during the control period. Accordingly, the Commission has considered the approved value of employee expenses for FY 2020-21 for computation of revised employee expenses of FY 2021-22. The approved employee expenses for FY 2021-22 has been escalated with the average CPI of previous three years and employee growth rate to arrive at the employee expenses for FY 2021-22.

The CPI Inflation has been computed as follows:

Table 60: Computation of CPI Inflation (%)

FY	Increase in CPI Index	Average increase in CPI Index over 3 years
2017-18	3.08%	**5.35%**
2018-19	5.45%	
2019-20	7.53%	

Table 61: Employee Expenses approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	EMPn-1 (INR Crore)	111.85	**145.07**	112.80
2	Gn (%)	3.78%		3.78%
3	CPIinflation (%)	4.34%		5.35%
4	**Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)**	**121.11**		**123.33**

The Commission approves Employee Expenses of INR 123.33 Cr for FY 2021-22.

5.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted the Administrative & General Expenses of INR 17.00 Crore as against the approved figure of INR 39.25 crore in the MYT Order.

Commission's analysis

In accordance with MYT Regulations, the A&G expenses shall be revised to the extent of change in inflation during the control period. Accordingly, the Commission has considered the approved value of A&G expenses for FY 2020-21 for computation of revised A&G expenses of FY 2021-22. The A&G expenses for FY 2020-21 has been escalated with the average CPI of previous three years to arrive at the A&G expenses for FY 2021-22.

The table below provides the A&G expenses approved in MYT Order, Petitioner's Submission and now approved by the Commission:

Table 62: A&G Expenses approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	A&Gn-1 (INR Crore)	37.62	**17.00**	37.93
2	CPIinflation (%)	4.34%		5.35%
3	**Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)**	**39.25**		**39.97**

The Commission approves the Administrative & General (A&G) expenses of INR 39.97 Crore for FY 2021-22.

5.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has submitted the Repair & Maintenance Expenses of INR 62.34 Crore as against the approved figure of INR 57.43 crore in the MYT Order.

Commission's analysis

In accordance with MYT Regulations, the R&M expenses shall be revised to the extent of change in inflation during the control period. The Commission has considered the k-Factor as approved in the MYT Order and multiplied the same with the opening GFA of FY 2021-22. The resultant amount is then escalated by average WPI Inflation of previous three years to arrive at the R&M expenses for FY 2021-22.

The WPI Inflation has been computed as follows:

Table 63: Computation of WPI Inflation (%)

FY	Increase in WPI Index	Average increase in WPI index over 3 years
2017-18	2.92%	**2.96%**
2018-19	4.28%	
2019-20	1.68%	

The R&M expenses approved by the Commission for FY 2021-22 have been provided in the following table:

Table 64: R&M Expenses approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	FY 2021-22
1	Opening GFA (GFA_{n-1})	212.55
2	K factor approved (K) (%)	24.99%
3	Avg. WPI Inflation (%)	2.96%
4	**R&M Expenses = K x (GFA_{n-1}) x ($1+WPI_{inflation}$)**	**54.69**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 54.69 Crore for the FY 2021-22.

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

The following table provides the total O&M expenses approved by the Commission for the FY 2021-22:

Table 65: O&M Expenses approved by the Commission for FY 2021-22 (In INR Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	121.11	145.07	123.33
2	Administrative & General Expenses (A&G)	39.25	17.00	39.97
3	Repair & Maintenance Expenses	57.43	62.34	54.69
	Total Operation & Maintenance Expenses	**217.79**	**224.41**	**217.98**

The Commission approves Operation & Maintenance (O&M) expenses of INR 217.98 Crore in FY 2021-22.

5.9. Gross Fixed Assets (GFA) and Capitalization

Petitioner's submission

The Petitioner has claimed the capitalisation of INR 28.36 crore for FY 2021-22. The opening value of GFA has been considered as the closing value of FY 2020-21.

Commission's analysis

The Commission has considered the approved closing value of the GFA for FY 2020-21 as the opening value of GFA for FY 2021-22. The Commission has considered the capitalisation for FY 2021-22 as per the Petitioner's submission. Accordingly, the Commission has arrived at the closing value of GFA for FY 2021-22. The following table provides the summary of capitalization now approved by the Commission vis-à-vis the capitalisation approved by the Commission in the MYT Order:

Table 66: Capitalisation now approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	**Capitalisation**	**9.55**	**28.36**	**28.36**

The Commission approves the capitalisation of INR 28.36 crore for FY 2021-22.

5.10. Capital Structure

Petitioner's Submission

The Petitioner has submitted that all the capital assets have been created out of equity contribution from Andaman & Nicobar Administration.

Commission's analysis

Regulation 26 of the MYT Regulations, 2018 specifies the following:

"26. Debt to Equity Ratio

26.1 In case of Existing Projects, debt to equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2018 shall be considered:

Provided that in case of retirement or replacement or De-capitalization of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or De-capitalization of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

26.2 For New Projects, the debt-equity ratio as on the Date of Commercial Operation shall be 70:30 of the amount of capital cost approved by the Commission under Regulation 23, after prudence check for determination of tariff:

Provided that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of tariff:

Provided also that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a normative loan for the Licensee for determination of tariff:

Provided also that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

Provided further that the premium, if any, raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the scheme, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the transmission system or the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

26.3 Any expenditure incurred or projected to be incurred on or after April 1, 2019, as may be admitted by the Commission, as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in this Regulation."

For the purpose of calculating the opening value of GFA in FY 2021-22, the Commission has considered the closing value of GFA for FY 2020-21 as approved in previous chapter.

Therefore, in accordance with the MYT Regulations, 2018, the Commission has determined the Capital Structure for the FY 2021-22 as follows:

Table 67: GFA addition approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	FY 2021-22
1	Opening Gross Fixed Assets	212.55
2	Addition During the FY	28.36
3	Adjustment/Retirement During the FY	0.00
4	Closing Gross Fixed Assets	240.91

Table 68: Loan addition approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	FY 2021-22
1	Opening Loan	32.39
2	Additions during the year	19.85
3	Less: Normative Repayment equivalent to Depreciation	8.24
4	Closing Loan	44.00

Table 69: Normative Equity addition approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	FY 2021-22
1	Opening Equity	63.77
2	Additions during the year	8.51
3	Closing Equity	72.27

5.11. Depreciation

Petitioner's submission

The Petitioner has submitted the depreciation of INR 17.40 crore as per MYT Regulations 2018 as against the approved depreciation of INR 6.79 crores in MYT Order.

Commission's analysis

Regulation 30 of the MYT Regulations, 2018 stipulates the following:

"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.

30.6 For Transmission Licensee, the depreciation shall be calculated at rates and norms specified in the prevalent CERC Tariff Regulations for transmission system.

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.

30.8 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."

The Commission has derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in MYT Regulations, 2018, provided in the following table:

Table 70: Depreciation Rate (%)

Description	Rate
Plant & Machinery	3.60%
Buildings	1.80%
Furniture & Fixtures	6.00%
Land	0.00%
Vehicles	18.00%
Computers	6.00%
Office Equipment	6.00%

The overall depreciation rate is considered as the weighted average depreciation rate calculated based on the asset wise depreciation rates and asset classification as per the Fixed Asset Register of FY 2019-20. The closing GFA of the FY 2020-21 as approved in the APR has been considered as opening GFA of the FY 2021-22. Further, depreciation has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during each year. The following table provides the calculation of depreciation as approved in the MYT order, Petitioner's submission and now approved by the Commission.

Table 71: Depreciation approved by the Commission for FY 2021-22 (In INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	229.08	553.41	212.55
2	Addition During the FY	9.55	28.36	28.36
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	238.63	581.77	240.91
5	Average Gross Fixed Assets	233.86	567.59	226.73
6	Weighted Average Depreciation rate (%)	2.90%	3.07%	3.64%
7	**Depreciation**	**6.79**	**17.40**	**8.24**

The Commission approves a depreciation of INR 8.24 Crore for the FY 2021-22.

5.12. Interest on Loan

Petitioner's submission

The petitioner has estimated the Interest and Finance charges as per the JERC MYT Regulations, 2018 for the year FY 2021-22. The Petitioner has submitted that the majority of capital assets are created out of the equity contribution from Andaman & Nicobar Administration only. The rate of interest considered is SBI MCLR as on 1stApril of the relevant year plus 100 basis points.

Commission's analysis

Regulation 28 of the MYT Regulations, 2018 stipulates the following:

"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-capitalization 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 capitalization 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.

28.8 The finance charges incurred for obtaining loans from financial institutions for any Year shall be allowed by the Commission at the time of Truing-up, subject to prudence check.

28.9 The excess interest during construction on account of time and/or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission:

Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Transmission Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:

Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

28.10 The Transmission Licensee or the Distribution Licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the equally between the beneficiaries and the Transmission Licensee or the Distribution Licensee and the Consumers of Distribution Licensee.

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."

Hence, the rate of interest to be considered while determining the ARR shall be the weighted average interest rate of the actual loan portfolio. However, in absence of detailed data with respect to the actual loan portfolio, the Commission has considered the SBI 1 Year MCLR rate[1] plus 100 basis points as Rate of Interest, in accordance with the MYT Regulations, 2018

As per the MYT Regulations, 2018, if the equity deployed is more than 30% of the capital cost, then equity in excess of 30% is considered as normative loan. The Interest on Loan has been calculated on the average loan during the year with the opening loan for the FY 2021-22 considered equivalent to the closing loan approved in the APR for the FY 2020-21.

The following table provides the Interest on Loan as approved in the MYT order, Petitioner's submission and now approved by the Commission:

Table 72: Interest on loan approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	39.14	194.87	32.39
2	Add: Normative Loan During the year	6.69	19.85	19.85
3	Less: Normative Repayment equal to Depreciation	6.79	17.40	8.24
4	Closing Normative Loan	39.03	197.32	44.00
5	Average Normative Loan	39.08	196.09	38.20
6	Rate of Interest (%)	9.15%	8.75%	8.00%
7	**Interest on Loan**	**3.58**	**17.16**	**3.06**

[1] SBI 1 Year MCLR rate as on 15th May 2021

The Commission approves Interest on Loan as INR 3.06 Crore for the FY 2021-22.

5.13. Return on Equity (RoE)

Petitioner's submission

The Return on Equity (RoE) is computed in accordance with the MYT Regulations, 2018, wherein RoE is computed on 30% of the capital base if the actual equity deployed is more than 30% and the actual equity base if the equity deployed is less than 30%. Accordingly, the Petitioner has computed the Return on Equity at 16% on post-tax basis. The following table summarizes Petitioner's submission:

Table 73: Return on equity as submitted by the Petitioner (INR Crore)

S. No.	Particulars	FY 2021-22
1	Opening Equity Amount	166.02
2	Equity Addition during year (30% of Capitalization)	8.51
3	Closing Equity Amount	174.53
4	Average Equity Amount	170.28
5	Return on Equity (%)	16.00%
6	**Total Return on Equity**	**27.24**

Commission's analysis

Regulations 27.2 and 27.3 of the MYT Regulations, 2018 stipulate the following:

"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."

RoE has been calculated on normative basis on the average of opening and closing of equity during the year at the rate of 16% (on post-tax basis) with an opening equity considered equivalent to the closing equity of FY 2020-21 as approved in the APR. Income Tax payable shall be considered taken on actual basis at the time of True-up. The following table provides the RoE approved in the ARR of FY 2021-22, the Petitioner's submission and RoE now approved by the Commission.

Table 74: RoE approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	68.72	166.02	63.77
2	Additions on account of new capitalisation	2.87	8.51	8.51
3	Closing Equity	71.59	174.53	72.27
4	Average Equity	70.15	170.28	68.02
5	Rate of Return	16.00%	16.00%	16.00%
6	**Return on Equity**	**11.22**	**27.24**	**10.88**

The Commission approves Return on Equity of INR 10.88 Crore for the FY 2021-22.

5.14. Interest on Security Deposits

Petitioner's submission

The Petitioner has submitted that it does not collect security deposit from consumers in cash. The consumers are required to create a Term Deposit in scheduled bank equivalent to the security amount and a lien is created in favour of the FDA&N towards security deposit. Hence, Interest on Security deposits is not payable to the consumers. Therefore, EDA&N has not claimed Interest on Security deposit in the ARR.

Commission's analysis

Regulation 28.11 of the MYT Regulations, 2018 stipulates the following:

"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. "

Since, the Petitioner has not collected any consumer security deposit. Therefore, the Commission has not approved any Interest on Security Deposits as the interest amount on fixed deposits is not available with Petitioner in cash.

Accordingly, the Commission approves Interest on Security Deposit as NIL for the FY 2021-22.

5.15. Interest on Working Capital

Petitioner's submission

The interest on working capital has been calculated based on the normative principles outlined in the MYT Regulations, 2018.

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

- Receivable of two months of billing
- O&M Expenses of one month
- Maintenance Spares at 40% of repair and maintenance expenses for one month
- Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt

The SBI 1 year MCLR as on 1st April 2020 plus 200 basis points i.e. 9.75% (7.75% + 2%) has been considered for computation of interest on working capital. The following table provides the Interest on working Capital proposed for FY 2021-22.

Table 75: Interest on Working Capital submitted by the Petitioner (INR Crore)

S. No.	Particulars	FY 2021-22
1	O&M Expense - 1 month	18.70
2	Maintenance Spare @ 40% of R&M Exp - one month	24.94
3	Two Months Receivables	37.48
4	Less : Amount held as Security Deposit	0.00
5	Total Working Capital	81.12
6	Interest Rate	9.75%

S. No.	Particulars	FY 2021-22
7	**Interest on Working Capital**	**7.91**

Commission's analysis

Regulation 52 of the MYT Regulations, 2018 stipulates the following:

"52. Norms of Working Capital for Distribution Wires Business

52.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Distribution Wires Business for the Financial Year, computed as follows:

(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 charges for use of distribution

wires 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."

Further, Regulation 31.3 of the MYT Regulation, 2018 stipulates the following:

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 1st April of the Financial Year in which the Petition is filed plus 200 basis points.

The Commission has computed the Interest on Working Capital for FY 2021-22 in accordance with the MYT Regulation, 2018. The interest rate has been considered as 9.75% (1 year MCLR as on 1st April 2020 i.e. 7.75% + 200 basis points). The computation of interest on working capital is shown in the following table:

Table 76: Interest on Working Capital approved by the Commission for FY 2021-22 (INR Cr)

S. No	Particulars	FY 2021-22
1	O&M Expense for 1 month	18.16
2	Maintenance spares at 40% of R&M expenses for one (1) month;	1.82
3	Receivables equivalent to two (2) months of the expected revenue from charges for use of distribution wires at the prevailing tariff	26.80
4	Less: Amount held as security deposits	0.00
5	Net Working Capital	46.79
6	Rate of Interest (%)	9.75%
	Interest on Working Capital	**4.56**

The Commission approves the Interest on Working Capital as INR 4.56 Crore for the FY 2021-22.

5.16. Income Tax

Petitioner's submission

The Petitioner has not made any submission has been made in this regard.

Commission's analysis

Regulation 32 of MYT Regulations, 2018 stipulates the following:

"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."

Since the Petitioner has paid no Income tax in the previous years, no income tax liability is computed for the FY 2021-22 and the same shall be Trued-up based on the actual income tax paid by the Petitioner.

Table 77: Income Tax approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	FY 2021-22
1	Income Tax	0.00

5.17. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner has not proposed any provision for bad and doubtful debts during the FY 2021-22.

Commission's analysis

Regulation 62 of the MYT Regulations, 2018 stipulates the following

"62. Provision for bad and doubtful debts

62.1 The Commission may allow bad debts written off as a pass through in the Aggregate Revenue Requirement, based on the trend of write off of bad debts in the previous years, subject to prudence check:

Provided that the Commission shall true up the bad debts written off in the Aggregate Revenue Requirement, based on the actual write off of bad debts excluding delayed payment charges waived off, if any, during the year, subject to prudence check:

Provided also that the provision for bad and doubtful debts shall be limited to 1% of the annual Revenue Requirement of the Distribution Licensee:

Provided further that if subsequent to the write off of a particular bad debt, revenue is realised from such bad debt, the same shall be included as an uncontrollable item under the Non-Tariff Income of the year in which such revenue is realised."

The Commission also has not considered any Provision for Bad & Doubtful Debts for the FY 2021-22. The same shall be accounted for as per actuals during the True-up of respective years.

5.18. Non-Tariff Income

Petitioner's submission

The Petitioner has estimated the non-tariff income of INR 3.25 crore for FY 2021-22 as approved by the Commission in MYT Order.

Commission's analysis

Regulation 64 of the MYT Regulations, 2018 stipulates the following:

"64. Non-Tariff Income

64.1 The amount of Non-Tariff Income relating to the retail supply of electricity as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in calculating the tariff for retail supply of electricity by 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 tariff.

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

(a) Income from rent of land or buildings;

(b) Income from sale of scrap;

(c) Income from statutory investments;

(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) Meter/metering equipment/service line rentals;

(j) Service charges;

(k) Consumer charges;

(l) Recovery for theft and pilferage of energy;

(m) Rebate availed on account of timely payment of bills;

(n) Miscellaneous receipts;

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

(p) Prior period income, etc.:

Provided that the interest/dividend earned from investments made out of Return on Equity corresponding to the Retail Supply Business of the Distribution Licensee shall not be included in Non-Tariff Income:

Provided further that any income earned by a Distribution Licensee by sale of power to other Distribution Licensees or to Consumers as per Section 49 of the Act using the existing power purchase agreements or bulk supply capacity allocated to the Distribution Licensee's Area of Supply shall be reduced from the Aggregate Revenue Requirement of the Distribution Licensee for the purpose of determination of tariff. Such reduction shall be carried out in accordance with Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017, as amended from time to time."

The Commission approves the NTI in line with the approved figures of MYT Order. The same shall be Trued-up on actual basis at the time of true-up. The NTI approved for FY 2021-22 has been shown in the following table:

Table 78: Non -tariff Income approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	**Non- Tariff Income**	**3.25**	**3.25**	**3.25**

The Commission approves Non-Tariff Income of INR 3.25 Crore for the FY 2021-22.

5.19. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the Petitioner has submitted the net aggregate revenue requirement of INR 906.14 crore as against the approved net aggregate revenue requirement of INR 844.31 crore in MYT Order.

Commission's analysis

On the basis of the detailed analysis of the cost parameters of the ARR the net revenue requirement as approved in MYT order, Petitioner's submission and now approved by the Commission for FY 2021-22 is shown in table below:

Table 79: Aggregate Revenue Requirement approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost	349.27	442.77	474.27

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
2	Fuel Cost	252.97	172.49	
3	O&M Expenses	217.79	224.41	217.98
4	Depreciation	6.79	17.40	8.24
5	Interest and Finance charges	3.58	17.16	3.06
6	Interest on Working Capital	5.95	7.91	4.56
7	Return on Equity	11.22	27.24	10.88
8	Interest on Security Deposit	0.00	0.00	0.00
9	Income Tax	0.00	0.00	0.00
10	**Total Revenue Requirement**	**847.58**	**909.39**	**719.00**
11	Less: Non-Tariff Income	3.25	3.25	3.25
12	**Net Revenue Requirement**	**844.33**	**906.14**	**715.75**

The Commission approves net ARR of INR 715.75 Crore for the FY 2021-22.

5.20. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has estimated revenue from sale of power at existing tariff as INR 192.17 Crore for the FY 2021-22 based on the projected energy sales, connected load and number of consumers.

Commission's analysis

The category wise revenue at existing retail tariff is calculated as per the applicable tariff rates. The revenue from demand charges and the energy charges have been projected for each category. The Commission has considered number of single phase and three phase consumers in the ratio of 98.02%-1.98% for Domestic consumers, 86.43%-13.57% for Commercial consumers and 58.52%-41.48% for government consumers. Further, the Commission has also considered the power factor of 0.9 for kVA billing (Fixed Charges). The revenue from category tariff as computed by the Commission for the FY 2021-22 has been shown in the following table:

Table 80: Revenue at existing tariff computed by the Commission for the FY 2021-22

S. No.	Category	Sales (MUs)	Revenue from Fixed Charges (INR Crore)	Revenue from Energy charges (INR Crore)	Total (INR Crore)	ABR (INR/ unit)
1	Lifeline Connection	7.84	0.00	1.61	1.61	2.05
2	Domestic	140.14	3.05	58.63	61.68	4.40
3	Commercial	28.97	0.97	25.35	26.32	9.08
4	Government Connection	18.21	0.24	18.79	19.03	10.45
5	Industry	9.70	1.05	6.50	7.55	7.78
6	Bulk	30.46	2.02	38.08	40.10	13.16
7	Public Lighting	6.15	0.56	3.75	4.31	7.01
8	Irrigation, Pumps & Agriculture	1.03	0.03	0.16	0.19	1.90
	TOTAL	**242.50**	**7.91**	**152.88**	**160.79**	**6.63**

The Commission has determined revenue from sale of power at existing tariff as INR 160.79 Crore in FY 2021-22.

5.21. Standalone Revenue Gap/ Surplus

Petitioner's submission

Based on the ARR and the revenue from retail tariff projected by the Petitioner, the Petitioner has submitted a standalone revenue gap of INR 713.96 Crore for the FY 2021-22.

Commission's analysis

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

Table 81: Standalone Revenue Gap/ Surplus approved at existing tariff for the FY 2021-22 (INR Crore)

S. No	Particulars	Petitioners submission	Now Approved
1	Annual Revenue Requirement	906.14	715.75
2	Revenue from sale of power	192.17	160.79
	Revenue Gap/(Surplus)	**713.96**	**554.96**

The standalone revenue gap at existing retail tariff is INR 554.96 Crore for the FY 2021-22.

6. Chapter 6: Tariff Principles and Design

6.1. Overall Approach

The Commission while designing retail tariffs for the FY 2021-22 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. Since the majority of the energy sales within EDA&N's jurisdiction is to tourism related businesses, the Commission has attempted to ensure that, tourism is promoted, but not at the cost of other segments of society.

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."

In case of Andaman & Nicobar Islands, the source of power is own generation and purchase from Hired Power Plants (HPP), Independent Power Producers (IPP) and 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 713.97 Crore for FY 2021-22 at existing tariff. The revenue gap submitted by the Petitioner for FY 2021-22 is as follows:

Table 82: Revenue Gap at existing tariff submitted by the Petitioner for FY 2021-22 (INR Crore)

Sr. No.	Particulars	FY 2021-22
1	Net Revenue Requirement	906.14
2	Revenue from Sale of Power at existing Tariff	192.17
3	**Net Gap during the year**	**713.96**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**713.96**

Commission's View

The Commission based on the ARR and Revenue from sale of power computed above, has derived revenue gap for the FY 2021-22 at existing tariff as shown in table below:

Table 83: Revenue Gap determined by the Commission at existing tariff for FY 2021-22 (INR Crore)

Sr. No.	Particulars	FY 2021-22
1	Net Revenue Requirement	715.75
2	Revenue from Sale of Power at existing Tariff	160.79
3	**Net Gap during the year**	**554.96**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**554.96**

Accordingly, the Commission determined the revenue gap of INR 554.96 Crore for FY 2021-22 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 554.96 Crore for FY 2021-22. However, the Commission has approved a marginal increase in the tariff of FY 2021-22 over the FY 2020-21 considering the socio-economic conditions of the people in Andaman & Nicobar and 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 32.15 per unit, whereas the Average Billing Rate (ABR) is INR 6.82 per unit. Thus, there is a gap of INR 25.33 per unit.

2. The Petitioner has proposed a tariff hike of 17.01% for FY 2021-22.

3. The Petitioner has proposed a reduced tariff for domestic, commercial and industrial consumers who have installed Rooftop Solar in their premises in order to incentivize them.

Accordingly, the tariff proposal submitted by the Petitioner for FY 2021-22 for individual category is as follows:

Table 84: Tariff proposal submitted by the Petitioner for FY 2021-22

Existing			Proposed		
Category	**Fixed Charge**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
Life Line Connection			**Life Line Connection**		
0 to 100 units	INR 10 per connection per month or part thereof	2.05	0 to 100 units	INR 10 per connection per month or part thereof	1.75
Domestic Connection			**Domestic Connection**		
0 to 100 units	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	0 to 100 units	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	2.50
101 to 200 units		5.00	101 to 200 units		6.00
201 to 500 units		7.20	201 to 500 units		8.50
501 units & above		7.50	501 to 1000 units		10.00
			1001 & above		15.00
Commercial			**Commercial**		

Existing			Proposed		
Category	**Fixed Charge**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
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	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	9.00
201 to 500 Units		9.50	201 to 500 Units		11.00
501 units & above		12.00	501 to 1000 units		13.50
			1001 & above		15.00
Govt. Connection			**Govt. Connection**		
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	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		10.60	501 units & above		10.60
Industrial			**Industrial**		
0 to 500 units	INR 50/kVA/Month or part thereof	6.00	0-200 Units	INR 50/kVA/Month or part thereof	6.00
501 units & above		8.00	201 to 500 Units		8.00
			501 to 1000 units		12.00
			1001 & above		15.00
Bulk Supply	INR 100/kVA/Month or part thereof	12.50	**Bulk Supply**	INR 100/kVA/Month or part thereof	15.00
Public Lighting	INR 150/kVA/Month or part thereof	6.10	**Public Lighting**	INR 150/kVA/Month or part thereof	8.00

Existing			Proposed		
Category	**Fixed Charge**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
Irrigation Pumps & Agriculture	INR 50/kVA/Month or part thereof	1.60	**Irrigation Pumps & Agriculture**	INR 50/kVA/Month or part thereof	1.60
EV Charging Stations		6.90	**EV Charging Stations**		7.00

Accordingly, the computation of impact of proposed tariff on revenue for FY 2021-22 is as follows:

Table 85: Average Tariff Hike for FY 2020-21 as submitted by the Petitioner

Sr. No.	Particulars	Units	FY 2020-21	
			Existing	Proposed
1	Net ARR for FY 2020-21	INR Crore	906.14	906.14
2	Revenue for FY 2020-21	INR Crore	192.17	224.85
3	Gap (1-2)	INR Crore	713.97	681.28
4	Total Sales	MU	281.85	281.85
5	Average Cost of Supply	INR/kWh	32.15	32.15
6	Average Revenue	INR/kWh	6.82	7.98
7	Pure Gap	INR/kWh	25.33	24.17
8	Average Tariff Hike	INR/kWh		1.16
9	Tariff Hike in %	%		17.01%

The Petitioner has proposed to revise the solar tariffs proposed to incentivise the consumers to become prosumers (producing Consumers) by installing solar panels on their roofs or other available areas and participating under the virtual net metering scheme of EDA&N as shown in the following table:

Table 86: Proposed Tariff for consumers installing solar panels in their premises

Sr. No	Particulars		Exiting Tariff		Proposed Tariff	
			Fixed Charges	Energy Charges (INR/kWh)	Fixed Charges	Energy Charges (INR/kWh)
1	Domestic Connection	0 to 200 units	Rs. 20/- per connection per month or part thereof for single phase Rs. 70/- per connection per month or part thereof for three phase	2.05	Rs. 20/- per connection per month or part thereof for single phase Rs. 70/- per connection per month or part thereof for three phase	2.15
		201 to 500 units		7.20		7.55
		501 and above units		7.50		7.85
2	Commercial	0 to 200 units	Rs. 30/- per connection per month or part thereof for single phase Rs. 125/- per connection	7.00	INR 50/- per KVA per month or part thereof	5.75
		201 to 500 units		9.50		6.30

		501 to above units	per month or part thereof for three phase	12.00		8.40
3	Industrial	0 to 200 units	INR 50/- per KVA per month or part thereof	5.50	INR 50/- per KVA per month or part thereof	5.75
		201 to 500 units		6.00		6.30
		501 to above units		8.00		8.40

Commission View

As discussed above, the Commission has determined the retail tariff for the FY 2021-22 in accordance with the principles stated in the Electricity Act, 2003 Tariff Policy, 2016, and the MYT Regulations, 2018. The Tariff design in general is guided by the following principles:

1. Cost reflective: The tariffs determined should efficiently reflect the cost of supply for each consumer category.
2. Progressive tariffs: Ensuring progressivity among tariffs by having telescopic tariff slabs which encourages efficient consumption and at the same time promotes intra-category cross-subsidy by way of charging higher tariff for higher consumption to subsidise the lower consumption consumers
3. Revenue neutrality: There should be no impact on the utility's yearly revenue due to rationalization of tariffs i.e. the overall status quo should be maintained.
4. Affordability: Assessing affordability of electricity for Domestic & Commercial consumers for defining slab ranges and setting tariffs
5. Revenue stability: Utilities should ensure adequate fixed cost recovery from fixed/demand charges
6. Avoiding tariff shocks: Tariff shocks should be prevented and consumers should be kept informed about the future trends in tariffs
7. Demand management and grid stability: Demand management and grid stability should be ensured with demand-based tariffs
8. Simplified tariff structure: Tariff structure should be simplified to make it easily administrable by the utility and easy to understand for the consumer.
9. Smart tariff design: Tariff rate design should take into consideration trends in electric power such as small-scale renewable generation by consumers, energy efficiency, electric vehicle charging, etc.

While all the above parameters contribute significantly in developing a sustainable tariff framework, there are certain parameters namely Cost of Supply and Tariff Affordability which are of importance and constitute the building blocks in achieving the overall objective. The context and the approach for these parameters have been discussed as follows:

1. *Cost of Supply*

a) Context

Due to electricity being a crucial utility item for all consumers, over the period of time, various socio-economic issues have been factored in to determine the end user's tariffs. This has unfortunately led to severe imbalance between the tariffs levied vis-a-vis the cost of supply of the electricity, causing distress to the Discom. For example, in order to ensure that tariffs are kept in check for residential consumers, while still allowing cost recovery for Discoms, cross subsidy is built in between categories. The tariffs so determined, are skewed, with tariff for industrial and commercial consumers being higher and for other categories being lower than their respective costs of supply. The implications of this imbalance in tariffs is twofold – uncompetitive industries owing to higher input costs and inability of Discoms to recover sufficient tariffs from domestic consumers, resulting in financial distress. The issue is more pronounced for rural supply where tariffs are highly subsidized, actual cost of supply is higher and revenue recovery is poor.

It is thus essential that tariffs reflect the true cost to service a category of consumer. As a crucial first step towards cost-reflective tariffs, it is important for distribution utilities to determine the costs of supply (which cascade from generation to transmission and finally to distribution and retail supply of power) that should be prudently recovered from each consumer category. These costs should correspond to the actual costs being imposed by each consumer category on the Discom. By determining consumer category wise costs of supply, the Discom would be in a better position to allocate costs where relevant and determine how tariffs can be levied fairly on each category.

The overall approach that can be followed for accurately determining the Cost of Supply has been discussed as follows

b) Approach:

Presently, the most commonly used approach for determining the cost of supply of electricity for tariff determination is the Average Cost of Supply (ACoS) method. The ACoS is computed by dividing the Annual Revenue Requirement (ARR) determined by the Commission for recovery through tariffs by the total energy sales for the year. However, this methodology doesn't indicate the costs incurred by consumers at different voltage levels using different assets of the network. Therefore, it doesn't help in determining accurate tariffs for particular consumers, eventually resulting in insufficient cost coverage.

As a next logical step, the Voltage wise cost of supply (VCoS) method provides a better reflection of cost to supply to consumers at different voltage levels. A simplified version of the same was suggested by Hon'ble ATE in 2010, to determine VCoS in the absence of all necessary data. In this method, the power purchase costs and other costs (such as network costs, wheeling costs etc.) are allocated to various consumer categories based on energy input or energy sales (as considered appropriate by the State Commission). This approach factors in the voltage level differentiation based on losses, however, it does not factor in asset utilization at different voltage levels.

A more refined version of determination of VCoS uses three parameters for allocating various costs to voltage levels – energy input at each voltage level, energy sales and asset allocation to voltage levels. The losses segregated voltage wise (as percentage of input energy) are to be allocated to different voltage levels based on energy input to each voltage level (as explained in subsequent sections). Subsequently, the cost elements such as power procurement costs, employee expenses, administrative and general expenses and income tax can be allocated to each voltage levels based on total sales at each voltage level. The cost elements, which are dependent on assets such as depreciation, interest costs, return allowed to utility etc. are allocated in ratio of assets allocated to each voltage level. The sum of all the cost components at each voltage level is the cost to supply the particular voltage (EHT/HT/LT).

The Commission is of the opinion that while VCoS differentiates cost allocation based on voltage levels, it does not factor in consumer category level differentiation. For instance, at the same LT level, cost of supplying electricity to a Commercial consumer may be different from that of a Residential consumer. Thus, it believes that the most progressive way forward for EDA&N is to accurately determine the cost of supply is to attempt to determine Cost of Supply at various category level. The Commission notes that States like Andhra Pradesh and Telangana have determined Category wise Cost of Supply albeit with several assumptions and EDA&N must also attempt to determine the same.

On studying the existing methodologies followed internationally, among developing nations with energy access situations like India's, the Commission is of the opinion that the Category wise Cost of Supply methodology is an appropriate starting point. The embedded cost method identifies and appropriately assigns the historical or accounting costs that make up a Discom's revenue requirement to all categories and sub-categories of consumers.

This method involves three steps:

- Cost Functionalization
- Cost Classification
- Cost Allocation

Cost functionalization separates cost data into the functional activities performed in the operation of a utility system - power generation/supply, transmission, distribution and retail supply. Classification determines the portion of the cost that is related to specific cost-causal factors, such as those that are demand-related, energy-related, or customer-related. Finally, the cost allocation step assigns the costs to specific customer categories based on the customer's contribution to the specific classifier selected.

The Commission as part of this Order has determined the tariff according to the Average Cost of Supply (ACoS) due to lack of requisite data. The Commission strongly believes that determination of Category wise Cost of Supply is essential to ensure cost reflectivity in tariffs fixed for different categories. However, the Commission feels that to carry out this exercise a lot of field level information would be required such as Category wise co-incident and non- co-incident demand, Voltage wise value of assets (Voltage wise asset ratio), Voltage wise losses, Category wise break-up of costs related to Metering, Billing and Collection etc. which currently the Petitioner doesn't maintain. Therefore, in absence of the same the Commission is unable to determine the Category wise CoS in this Order but directs the Petitioner to start maintaining this data and submit the same in the tariff proceedings of next year.

2. *Tariff Affordability*

a) Context

The Commission understands that the consumer base of EDA&N is varied and covers a wide spectrum of socio-economic backgrounds, specially the domestic category consumers. It is aware that most low income households spend a substantial share of their income on utility services such as electricity, heating and water. However, any envisaged tariff reforms are often objected to avoid further burdening of these consumers. But to improve the quality of service of electricity, the Discom has to undergo significant capital expenditure which eventually deteriorates the affordability of tariffs. Thus, to tackle this problem and in the spirit of economic wellbeing of all consumer classes, the concept of cross-subsidies has been built into the current tariff structure.

However, the Commission believes that a more scientific and logical approach can be adopted to identify the right categories of consumers and the right cross-subsidy/subsidy requirement that will benefit the end consumers at the same time. Hence, the Commission believes that there is a strong need to develop a scientific methodology to assess the social impact of electricity tariffs.

The overall approach that can be followed for determining the tariff affordability has been discussed as follows.

b) Approach

On reviewing methodologies adopted globally for social impact assessment of electricity tariffs by studying international research reports and studying model practices internationally, the Commission found that Tariff Affordability Ratio (TAR) is a reliable parameter to measure affordability of electricity in households.

TAR is defined by obtaining the burden incurred by a household for electricity as compared to the overall household expenditure. The rationale behind this concept is that the electricity is basic utility and is unavoidable in today's scenario, however, this does not ensure that the expenditure level is in line with the overall household expenditure. Hence, this concept helps to understand the affordability level of electricity on households with different economic levels.

The electricity expenditure can be determined initially for domestic consumers by computing the average consumption levels across each slab and the household expenditure can be estimated from national surveys of household expenditure across economic levels conducted by organizations like NSSO. Thereafter the distribution of consumers of the Discom across tariff slabs can be mapped across the established economic levels to develop the final affordability ratio matrix for the Discom's domestic consumer base.

Following the identification of the current ratio of Tariff Affordability, the Commission in consultation with the stakeholders will develop benchmarks for acceptable affordability levels by studying trends across countries with a demography and energy scenario similar to that of India and propose appropriate tariffs. The final output shall help understand the Commission to modify tariffs in cases where there is more room for tariff increase or a need to correct tariffs. The exercise would also help the Commission in setting tariff slabs as per the paying capacity of the consumers which would be beneficial especially for Domestic category consumers. Additionally, this shall also help the Government to formulate better schemes to effectively channelize its intended benefits.

The Commission in these tariff proceedings is not carrying out this exercise due to unavailability of accurate data. The Petitioner is directed to ensure the sanctity of the data-maintained pertaining to various categories.

The Commission, after analysis of the various components of the ARR for FY 2021-22, has come to the conclusion that the utility has to increase the average tariff from the existing level of INR 6.63 per unit to INR 29.51 per unit to recover the full amount of ARR as approved for FY 2021-22. This however will not be a practical proposition under the socio-economic circumstances.

Keeping in view the above principles and based on the category wise information submitted by the Petitioner, and 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 has approved a marginal increase in the tariff of FY 2021-22 over the FY 2020-21.

Accordingly, considering the revised tariff proposal submitted by the Petitioner for FY 2021-22 and the net ARR approved by the Commission for FY 2021-22, the Commission has approved the tariffs for FY 2021-22. 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 2021-22. Accordingly, the Commission has considered a marginal increase in tariff for FY 2021-22.

The approved tariff for FY 2020-21 is as follows:

Table 87: Existing vs. Tariff approved by the Commission for FY 2020-21

Existing			Approved		
Category	**Fixed Charge**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
Life Line Connection			**Life Line Connection**		
0 to 50 units	INR 10 per connection per month or part thereof	2.05	0 to 100 units	INR 10 per connection per month or part thereof	2.05
Domestic Connection			**Domestic Connection**		
0 to 100 units	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	0 to 100 units	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
101 to 200 units		5.00	101 to 200 units		5.00
201 to 500 units		7.20	201 to 500 units		7.20
501 units & above		7.50	501 units & above		8.50
Commercial			**Commercial**		
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	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		9.50	201 to 500 Units		9.50
501 units & above		12.00	501 units & above		12.75
Govt. Connection			**Govt. Connection**		
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	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	10.00
501 units & above		10.60	501 units & above		11.50
Industrial			**Industrial**		

Existing			Approved		
Category	**Fixed Charge**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
0 to 500 units	INR 50/kVA/Month or part thereof	6.00	0 to 500 units	INR 50/kVA/Month or part thereof	6.00
501 units & above		8.00	501 units & above		9.00
Bulk Supply	INR 100/kVA/Month or part thereof	12.50	**Bulk Supply**	INR 100/kVA/Month or part thereof	13.00
Public Lighting	INR 150/kVA/Month or part thereof	6.10	**Public Lighting**	INR 150/kVA/Month or part thereof	7.00
Irrigation Pumps & Agriculture	INR 50/kVA/Month or part thereof	1.60	**Irrigation Pumps & Agriculture**	INR 50/kVA/Month or part thereof	1.60
EV Charging Stations		6.90	**EV Charging Stations**		6.90
	-				
Temporary Supply	1.5 times the rate applicable to the relevant category of consumers.		**Temporary Supply**	1.5 times the rate applicable to the relevant category of consumers.	

The Commission has also analyzed the Petitioner's proposal of lower tariffs to incentivise the consumers to become prosumers (producing Consumers) by installing solar on their roofs or other available areas. The Andaman Islands has a very high average cost of supply on account of Diesel generation. The Commission appreciates the Petitioner's effort to reduce Diesel generation which shall bring down the average cost of supply and accordingly approves the reduced tariffs for Domestic, Commercial and Industrial categories installing solar on their roofs or other available areas as shown in the following table:

Table 88: Approved Tariff for consumers installing solar in their premises

Sr. No	**Particulars**	**Slab**	**Approved Tariff**	
			Fixed Charges	**Energy Charges (INR/kWh)**
1	Domestic (Solar)*	0 to 200 units	Rs. 20/- per connection per month or part thereof for single phase	2.05
		201 to 500 units		7.20
		501 & above units	Rs. 70/- per connection per month or part thereof for three phase	8.50
2	Commercial (Solar)*	0 to 200 units	Rs. 30/- per connection per month or part thereof for single phase	7.00
		201 to 500 units		9.50

Sr. No	Particulars	Slab	Approved Tariff	
			Fixed Charges	Energy Charges (INR/kWh)
		501 & above units	Rs. 125/- per connection per month or part thereof for three phase	12.75
3	Industrial (Solar)*	0 to 200 units	INR 50/- per KVA per month or part thereof	5.50
		201 to 500 units		6.00
		501 & above units		9.00

** Consumers shall be considered under Domestic (Solar), Commercial (Solar) and Industrial (Solar) category after having installed Rooftop / Ground Mounted Solar Power Plant in their premises equivalent to 15% of the connected load/contract demand or 25% of the roof area whichever is less. Further, if minimum of 250 kWh per kW Solar plant is not generated for more than 6 months, the consumer shall be brought back to their respective non-solar category.*

6.4.2. Revenue from Approved Retail Tariff for FY 2021-22

Based on the retail tariff approved above, the revenue at revised tariff approved by the Commission for FY 2021-22 is given in the following Table:

Table 89: Revenue at tariff approved by the Commission for FY 2021-22

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 100 units		**7.84**	INR 10 per connection per month or part thereof	**2.05**	**0.00**	**1.61**	**1.61**
2	**Domestic**							
	0 to 100 units	120910	66.30	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	3.05	14.92	
	101 to 200 units		44.30		5.00		22.15	
	201 to 500 units		19.61		7.20		14.12	
	501 units & above		9.92		8.50		8.43	
	Sub-total		**140.14**			**3.05**	**59.62**	**62.67**
3	**Commercial**							

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)			
	0-200 Units		17.39	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		13.04	
	201 to 500 Units	**18787**	6.37		9.50	0.97	6.05	
	501 units & above		5.22		12.75		6.65	
	Sub-total		**28.97**			**0.97**	**25.74**	**26.71**
4	**Govt. Connection**							
	0-500 Units		3.64	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	10.00		3.64	
	501 units & above	**2726**	14.57		11.50	0.24	16.75	
	Sub-total		**18.21**			**0.24**	**20.40**	**20.63**
5	**Industrial**							
	0-500 Units	**485**	6.30	INR 50 per kVA per month or part thereof	6.00	1.05	3.78	
	501 units & above		3.39		9.00		3.05	
	Sub-total		**9.70**			**1.05**	**6.84**	**7.89**
6	**Bulk Supply**							
	All units	**68**	**30.46**	INR 100 per kVA per month or part thereof	**13.00**	**2.02**	**39.60**	**41.63**
7	**Public Lighting**							
	All units	**743**	**6.15**	INR 150 per kVA per month or part thereof	**7.00**	**0.56**	**4.31**	**4.86**
8	**Irrigation Pumps & Agriculture**							
	All units	**509**	**1.03**	INR 50 per connection per	**1.60**	**0.03**	**0.16**	**0.19**

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)			
				month or part thereof				
9	**Electric Vehicle Charging Station**	**0**	**0.00**		**6.90**	**0.00**	**0.00**	**0.00**
10	**Temporary Supply**							
	All units		**0.00**	1.5 times the rate applicable to the relevant category of consumers.		**0.00**	**0.00**	**0.00**
11	**Total**		**242.50**			**7.91**	**158.28**	**166.19**

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

Table 90: Revenue gap at tariff approved by the Commission for FY 2021-22 (INR crore)

S. No.	Particulars	FY 2021-22	
		Claimed	Approved
1	Net Revenue Requirement	906.14	715.75
2	Revenue from Sale of Power at Revised Tariff	192.17	166.19
3	**Net Gap during the year**	**713.97**	**549.56**
4	Add: Previous Year Gap	0.00	0.00
5	**Total Gap**	**713.97**	**549.56**

In view of solar rooftop scheme introduced by the Petitioner, it is expected that there will be migration of consumers in all the categories (Domestic, Commercial & Industrial) from higher slab to lower slab, which will impact the revenue calculation of EDA&N. However, the Commission has not projected any reduction in revenue considering the solar panel installation shall bring down the diesel generation and power purchase cost. 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 91: Percentage recovery of ACOS at tariff approved by the Commission for FY 2021-22

S. No.	Category	Average Cost of Supply (INR/unit)	Average Billing Rate (INR/unit)	% of AcoS
1	Life Line Connection (Upto 100 Units)	29.51	2.05	6.95%
2	Domestic	29.51	4.47	15.15%
3	Commercial	29.51	9.22	31.23%
4	Government Connection	29.51	11.33	38.39%
5	Industrial	29.51	8.13	27.56%
6	Bulk Supply	29.51	13.66	46.30%
7	Public Lighting	29.51	7.91	26.79%
8	Irrigation Pumps & Agriculture	29.51	1.90	6.43%
9	Electric Vehicle Charging Station	29.51	0.00	0.00%

S. No.	Category	Average Cost of Supply (INR/unit)	Average Billing Rate (INR/unit)	% of AcoS
10	Temporary Supply	29.51	0.00	0.00%
11	**Overall**	**29.51**	**6.85**	**23.22%**

Table 92: Approved ACoS and ABR by the Commission at approved tariff for FY 2021-22

Sr. No.	Particulars	FY 2021-22
1	Net Revenue Requirement (INR Crore)	715.75
2	Revenue from Revised Tariff (INR Crore)	166.19
3	Energy Sales (MU's)	242.50
4	Average cost of supply/unit (INR/kWh)	29.51
5	Average Billing Rate (INR/kWh)	6.85
6	**Gap (INR/kWh)**	**22.66**

The highlights of the tariff structure approved by the Commission for FY 2021-22 is as follows:

1. The Commission has approved a tariff hike of 3.36% for FY 2021-22 over the tariff for FY 2020-21.
2. The Commission has approved the ABR for FY 2021-22 as INR 6.85/kWh as against the approved Average Cost of Supply of INR 29.51/kWh.

The Petitioner has confirmed that the Revenue Gap shall be borne by the Administration of Andaman & Nicobar Islands, with budgetary support from the 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 100 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		8.50
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		12.75
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	10.00
	501 Units & above		11.50
5.	**Industrial**		
	0-500 Units	INR 50/- per KVA per month or part thereof	6.00
	501 Units & above		9.00
6.	**Bulk Supply**		
	All Units	INR 100/- per KVA per month or part thereof	13.00
7.	**Public Lighting**		
	All Units	INR 150/- per KVA per month or part thereof	7.00
8.	**Irrigation Pumps and Agriculture**		
	All Units	INR 50/- per KVA per month or part thereof	1.60
10	**Electric Vehicle Charging Station**		6.90
9	**Temporary supply**		
	All Units	1.5 times the rate applicable to the relevant category of consumers.	

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7.2. Applicability

Sr. No.	Category	Applicability	Point of Supply news
1	Life Line	Applicable to domestic consumers with monthly consumption of upto 100 units and below.	Note: The Domestic Consumer having consumption above 100 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) Government schools along with related facilities. c) 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, 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.	
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, Hotels & industries such as wood-based, cottage,	The supply will be given through a single delivery and metering point and at a single voltage.

Sr. No.	Category	Applicability	Point of Supply news
		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	
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, 2018 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 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.

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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
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

S. No.	PARTICULARS	Rate (INR)
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 Regulation 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 many of the directives issued by the Commission. In order to strengthen the effective monitoring and ensure timely implementation of all the directives in true spirit, the Commission hereby directs that the Petitioner shall now compulsorily submit:

- The detailed action plan for compliance of all the directives within 1 month of the 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 of 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 18th May 2020 *The Commission has noted the submission of the Petitioner and directs the Petitioner to submit the details of the outstanding arrears at the earliest.*
Petitioner's response in the present Tariff Petition *It is submitted that the department is making all efforts to collect the arrears by improving the collection efficiency. The details of arrears are being compiled and shall be submitted along with the next petition.*
Commission's response It is disheartening to see that the Petitioner has not been able to comply with the Commission's directions and is making the same submission year-on-year. The Commission directs the Petitioner to submit the details of collection of arrears within two months of issuance of this order.

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 18th May 2020 *The Commission has noted the submission of the Petitioner. The Commission directs the Petitioner to get the audited accounts of FY 2017-18 and FY 2018-19 and file the true up Petitions for these years within two months from the issuance of this Tariff Order.*

Petitioner's response in the present Tariff Petition *It is submitted that the Annual Accounts for the FY 2017-18, FY 2018-19 & FY 2019-20 has been finalized but the audit of the same is yet to be complete. True-up petition for the previous years shall be submitted along with the next petition after the audit are completed.*
Commission's response The Commission has noted the submission of the Petitioner and directs the Petitioner to expedite the audit of the financial accounts and file the true up of all pending years along with the tariff petition for FY 2022-23 latest by 30th November 2021.

8.1.3. Bill Payment

Originally issued in Tariff Order dated 04th June 2012
Commission's latest directive in Tariff Order dated 20th May 2019 *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.* **Commission's latest directive in Tariff Order dated 18th May 2020** *The Commission directs the Petitioner to submit the status report within a month of issuance of this order.*
Petitioner's response in the present Tariff Petition *All the Site Offices at South Andaman and North & Middle Andaman (Except Nicobar Division) have Web Based Billing Software connected to intra-net Network or working in standalone mode.* *Moreover, following initiatives were taken by Electricity Department for ensuring delivery of online services anytime & anywhere:* *1) Payment of Electricity Bill (www.urjapay.andaman.gov.in)* *2) Application for Electric Meter Connection and temporary LT Supply (andssw1.and.nic.in/EMCOSP).* *3) Application for Inspection of Electrical Installation (http://andssw1.and.nic.in/swc/depts/electricity/).* *4) Application for ground mounted and rooftop Solar buildings and Akshay Urja Shops (https://usrp.andaman.gov.in/).*
Commission's response The Commission has noted the Petitioner's submission and directs the Petitioner to expedite the enablement of web billing payment for Nicobar Division as well and submit the progress report within 3 months of issuance of this order.

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 18th May 2020 *The Commission has observed that the Petitioner has not submitted the Fixed Asset Register till FY 2018-19. Accordingly, the Commission directs the Petitioner to submit the Fixed Asset Register till FY 2018-19 within three months otherwise the Commission may take appropriate action against the Petitioner.*

Petitioner's response in the present Tariff Petition *It is submitted that the Fixed Asset Register (FAR) for the FY 2017-18, FY 2018-19 & FY 2019-20 has been completed and the same is being submitted separately.*
Commission's response The Commission has noted the Petitioner's submission and accordingly, drops this directive.

8.1.5. Energy Audit

Originally issued in Tariff Order dated 04th June 2012
Commission's latest directive in Tariff Order dated 18th May 2020 *It is disheartening to see that the Petitioner has not been able to comply with the Commission's directions. The Commission directs the Petitioner to submit the Action Plan in one month and comply with the direction within nine months from the issuance of this order.*
Petitioner's response in the present Tariff Petition *At present action are in progress on war footing for installation of smart meters for DTs/ consumers metering. The installation was delayed on account of lockdown due to COVID-19 Pandemic. However, after successfully installation of all the smart meters, Electricity Department expects to conduct real-time energy audit of feeders.*
Commission's response The Commission has noted the Petitioner's submission and directs the Petitioner to submit the Progress report within three months from the issuance of this order.

8.1.6. State load Dispatch Centre

Originally issued in Tariff Order dated 26th February 2018
Commission's latest directive in Tariff Order dated 18th May 2020 *The Commission directs the Petitioner to submit the status report within two months of issuance of this order.*
Petitioner's response in the present Tariff Petition *For monitoring, operation and management of conventional generation as well as solar generation, an Energy Management Center (EMC) is under commissioning by Electricity Department. A building has renovated within Phoenix Bay Power House Complex. All major work has been completed. However, in view of COVID-19 the work is delayed and is expected to be completed within 2 months.* *EMC is established by M/s PGCIL through the funds sanctioned by MoP at an estimated amount of Rs. 23.5 Crores. After commissioning, EMC shall be handed over to the Electricity Department, A&N Administration.*
Commission's response The Commission has noted the Petitioner's submission and directs the Petitioner to expedite the work and complete the establishment of SLDC within six months and accordingly, submit the progress report every months from issuance of this order.

8.1.7. Slab wise details

Originally issued in Tariff Order dated 26th February 2018
Commission's latest directive in Tariff Order dated 18th May 2020 *The Commission directs the Petitioner to make efforts to collect and provide the above data and submit the same at earliest.*
Petitioner's response in the present Tariff Petition *Category-wise sales, number of consumers, connected load, T&D losses, plant-wise generation/purchase, fuel cost is being submitted.*
Commission's response The Commission has not received any data pertaining to Category-wise sales, number of consumers, connected load, T&D losses, plant-wise generation/purchase, fuel cost and directs the Petitioner to submit the requisite along with the tariff petition for next year failing which the Commission may take appropriate assumptions for forecasting revenue and the resultant gap.

8.1.8. Introduction of Fixed charges

Originally issued in Tariff Order dated 26th February 2018
Commission's latest directive in Tariff Order dated 18th May 2020 *The Commission has noted the Petitioner's submission. However, the Petitioner has submitted the overall revenue breakup between fixed charges and energy charges. The Commission directs the Petitioner to submit the category wise fixed charges and energy charges with the next year tariff filing.*
Petitioner's response in the present Tariff Petition *Category wise revenue break up between fixed charges and energy charges is being submitted.*
Commission's response The Commission has not received any data pertaining to Category wise revenue break up between fixed charges and energy charges and directs the Petitioner to submit the requisite along with the tariff petition for next year failing which the Commission may take appropriate assumptions for forecasting the revenue.

8.1.9. T&D Losses

Originally issued in Tariff Order dated 26th February 2018
Commission's latest directive in Tariff Order dated 18th May 2020 *The Commission has noted the Petitioner's submission and directs the Petitioner to submit the status report on the initiatives taken to reduce T&D loss within three months from the date of issuance of this Order.*
Petitioner's response in the present Tariff Petition *With the implementation of Smart Meters Electricity Department expects to identify loss making section in real time which will further contribute in reduction of T&D loss for which appropriate action may be taken.*

In addition to the above, a Rehabilitation of National Highway-4 to Intermediate Lane are under progress by M/s NHIDCL. Under the project, the T&D networks which have outlived its useful life along NH4 is under replacement. The work is under progress through the contractors engaged by M/s NHIDCL. This new T&D network expected to decrease T&D losses.

Commission's response

The Commission has noted that the Petitioner has claimed the T&D loss of 20.00% for FY 2020-21 as against the approved T&D loss of 13.84% in the MYT Order. The Commission has noted the Petitioner's submission, however, the Petitioner is directed to make additional efforts in order to bring the T&D losses in the range as approved by the Commission and submit the status report on the initiatives taken to reduce T&D loss within three months from the date of issuance of this Order.

8.1.10. Details of upcoming Power Plants

Originally issued in Tariff Order dated 26th February 2018

Commission's latest directive in Tariff Order dated 18th May 2020

The Commission has noted the Petitioner's submission and directs the Petitioner to submit the progress report on the proposed power plants within two months from the date of issuance of this Order.

Petitioner's response in the present Tariff Petition

The details of upcoming power plants are as follows:
50 MW LNG Based Power Plant

- 50 MW LNG Based Power Plant will be established by NVVN.
- The revised tender prepared for Single Fuel Engine with the consent of CEA and the tender was floated for 50 MW Gas power project and Fuel supply infra structure on 20.07.2020 and the bid of three bidders opened on 06.02.2021.
- The A&N Command has been requested for NOC for height clearance for establishment of the project.
- 7th Meeting of the Expert Appraisal Committee (EAC) on Environment Impact Assessment (EIA) of Thermal Power Projects held on 15th February, 2021 in respect of Environmental clearance.
- CRZ clearance for Gas Supply Infrastructure provided by Pollution Control Committee on 12.02.2021.
- The PCCF (Wild life) has been requested for environmental clearance for Gas Supply Infrastructure on 04.02.2021
- Project will be commissioned within 28 months from date of LoA.

Solar Power Plant at Middle Andaman, Swaraj Dweep, Shaheed Dweep, Little Andaman and five major islands in Nicobar group including micro grid in hamlets / villages.

- SECI has engaged International Finance Corporation (IFC) for carrying out pre-feasibility study on RE projects in these Islands.
- Further, IFC has appointed M/s Deloitte is under process. The project is under conceptualization and is expected to be completed by March, 2023

Grid connected rooftop solar plant on 469 buildings of capacity 5.71 MW in North & Middle Andaman.

- For implementation of the project proposal has been received from M/s Convergence Energy Service Limited (CESL). CESL is a wholly owned subsidiary of EESL. All the projects related to deployment of electric vehicles and charging station. Solar power renewable etc. shall be carried out by CESL.
- The total project cost for implementation of Rooftop Solar power plant in N&M Andaman on Govt. Building in Annuity Model has been worked out is Rs. 71.65 Cr.
- The proposal submitted to A&N Administration for approval of Competent Authority.

Grid Connected rooftop solar power plant of capacity 2.5 MW in South Andaman with hybrid inverter and battery storage in residential / commercial / industrial category.

- The firm M/s Sunshine Solutions Pvt. Ltd. has been empaneled for installation of aggregate capacity of 2.5 MWp Rooftop Solar PV Plant under the scheme of establishment of 1-50 kWp Solar Rooftop Plant for domestic, commercial and industrial consumers in A & N Islands.
- The estimated timeline of the project is May, 2021.

5 MW & 10 MW Hiring Power Plant at Port Blair and 400 KW Hiring Power Plant at Neil Island is under progress.
Commission's response The Commission has noted the Petitioner's submission and accordingly drops this directive.

8.2. New Directives issued in this Order

8.2.1. Billing the Hotel Industry Consumers under the Industrial Category

It has come to Commission's notice that the Hotels are being charged Commercial tariff by EDA&N in violation of Commission's Review Order dated December 2, 2020 which categorises Hotel Establishments under the Industrial Category. Therefore, the Commission directs the Petitioner to strictly comply with the Commissions said review order dated December 2, 2020.

8.2.2. Details of Hotel industry consumers

The Petitioner is directed to submit the slab wise sales data, connected load and number of consumers for the Hotel industry consumers along with the tariff petition for FY 2022-23.

8.2.3. Approval for new Power Purchase Agreements

The Commission was apprised that the Petitioner has signed the new Power Purchase Agreements (PPAs) to bridge the additional energy demand without taking the prior approval of the Commission. The Commission has allowed the power purchase cost in the APR on provisional basis and directs the Petitioner to get the PPAs approved on the priority basis of issuance of this order. Further, the Petitioner is directed to take the Commission's approval prior to signing any new PPA.

8.2.4. Connected Load and Fixed Charges for Commercial and Government Connections Categories

The Petitioner is directed to provide the details pertaining to slab wise sales data, connected load and number of consumers for the Commercial and Government Connections Categories along with the tariff petition for FY 2022-23 in order to introduce the kVA based fixed charges.

8.2.5. Tariff Determination for Own Renewable Generation

It has come to Commission's Notice that while claiming the power purchase cost for fully owned renewable generation has been submitted as Nil considering the same are being considered in the Gross Block in lieu of the power purchase fixed costs. The Petitioner is directed to file a separate tariff determination petition for fully owned renewable generation within three months of issuance of this Order to get the fixed charges notified in order to bring transparency in the power procurement plan and accordingly, the same may be deducted from the gross block of the Assets.

Annexures

Annexure 1: List of Stakeholders who attended the Public hearing on 18th May 2021 through Video Conference

Table 93: List of Stakeholders

S.No.	Name of Person (Mr/Ms)	Address
1	Girish Arora	Hoteliers Association A&N Islands
2	Diwakar Moorthy	AKT Entertainment
3	G. Bhasker	TSG HOTELS AND RESORTS
4	Shri Mohd. H Jadwet	Andaman Chamber of Commerce & Industry
5	G. BHASKER	Former General Secretary - ANTCC
6	Vikas Lall	Aparupa Hotel & Resort
7	Dr T.K.Jijith Rekh	1/BJP Bhawan Middle Point Port Blair A&N islands
8	K. ABDUL GAFOOR	Model Village, Kanyapuram, PO Wimberly Gunj, South Andaman,Pin 744206
9	Prasant.P. Shahni	
10	M. H. Jadwet	
11	Sanjay Chowdhury	President Hotel and Restaurant Association of Andaman and Nicober Islands
12	Zakir Jadwet	Jadwet Hotels
13	A. Mohammad Mustafa	
14	Sanjay Chowdhury	President Hotel and Restaurant Association of Andaman and Nicober Islands