TARIFF ORDER

Annual Performance Revenue for FY 2021-22, Aggregate Revenue Requirement for 3rd MYT Control Period (FY 2022-23 to FY 2024-25) & Determination of Retail Supply Tariff for the FY 2022-23

Petition No. 81/2022

For

Electricity Department Andaman & Nicobar Administration (EDA&N)

1st August 2022

JOINT ELECTRICITY REGULATORY COMMISSION
For the State of Goa and Union Territories,
3rd and 4th Floor, Plot No. 55-56, Sector -18, Udyog Vihar - Phase IV
Gurugram, (122015) Haryana
Telephone: +91(124) 4684705 Telefax: +91(124) 4684706
Website: www.jercuts.gov.in
E-mail: secy.jercuts@gov.in

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Table of Contents

List of Tables

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
EDA&N	Electricity Department Andaman & Nicobar Administration
FY	Financial Year
GoI	Government of India
HPP	Hired Power Plant
HT	High Tension
IPP	Independent Power Producer
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
NIOT	National Institute of Ocean Technology
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
SFC	Specific Fuel Consumption
SPV	Solar Photovoltaic
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

Smt. Jyoti Prasad, Member (Law)

Petition No. 81/2022

In the matter of

Approval of Annual Performance Revenue for FY 2021-22, Aggregate Revenue Requirement for 3rd MYT Control Period (FY 2022-23 to FY 2024-25) & Determination of Retail Supply Tariff for the FY 2022-23.

And in the matter of

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

ORDER

Dated: 1st August 2022

1) This Order is passed in respect of a Petition filed by the Electricity Department Andaman & Nicobar Administration (herein after referred to as "The Petitioner" or "EDA&N" or "The Licensee") for Approval of Annual Performance Revenue for FY 2021-22, Aggregate Revenue Requirement for 3rd MYT Control Period (FY 2022-23 to FY 2024-25) & Determination of Retail Supply Tariff for the FY 2022-23, 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 8th April 2022. 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. The Public Hearing was held on 24th and 27th May 2022 at Swaraj Dweep Island and Port Blair and all the Stakeholders/Electricity Consumers present in the Public Hearing were heard.

3) The Commission based on the Petitioner's submission, 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 2021-22 and ARR for FY 2022-23 to FY 2024-25 along with Retail Tariff for the FY 2022-23.

4) 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 2021-22:

Table 1: Standalone Revenue Gap/ (Surplus) approved for FY 2021-22 (INR Crore)

S. No	Particulars	Petitioner's submission	Approved by Commission
1	Net Revenue Requirement	1054.92	932.09

Secretary, JERC
(For Goa & UTs)

S. No	Particulars	Petitioner's submission	Approved by Commission
2	Revenue from Retail Sales at Existing Tariff	224.49	187.93
3	**Net Gap /(Surplus)**	**830.43**	**744.15**

(b) The following table provides ARR, Revenue and gap as submitted by the Petitioner and approved by the Commission for FY 2022-23:

Table 2: Standalone Revenue Gap/ (Surplus) approved for FY 2022-23 (INR Crore)

S. No	Particulars	Petitioner's submission	Approved by Commission
1	Net Revenue Requirement	1139.14	995.72
2	Revenue from Retail Sales at Approved Tariff	346.64	216.22
3	**Net Gap /(Surplus)**	**792.50**	**779.49**

(c) The Commission has approved tariff hike of 10.69% for FY 2022-23 over the existing tariff for FY 2021-22.

(d) The Commission has introduced the kW/kVA based billing for the fixed charges for consumers under the Domestic, Commercial and Government Connections categories in the tariff schedule for FY 2022-23.

(e) The Commission has introduced a new category "Hotels/ Restaurant/ Resorts" with tariffs applicable to various Hotels, Restaurants and Resorts establishments in the islands of Andaman & Nicobar.

(f) Further, the Commission has introduced new tariff slabs in Commercial and Industrial Category and has introduced separate tariffs for LT Industrial and HT Industrial under the Industrial Category.

(g) The Commission has approved the average revenue for FY 2022-23 as INR 7.80/kWh as against the approved Average Cost of Supply of INR 35.92/kWh.

(h) This Order shall come into force with effect from 1st August 2022 and shall, unless amended or revoked, continue to be in force till further orders of the Commission.

5) 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.

6) Ordered accordingly, the attached documents giving detailed reasons, grounds and conditions are the Integral part of this Order.

Sd/-
(Jyoti Prasad)
Member (Law)

Place: Gurugram
Date: 1st August 2022

Certified Copy
RKumar.
(Rakesh Kumar)
Secretary, JERC

Secretary, JERC
(For Goa & UTs)

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.

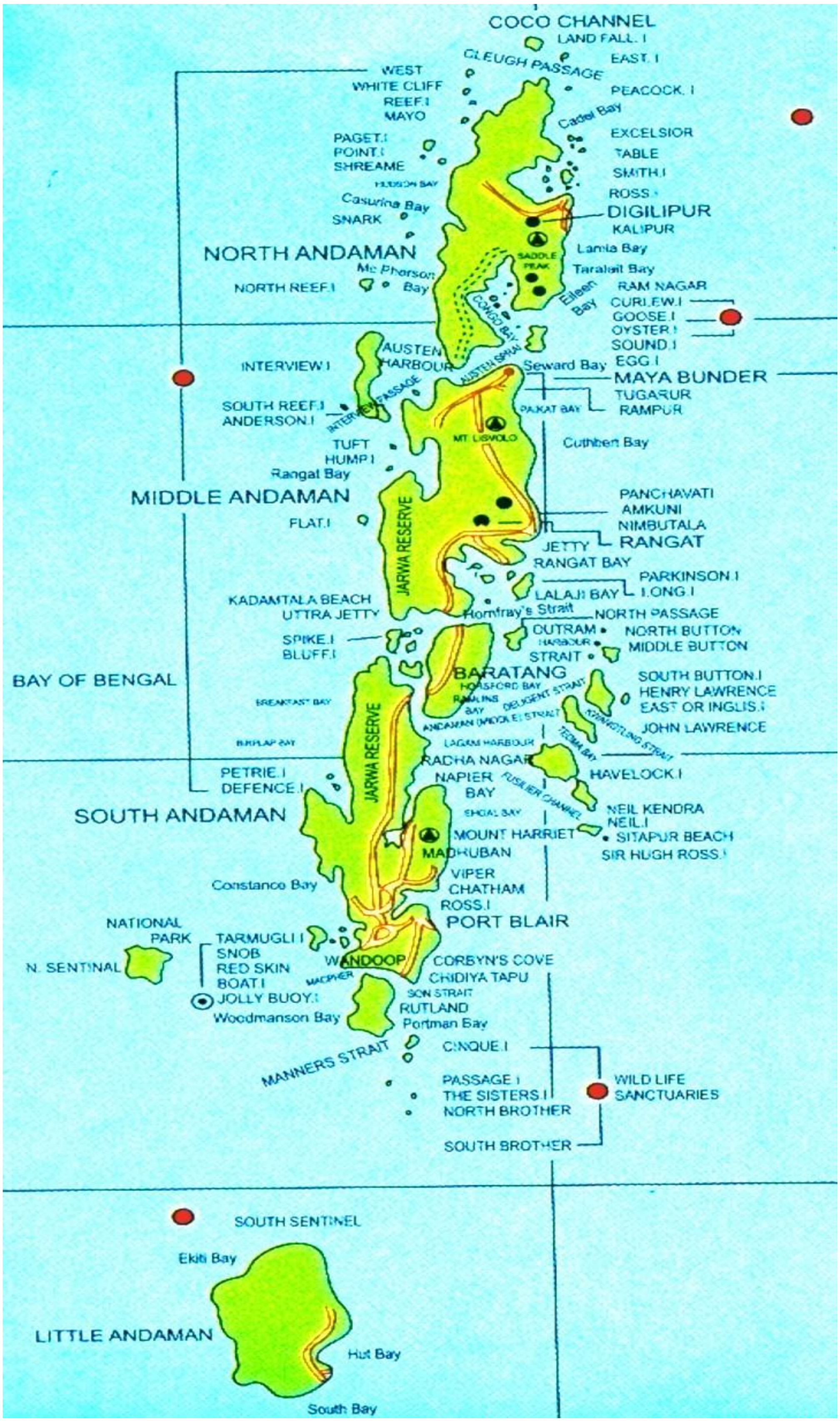
1.2. Andaman & Nicobar Islands

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.

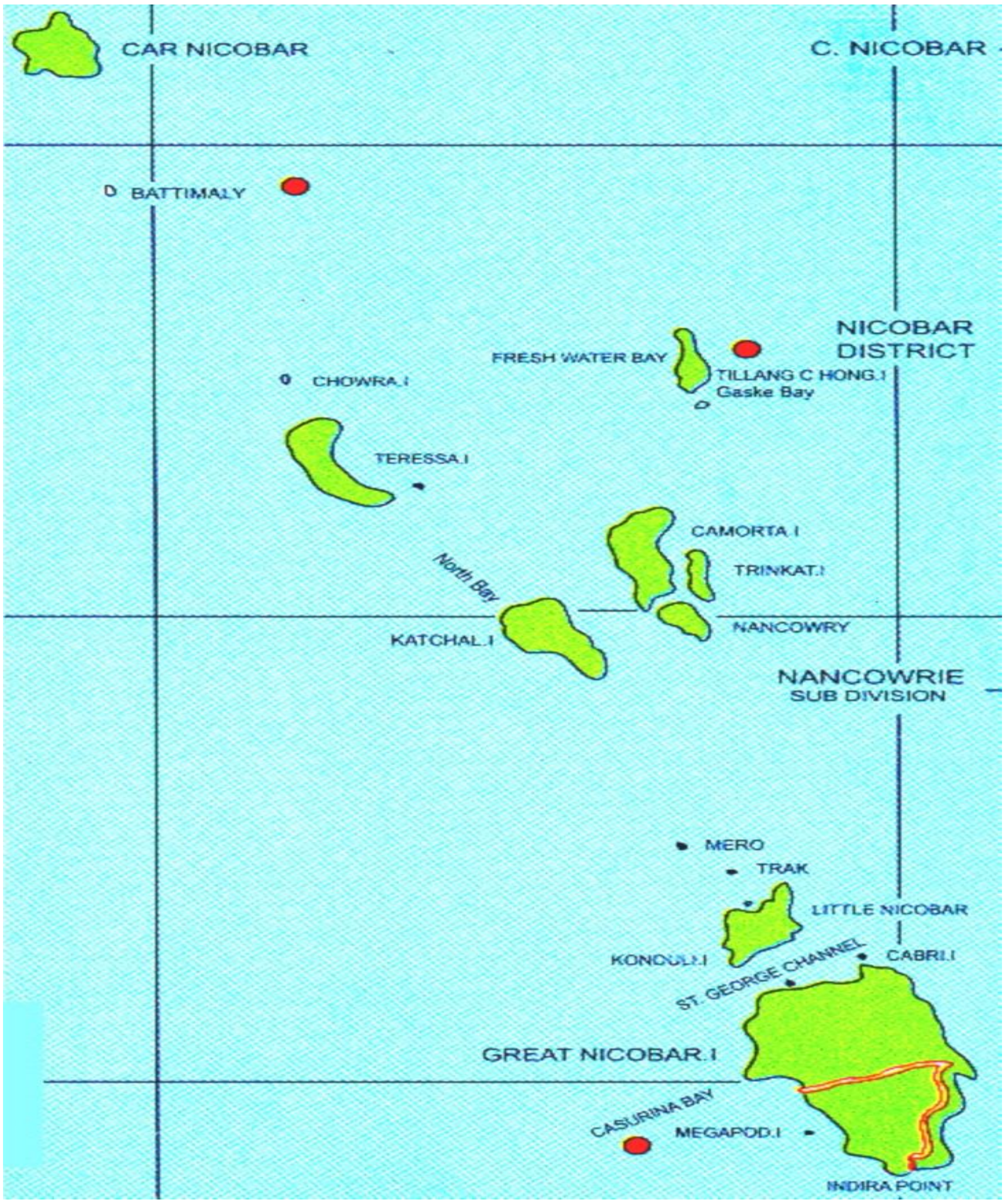
The tempo of economic development has tremendously accelerated along with all-round expansion in the areas/ sectors, viz., (i) Shipping Services, (ii) Civil Supplies, (iii) Education, (iv) Fisheries, (v) Tourism & Information Technology, (vi) Health, (vii) Industries, (viii) Rural Development, (ix) Social 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



Nicobar 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, powerhouse 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 present Installed Capacity of EDA&N is approximately 127.80 MW from various generating stations. The current demand mainly comprises of the domestic and commercial category, which contributed approximately 80% to the total sales of the EDA&N. The table below gives an overview of present transmission and distribution infrastructure of EDA&N as of 31.03.21:

Particulars	Value
33KV Lines	480.53 Km.
11KV Lines	984.47 Km.
LT Lines (415 V)	3858 Km.
Distribution Transformers	1136 Nos.
Capacity of Distribution Transformers 33 KV S/S	227.20 MVA
Total Number of Powerhouse (in Nos)	53 Nos.
Peak Demand	60 MW
Present Installed Capacity	127.80 MW
Diesel Capacity (including 36.53 MW Hiring)	93.32 MW
Hydro Capacity	5.25 MW
Solar Capacity	29.23 MW
Departmental Powerhouse	25 Nos
Private Powerhouse	17 Nos
Community Powerhouse	11 Nos
Consumers	141676

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. Multi Year Tariff Regulations, 2021

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 (hereinafter referred to as MYT Regulations, 2021) on March 22, 2021. These Regulations are applicable in the 3rd MYT Control Period comprising of three financial years from FY 2022-23 to FY 2024-25. 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.

1.6. Filing and Admission of the Present Petition

As per Regulation 9 and 17 of the JERC MYT Regulations, 2021 the Petitioner is required to file Multi Year Tariff Petition for the three years Control Period from FY 2022-23 to FY 2024-25 with details for each year of the Control Period and Tariff proposal for the first year of the Control Period for approval of the Commission.

The Petitioner has submitted this Petition for approval of its Multi Year Tariff for the three years Control Period from FY 2022-23 to FY 2024-25 on 6th April 2022, which was admitted by the Commission on 8th April 2022 and marked as Petition no. 81/2022.

1.7. Interaction with the Petitioner

A preliminary scrutiny/analysis of the Petitions were 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) on May 10, 2022 with the Petitioner at the Commission's office in Gurugram, 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	13.04.2022
2	Technical Validation Session	10.05.2022
3	Reply received from the Petitioner with regard to first discrepancy Note	17.05.2022
4	Public hearing	24.05.2022 and 27.05.2022
5	Reply received from the Petitioner with regard to queries raised in TVS	5.07.2022, 20.07.2022, 22.07.2022
6	Petitioner's reply to the Stakeholders' comments sought by the Commission	5.07.2022

1.8. Notice for Public Hearing

Public Notices were published by the Commission in the leading newspapers as tabled below, giving due intimation to the stakeholders, consumers and the public at large about the Public Hearing to be conducted by the Commission. These notices were also uploaded on the Commission's website:

Table 4: Details of Public Notice published by the Commission

S. No.	Date	Name of Newspaper	Language	Place of circulation
1	May 3, 2022	Sanmarg	Hindi	Andaman & Nicobar Islands
2		Andaman Express	English	
3		Arthik Lipi	Bengali	
4		The Echo of India	English	
5	May 21, 2022	Sanmarg	Hindi	
6		Andaman Express	English	
7		Arthik Lipi	Bengali	
8		The Echo of India	English	

The Public Notice was published by the Petitioner in the following newspapers for inviting objections/suggestions from the stakeholders on the Tariff Petition:

Table 5: Details of Public Notice published by the Petitioner

S. No.	Date	Name of Newspaper	Language	Place of circulation
1	May 12, 2022	Sahil Ki Oar	Hindi	Andaman & Nicobar Islands
2	May 14, 2022	Daily Telegrams	English	
3	May 16, 2022	Andaman Sheekha	English	
4	May 19, 2022	Mini India	English	

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 conducted by the Commission on 24th and 27th May 2022 in Swaraj Dweep Island and Port Blair respectively.

1.9. Public Hearing

The Public Hearing was held on 24th and 27th May 2022 at Swaraj Dweep Island and Port Blair to discuss the issues 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 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 JERC MYT Regulations, 2018 and JERC MYT Regulations 2021.

The Public Hearing was held on 24th and 27th May 2022 at Swaraj Dweep Island and Port Blair respectively on the Petition for Business Plan for MYT Control Period from FY 2022-23 to FY 2024-25 and Approval of Annual Performance Revenue for FY 2021-22, Aggregate Revenue Requirement for 3rd MYT Control Period (FY 2022-23 to FY 2024-25) & Determination of Retail Supply Tariff for the FY 2022-23. 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. Tariff shock for all category of Consumers

Stakeholder's Comment:

The stakeholder has provided a table which compares the proposed rates for the years 2022-23 with the approved rates of 2020-21.

S.No.	Category	Proposed tariff 2022-23	Approved tariff 2020-21	% Increase
1	Domestic Connection			
	a) 501 to 1000	11.50	8.50	35.29%
	b) 1000 & above	13.00	8.50	52.94%
2.	Domestic Connection (Bed & Breakfast)			
	501 to 1000	15.00	8.50	76.47%
	1000 & above	20.00	8.50	135.29%
3.	Commercial			
	501 to 1000	18.00	12.75	41.17%
	1000 & above	25.00	12.75	96.07%
4.	Private Education			

S.No.	Category	Proposed tariff 2022-23	Approved tariff 2020-21	% Increase
	501 to 1000	16.00	12.75	25.49%
	1000 & above	23.00	12.75	80.39%
5.	Industrial			
	501 to 1000	15.00	9.00	66.66%
	1000 & above	25.00	9.00	177.77%

The stakeholder has submitted that from above it is clear that the increase in tariff is from 25.49% to 177.77% across all categories. This inordinate increase in tariff amounts to a tariff shock and shall cause grievous harm to businesses, education sector, industries as well as to domestic users. This increase is being proposed during the Covid-19 pandemic when all sections of society are suffering. Industry, business, hotels and education sector etc. have suffered severe financial losses due to the lockdowns imposed by the A&N administration.

Petitioner's Response:

The Petitioner has submitted that the hike proposed by the department is different for different slab and category. Further, a lower hike has been proposed for Low Value consumers (consumption less than 500 units) whereas higher hike is proposed in tariff for High Value Consumers. This strategy shall promote and encourage these high value consumers to move towards small scale renewable plants on their respective premises. This not only reduces their dependency on the grid but will subsequently reduce their energy bills.

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 5 of the Tariff Order.

2.2.2. Rate difference between Electricity department of Andaman and other UTs

Stakeholder's Comment:

The stakeholder has submitted that the rates proposed by the Electricity Department are extremely high when compared with the rates being charged by the Electricity Department of other UTs. For instance, the Electricity charges for hotels operating in other UTs are as follows:

Rate	Rate
Chandigarh	5.00 Rs/kWh
Daman & Diu	4.05 Rs/ kWh
Puducherry	7.00 Rs/ kWh
Lakshadweep	9.50 Rs/ kWh
Andaman & Nicobar	25.00 Rs/ kWh

Petitioner's Response:

The Electricity Department sought separate category for Hotel Establishment bearing in mind that charging hotels under industrial category would have huge financial implication on the state exchequer. The Petitioner submitted that there is a huge Geographical and economic dis-similarity between the Electricity Department and its counterpart DISCOMs/ department active in other UTs. This economic dissimilarity is also obvious from the fact that cost of supply of electricity for A&N Islands is Rs. 38.79 per unit whereas the cost of supply of electricity for other UTs i.e. Puducherry at 5.44 per unit, Goa at 5.24 per unit, Daman & Diu at 5.43 per unit and DNH Power

Distribution Corporation Limited at 5.74 per unit. Still Electricity Department offers power to its consumers at much cheaper subsidized rate as compared to its counterpart DISCOMs/ department active in other UTs. This subsidy causes a huge gap between Annual Revenue Requirement (ARR) and Revenue Realized (RR).

Commission's View:

The charges are being approved by the Commission based on prudence check, proposal of the licensee, cost structure of the licensee, etc. Since these are different for different utilities under the jurisdiction of the Commission and are comparatively higher in Andaman & Nicobar Islands, the tariffs are higher in Andaman & Nicobar Islands vis-à-vis the other UTs. Further, 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 5 of the Tariff Order.

2.2.3. Use of expensive, inefficient and polluting means of producing electricity

Stakeholder's Comment:

The ED of Andaman & Nicobar administration has adopted expensive, inefficient and polluting means of producing electricity like generating power from Diesel generating sets. This has resulted in high cost of production. Solar generation has been a non- starter because the solar plants installed cannot successfully generate power due to the dense tree cover and several months of monsoon. Therefore, instead of passing the high charges onto the consumer, the ED must explore other ways of generating cost effective and clean energy. The alternate ways of generating electricity can include the use of technologies such as Geo-Thermal, Tidal Energy, Multi Grid and Nuclear.

Petitioner's Response:

The Petitioner has submitted the following:

- Possibility of Geo-Thermal does not exist in A&N Islands.
- Further, possibility for Nuclear Power is under exploration.
- Solar Power Plant cannot be termed as unsuccessful as this power plants helps in achieving RPO Targets as well as generation from these plants helps in reduction of HSD consumption and saving fossil fuels.

Further, the Petitioner has submitted that it is pertinent to note that as per the proposed tariff electricity is supplied to its consumers at subsidized rate compared to proposed ACoS of Rs. 38.79 per unit. Any further subsidy may be detrimental for the department and shall have huge financial implication.

Commission's View:

The Commission appreciates the suggestion of the stakeholders, however, the generation of power from tidal energy is at nascent stage and is going through technological advancement and hence, the cost of power generation from tidal energy will be higher. Further, the consumers may also be encouraged to install solar rooftop as per the Net Metering Regulations, 2019

2.2.4. Huge tariff hike for Consumers who moved from industrial to commercial category

Stakeholder's Comment:

The stakeholder has submitted that the overall effect on consumers which are currently moved to Commercial category from Industrial is to the tune of almost 90% which is highly unrealistic for the current financial year.

We believe existing Tariff structure is already at its peak and consumers expect some relaxation of rates at this juncture. Inefficiencies at power stations needs to be improved by proper methodological approach and corrective procedures adopted thereafter. Keeping in mind the Tourism promotion, reliability and cost per unit of Power, we had set up two Hotel units in the UT of A & N Islands. However in recent past, our running costs like Power has increased so much that it is really impossible for us to sustain our support to the TOURISM segment which is falling day by day due to numerous Govt reasons like - closure of Airport & other stringent Covid guidelines. Moreover, the numerous power cut at Havelock and Port Blair is another challenge for us since running Diesel Generators has also got costly due to escalation of fuel prices. These price escalations will eventually force us to jack up the prices of our room rates which are already very high considering the ever so high operational cost to run a property in these islands. This will directly impact the flow of tourists in Andaman since they wouldn't feel the necessity of spending so much on their trip and would rather travel to our neighbouring countries at that same cost. We hope JERC will take note of our strong resentment over proposed tariff hike and will adhere to improve the delivery of services and achieve cost effectiveness through technical, managerial and administrative restructuring of the utilities. We will extend all possible help for this activity.

Petitioner's Response:

In response to the submission, the Petitioner submitted that the overall impact even for High Value Consumers consuming more than 1000 units is around 60% only. However, this is marginal compared to losses borne by Electricity Department. Moreover, hotels being fully commercial activity, a separate category at par to the tariff of commercial category has been proposed. Further, the tourism activities have been reopened in full respect and are gaining momentum. In fact, all the restrictions relating to COVID – 19 have been withdrawn vide order dated April 8, 2022.

It is pertinent to note here that, as per the proposed tariff electricity is supplied to its consumers at subsidized rate compared to proposed ACoS of Rs. 38.79 per unit. Any further subsidy may be detrimental for the department and shall have huge financial implication.

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 5 of the Tariff Order.

2.2.5. Problems for inviting big MNCs to set up industries and factories

Stakeholder's Comment:

The stakeholder submitted that the tariffs proposed by the Petitioner is detrimental for our industry. We are already faced with high cost of operations due to the distance from mainland India and this will only add further to the cost. In this current age, where states and UT are inviting big MNCs to set up industries and factories by giving free power and other perks. Here in Andamans, we are suppressing already functioning establishments by burdening them with additional cost.

Further, it is not our fault, that the government over the years haven't invested in renewable and cheaper ways of generating power. The current cost mention in the circular is Rs 38 per unit, which is not true for Port Blair, as it takes into account cost of production across North to South of Andaman & Nicobar Islands. Our establishment is based in Port Blair, so why the additional cost is loaded on to us. If we have to produce our own power, current cost of producing electricity by means of generator is Rs 22 per unit then why do we even need a government electric connection, when we can produce it at a cheaper rate.

Petitioner's Response:

The Petitioner has submitted that the proposed hike in Tariff is to reduce a gap between ARR and RR of the Electricity Department. A&N Administration already offers various incentives to promote industrial sector. Any further subsidy from Electricity Department shall be detrimental for the department in the form of huge revenue loss.

The interpretation of the stakeholder that the average cost of power is taken into account cost of production across North to South of Andaman & Nicobar Islands whereas the establishment of the stakeholder is based in Port Blair holds no merit. It is to submit that ARR is decided based on the total cost incurred by the Electricity Department in providing power in complete A&N Islands.

It is pertinent to note here that, as per the proposed tariff electricity is supplied to its consumers at subsidized rate compared to proposed ACoS of Rs. 38.79 per unit. Any further subsidy may be detrimental for the department and shall have huge financial implication.

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 5 of the Tariff Order. Further, the Petitioner is directed to re-assess their existing generation facilities and explore the possibilities to bring down the generation cost.

2.2.6. Hotel industry facing difficult times due to Pandemic

Stakeholder's Comment:

We strongly submit our objections to the proposed increased revision of electricity tariff for different sectors of consumers of Andaman and Nicobar Islands. During these difficult times of pandemic when the entire industry and more specifically the hotel industry which was the first to be affected and the last to recover, this unjust and exorbitant increase proposed by the Andaman administration will not only put the revival but the survival of the industry at stake affecting the common population who are dependent on this industry for employment. As Andamans does not have any other major employment in private sector, Tourism is the only industry which generates major employment to the unemployed.

The hotel industry is now in a such a stage that it is struggling for its own survival. We are not even able to manage to pay salaries to our employees and take care of our basic operations. Many hotels have shut down and are into liquidation due to the financial stress. Due to increase in costs the hotel tariff will be bound to increase substantially which would in turn make the destination more expensive to compete with other popular destinations in South East Asia.

The electricity tariff change proposed is beyond justification and without any correct reasoning, our submission are as follows:

1. In the newly created category of hotels, the proposed increase are unrealistic with hike of about 100% for consumption of over 1000 units from present Rs.12.75 to Rs. 25 per unit. For even a smallest of hotels where the electricity is the basic ingredient, it is bound to be more than 1000 units per month as we know each room need to have A/C, Geyser, TV apart from different Freezers in the kitchen etc. The 100% increase is beyond a logical increase of any kind.

2. We have been pleading for last many years to bring the hotel sector back under the industrial category so that we can take advantage with lower tariffs for promotion of the industry, however that has also now been made cleverly at par with the commercial & hotel sector with the proposed increase of almost 170% for units of more than 1000. 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 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/hotel category will be charged even if this is granted industry status. This proposed increase is to ensure that the sector ultimately do not get any benefit even after it is categorized as an industry in these Islands despite the JERC court judgement.

Petitioner's Response:

The Petitioner has submitted that the tourism activities have been reopened and are gaining momentum. In fact, all the restrictions relating to COVID – 19 have been withdrawn vide order dated April 8, 2022.

1. This hike is basically to bridge the gap between Annual Revenue Requirement (ARR) and Revenue Realized (RR). Further, this shall encourage such high energy consumption establishment to move towards energy efficient appliance. Such establishment may even focus for Solar rooftop to reduce their dependency on the grid.

2. The proposed increase is not 170%.

The JERC Order dated 02.12.2020 is subjudice before APTEL wherein it has been clearly submitted before the APTEL that considering of Hotels under industrial category shall have huge financial implication.

It is pertinent to note here that, as per the proposed tariff electricity is supplied to its consumers at subsidized rate compared to proposed ACoS of Rs. 38.79 per unit. Any further subsidy may be detrimental for the department and shall have huge financial implication.

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 5 of the Tariff Order.

2.2.7. Tourism industry facing problems due to pandemic

Stakeholder's Comment:

The stakeholder submitted that the tourism is the only prominent Industry in the Islands and serves as lifeline to maximum number of residents here as well as professional migrants who work here in this Industry. After COVID-19 we are still unable to find our feet back in usual business while facing enormous challenge of International Competition, mounting Bank loans, increasing cost of material etc., on top of that now this more than double increase in tariff will severely impact our already heavy fixed cost of operations. This proposal will cripple the Industry and make us a very expensive destination with already higher flight fares, thus we won't be able to sustain our business in turn affecting the livelihoods of all the people who depend on the trade.

Petitioner's Response:

The Petitioner submitted that the tourism activities have been reopened and are gaining momentum. In fact, all the restrictions relating to COVID – 19 have been withdrawn vide order dated April 8, 2022. It is pertinent to note here that, as per the proposed tariff electricity is supplied to its consumers at subsidized rate compared to proposed ACoS of Rs. 38.79 per unit. Any further subsidy may be detrimental for the department and shall have huge financial implication.

Commission's View:

The Stakeholder may note the reply of the Petitioner. 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 5 of the Tariff Order

2.2.8. High cost of operations for Commercial establishments

Stakeholder's Comment:

The stakeholder has submitted that they would like to object to the proposed hike in electricity tariff for Commercial establishments. Such massive rate increase is unfavorable for our industry. We are already faced with a high cost of operations due to the distance from mainland India and this will only add further to the cost. Hikes in price shall increase the challenges, among other lots of challenges and difficulties being faced by commercial establishments in these Islands.

Petitioner's Response:

The proposed hike in Tariff is to reduce a gap between Annual Revenue Requirement (ARR) and Revenue Realized (RR) of the Electricity Department. A&N Administration already offers various incentives to promote industrial sector. Any further subsidy from Electricity Department shall be detrimental for the department in the form of huge revenue loss.

It is pertinent to note here that, as per the proposed tariff electricity is supplied to its consumers at subsidized rate compared to proposed ACoS of Rs. 38.79 per unit. Any further subsidy may be detrimental for the department and shall have huge financial implication.

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 5 of the Tariff Order.

2.2.9. Tariff at higher rate than the metropolitan cities

Stakeholder's Comment:

The stakeholder submitted that we have three industrial units which usually pay power consumption charges around Rs.1,20,000/- per month. But, as has been proposed in the industrial category, vide (vii) (industrial) (d) of the publication, rate for '1001 units and above' has been proposed to Rs.25/- per unit instead of existing Rs.9/- per unit. Accordingly, in a simple calculation, if we pay the power consumption bills @ proposed rate, we will have to bear around Rs. 3 to 4 Lakh per month on this count – which seems to be absurd to us.

We sincerely submit here that the Joint Electricity Regulatory Commission (JERC) is a judiciary body – which should think over this issue judicially and of course with proper justification. Normally in case of price hike in fuels (petrol, diesel etc.)' rate is increased in certain paise at a time. But in this case, the rate has been increased by almost 300 percent at a time (in case of industrial category, 1001 units and above) – which should not be accepted at all. Residing in the remotest / hardest area of the country, if we are compelled to pay power consumption tariff at higher rate(s) than any of the metropolitan cities, then which industry would exist in this UT? One day, we apprehend, this UT will exist sans industry.

We feel, this instance of increasing power consumption tariff proposed by the Electricity Department, A&N Administration has crossed all the limits. Moreover, it is unprecedented too. We don't think that such high rate of power consumption exists anywhere in the country. Furthermore, if we produce electricity of our own by using diesel-fed power generating set in our industrial unit(s) that would not also cost more than Rs.17/- to Rs.18/- per unit.

Under the facts and circumstances, you are requested to kindly admit our objection as made in the foregoing paragraphs and consider it as a part of the hearing which is scheduled on 27th May 2022 and oblige. We further request you not to accept the new power consumption rates as proposed by the Electricity Department, A&N Administration in greater public interest, for which we shall remain grateful to you.

Petitioner's Response:

The Petitioner has submitted that the contention of the stakeholder that with the proposed tariff the bill shall go to the tune of 3-4 times is highly incorrect. The proposed hike is also in view of abrupt rise in fuel cost over the year. The Commission is well aware that the fuel cost is changed on day-to-day basis. However, the electricity tariff is fixed for the whole year.

There is a huge Geographical and economic dissimilarity between the Electricity Department to its counterpart DISCOMs/ department active in other UTs. This economic dis-similarity is also obvious from the fact that cost of supply of electricity for A&N Islands is Rs. 38.79 per unit whereas the cost of supply of electricity for other UTs viz Puducherry @ 5.44 per unit, Goa @ 5.24 per unit, Daman & Diu @ 5.43 per unit and DNH Power Distribution Corporation Limited @ 5.74 per unit. It is pertinent to note here that, as per the proposed tariff electricity is supplied to its consumers at subsidized rate compared to proposed ACoS of Rs. 38.79 per unit. Any further subsidy may be detrimental for the department and shall have huge financial implication.

Commission's View:

The charges are being approved by the Commission based on prudence check, proposal of the licensee, cost structure of the licensee, etc. Since these are different for different utilities across India and are comparatively higher in Andaman & Nicobar Islands, the tariffs are higher in Andaman & Nicobar Islands vis-à-vis the other UTs. Further, 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 5 of the Tariff Order.

2.2.10. Alternative sources of power

Stakeholder's Comment:

The stakeholder has submitted that they would like to object to the tariff hike from 12/Unit to 25/Unit. The pandemic has put the Hotel Industry in a state of paralysis in the Andaman Islands. We are slowly beginning to recover but without any clear indication what the future holds for us in the Islands. Such tariff hike will put hoteliers in a further state of shock. With so much uncertainty and inflation this hike will make every business unviable in the Islands. The Administration should find alternative sources of power like Tidal, Wind or Microreactors which will be cheaper and sustainable in the years to come instead of hiking the tariff and burdening the commercial consumers.

Petitioner's Response:

The Petitioner submitted that the tourism activities have been reopened and are gaining momentum. It is pertinent to note here that, as per the proposed tariff electricity is supplied to its consumers at subsidized rate compared to proposed ACoS of Rs. 38.79 per unit. Any further subsidy may be detrimental for he department and shall have huge financial implication.

Commission's View:

The Commission appreciates the suggestion of the stakeholders, however, the generation of power from tidal energy is at nascent stage and is going through technological advancement and hence, the cost of power generation from tidal energy will be higher. Further, the consumers may also be encouraged to install solar rooftop as per the Net Metering Regulations, 2019.

2.2.11. Turbulent recovery for Cinema theatre owner

Stakeholder's Comment:

The stakeholder has submitted that they would like to object to the tariff hike from 12/Unit to 25/Unit. The pandemic has put the Cinema Industry in jeopardy across India. Our Recovery has been turbulent. Moreover, we are operating on Genset to help mitigate the load shedding. Such tariff hike will put commercial consumers in a further state of shock. Instead of putting the burden on the consumers, the Andaman & Nicobar Administration should find alternate solutions to bring down the cost.

Petitioner's Response:

The Petitioner submitted that the hike is to bridge gap between ARR and RR. It is pertinent to note here that, as per the proposed tariff electricity is supplied to its consumers at subsidized rate compared to proposed ACoS of Rs. 38.79 per unit. Any further subsidy may be detrimental for the department and shall have huge financial implication.

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 5 of the Tariff Order.

2.2.12. Incomplete facts put by department before the Commission

Stakeholder's Comment:

The stakeholder has submitted that the Department has not put forth the complete and correct facts before the Commission in order to enable the Chairperson to adjudicate the tariff petition judiciously. At the outset, it is pertinent to bring the following facts to the knowledge of the Commission:

(i) This Commission with respect to FY 2019-20. had vide Order dt. 02.12.2020 passed in Review Petition No. 30 of 2020 directed the Department inter alia to charge the hotels in the Industrial Category in place of Commercial Category -NOT COMPLIED WITH TILL DATE.

(ii) This Commission with respect to FY 2020-21, had vide Order dt. 02.12.2020 passed in a similar Review Petition No. 31 of 2020 passed a similar direction to the Department inter alia to charge hotels in the Industrial Category in place of Commercial Category- NOT COMPLIED WITH TILL DATE.

(iii) The Commission, with respect to FY 2021-22. had in the Tariff Order dt. 31.05.2021 condemned the conduct of the Department and directed that: "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 categorized 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." NOT COMPLIED WITH TILL DATE.

(iv) The Department, in complete willful disobedience of the aforesaid directions, continued to charge the Hotels as per commercial tariffs. This issue was again brought to the notice of the Calcutta High Court by way of Contempt Petition, wherein the High Court was pleased to issue a Rule against the officer to be present in court and directed the Department to raise bills as per industrial tariff. NOT COMPLIED WITH TILL DATE.

Petitioner's Response:

The Petitioner denied to the submission of the stakeholder that the Department has not put forth the complete and correct facts before the Commission.

i) The Order Dated 02.12.2020 for Petition No. 30/2020 has been challenged before APTEL and the matter is sub judice.

ii) The Order Dated 02.12.2020 for Petition No. 31/2020 has been challenged before APTEL and the matter is sub judice.

iii) The above-mentioned Orders dated 02.12.2020 have been challenged before APTEL on the ground that the said order came in view of unauthorized concession made by the official against whom competent authority has initiated action and the matter has been referred to CBI.

iv) It is submitted that the High Court of Calcutta order dated 31.08.2021 had been challenged before the Double Division Bench & High Court vide order dated 17.12.2021 directed that: - "The appeals are yet to be disposed of. In the appeals if there is an upward revision or change from industrial to commercial rate, no doubt, the appellants will be entitled to demand the differential amount of security from the writ petitioners in accordance with law. In the event, the writ petitioners failing to pay the differential amount of the security, the appellants will be at liberty to proceed against the petitioners in accordance with law."

Commission's View:

The Stakeholder may note the reply of the Petitioner**.**

2.2.13. Tourism sector has been the backbone of the economy of the Andaman and Nicobar Island

Stakeholder's Comment:

The stakeholder has submitted that they would like to address its concerns and issue in light of the following facts:

(i) The tourism sector has been the backbone of the economy of the Andaman and Nicobar Island and has been identified as one of the three main economic activities identified in the UT of A&N Island, under the Auditor's Report issued by the Government. However, the COVID-19 pandemic waves and its repercussions have severely impacted the tourism sector, for the growth of which the administration provides financial assistance.

(ii) Due to the pandemic, the sales of the hotel industry had dropped to 0% occupancy, and there appears only a negligible hope of this recuperating depending on the traffic this year.

(iii) Furthermore, after the recent wave of COVID this year, all hopes of revival of the Hotel industry were shattered. The Hotels are yet recovering at a very slow pace from the losses incurred from the past almost more than 3 years and the additional burden of such an unprecedented hike could even force to closure of businesses. In fact, a few hotels had even shut operations on the impact due to COVID.

(iv) During COVID, even domestic flight movements had been restricted and the passenger traffic was at bare minimal. International travel was also negligible, as a result of which the hotel industry here has been crippled and rather needs financial and administrative support from the Government in order to sustain and survive during these tough times.

Firstly, it is submitted that those hotels which are recognized as an Industry under the MSME Act are to be charged Industrial rate, presently capped at Rs.9 per/kWh (kilowatt hour). This applicability was confirmed by the JERC, Gurugram vide Order dt. 02.12.2020 in Petition No. 30 of 2020 titled "SeaShell Hotels and Resorts & Anr. vs. Supt. Engineer, EDA&N, wherein the JERC was pleased to direct the Electricity Dept. to charge the hotels in the industrial Category in place of Commercial Category as directed by the JERC through its Tariff Order dated 20.05.2019 (which was assailed in the said Petition No. 30).

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 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 JERC, the EDA&N has wrongfully been over- charging the Hotels at Commercial rates. To our shock and dismay, the Department served Notices to 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 Commission.

We, in our previous representation made in the public hearing for FY 2021-22 had requested the 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 Commission with unclean hands and is liable to be penalized/punished. For completeness, it is also pertinent to submit that this issue was again brought to the notice of the Calcutta High Court by way of Contempt Petition, wherein the High Court was pleased to issue a Rule against the officer to be present in court and directed the Department to raise bills as per industrial tariff, but the same has not been effectuated till date.

Secondly, the Hotels are ought to be charged at the industrial rate at Rs.9 per/kWh (kilowatt hour). However, with the proposed enhancement and separate categorization of the Hotel, the rate would shoot up to Rs.25.00 per/kWh, thereby causing a sudden and steep hike of approx. 280% - proposing yet again to cause a Tariff shock to the Hotel industry.

It is submitted that this sudden hike is in clear violation of Regulation 67(4)(e) of the JERC Multi-Year Tariff Regulations, 2018 which stipulates that the "tariff shall be set by the Commission in such a manner that it may not present a tariff shock to any category of Consumers" [Emphasis supplied].

It is further submitted that the along with introduction of separate category of "Hotels/ Restaurant/ Resorts", even the proposed tariff for "Industrial establishment has been capped at Rs. 25 kWh which will be the same, if allowed, as for the Commercial establishment, thereby effectively removing the distinction between all the categories and treating all of them alike and therefore, disentitling the Hotel establishment, falling under the industrial category, form the much-needed support from the government in the midst of financial situation being faced by such establishment in the light of ongoing pandemic resulting in reduced tourism and poor economic conditions.

Fourthly, the Electricity Department is misusing its power and the discretion exercised by the Commission by proposing to cap the rates of Industrial equivalent to that of Commercial, i.e. @ Rs. 25 kWh for having usage of 1001 units and above. Therefore, despite having categorized an Industry by the A&N Administration and also being registered under MSME. The hotels will be expected to pay charges, equivalent to that of commercial category. As such, the Department is clandestinely trying to achieve indirectly through the subject petition what it could not achieve under the previous year's Tariff Petition and as such, misusing the discretionary power of the Commission by capping the industrial and commercial rates at the same price.

In fact, the ED A&N, has acknowledged in their own petition that the basic requirement of any tariff proposal is that it has to be transparent and justifiable against the various policy guidelines and the framework evolved by the JERC and various SERC [Refer Pg.58 of the Petition]. This genesis of the proposal is completely contrary to the rules and regulations followed by the Commission and ought not to be allowed, as the Department has not only failed to provide for reasons neither for such unprecedented hike in tariffs nor for introducing separate category for Hotels and proposing the tariffs for all Hotels. commercial and industrial establishment but also to appraise the Commission of the true facts and hardships being faced by the hotels amid the COVID-19 pandemic, as highlighted above but also proposes to realize the gap by burdening the consumers.

Even in the other UT such as Goa, which is similarly placed as A&N Island and also falls under the purview of Commission, hotels with boarding facility are departmentalized under a separate "Industrial LT - Hotels" category giving them tariff benefits based on the recognition under the Goa Registration of Tourist Trade Act, 1982. Moreover, the tariff for such hotels is currently capped at Rs.5.25/kWh (after being enhanced from Rs.4.95kWh) while the Department proposes Rs.25/kWh for the Hotels in A&N Islands. On the other hand, the Electricity Department of A&N, in its Petition, neither proposes to retain Hotels the industrial tariff nor does it propose any such benefits based on their recognition under the MSME, which has been executed by the Administration for years. In fact, the proposed tariff hike will certainly be a huge burden on the public. commercial and industrial consumers as a whole that too in this situation where everyone is fighting to recover from the losses suffered due to the COVID-19 virus. In the above difficult times faced by public, it would not at all be prudent to increase tariff at all.

Petitioner's Response:

The Petitioner submitted that the tourism activities have been reopened in full respect and are gaining momentum. In fact, all the restrictions relating to COVID – 19 have been withdrawn vide order dated April 8, 2022.

The Order Dated 02.12.2020 in Petition No. 30 of 2020 have been challenged before APTEL on the ground that the said order came in view of unauthorized concession made by the official against whom competent authority has initiated action and the matter has been referred to CBI.

It is apposite to mention that the reply affidavits in the Review Petition 30 of 2020 were filed by the concerned officer, who, in disobedience of the directions given by the Lieutenant Governor and without consulting the concerned departments of the A&N Administration filed affidavits/replies in support of the Hoteliers for charging the electricity on industrial rate. The concessions made before the Commission in the course of proceedings of review, were without instructions and authority of the Administration. The Lt. Governor, on the perusal of the pleadings, noticed that relevant facts were not placed before the Commission and the views of Law & Finance Departments of the Administration were not obtained before filing reply before the Commission.

The Hotels being the commercial activity are categorized under Commercial Category. Further, there is no steep hike of 280% as stated. The hike in tariff is to bridge a huge gap between ARR and RR. Further, Section 61 of the Electricity Act stipulates that

(d) safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner.

(g) that the tariff progressively reflects the cost of supply of electricity and also, reduces cross subsidies in the manner specified by the Appropriate Commission"

The Electricity is already being supplied at highly subsidized rates to its consumer.

Further, it is submitted that the tourism activities have been reopened and are gaining momentum. As power is already been supplied at subsidized rates any further support may have huge financial implication

Under proposed tariff for all usage above 1001 units for Commercial, Hotels/Restaurants/Resorts and Industrial category as been kept at Rs. 25. This aims to encourage High Value Consumers to get conscious about their energy consumption and moves toward energy efficient appliances.

The justification for tariff hike is submitted above. Whereas the ARR is submitted in the Tariff Petition which clearly stipulated that the cost of power stand at Rs. 38.79/kWh. This hike will reduce burden on Electricity Department.

Submission of stakeholder to that A&N Islands are similarly placed to Goa is highly unjustified as power is available to them at much cheaper rate (Rs. 5.24 per unit) and whereas power is sold to Hotel Establishment at Rs. 5.25 per unit at comparatively profitable rate.

It is pertinent to note here that, as per the proposed tariff electricity is supplied to its consumers at subsidized rate compared to proposed ACoS of Rs. 38.79 per unit. Any further subsidy may be detrimental for he department and shall have huge financial implication.

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 5 of the Tariff Order.

2.2.14. Short staffing of the department

Stakeholder's Comment:

The stakeholder has submitted that the Electricity Department is always short-staffed which results in delay in clearing the faults. Another reason causing the delay is limitations of the female JE working on field. Request for replacement of the same.

Petitioner's Response:

The Petitioner has submitted that the proposal has already been submitted before A&N Administration for providing adequate staffs to carry out day-to-day activities.

Commission's View:

The stakeholder may note the Petitioner's response.

2.2.15. No supply of power on encroached lands

Stakeholder's Comment:

A stakeholder has submitted that the people of Havelock were given small patches of land for settling on the island. Over the years, their families have grown, and the people have encroached on more land. The government has provided road connectivity and water supply to these encroached lands, but no electricity supply is given to residents of the encroached areas. Request the commission to allow electricity supply to all these consumers as well.

Petitioner's Response:

The Petitioner has submitted that due to administrative reason, issuance of new connection on encroached land is restricted by the Technical board constituted vide Order No. 2643 dated 03.12.2021 by A&N Administration. However, the matter is being taken up with Administration for vital decision.

Commission's View:

The Commission has noted the stakeholders concern and directs the Petitioner to ensure supply of power as per the provisions of Supply Code 2018 and Electricity Act 2003.

2.2.16. Delay in releasing new connections

Stakeholder's Comment:

The stakeholder has raised a concern that the department took very long time in releasing new connection to the consumers. It has also been observed that the new connections which are released are unmetered.

Petitioner's Response:

The Petitioner has submitted that new connections were delayed at Swaraj Dweep due to unavailability of new energy meters which were under process of procurement. However, as on date the new connections are being released at Swaraj Dweep and other areas of these islands. Smart Meters were also installed by EESL which covered 54% consumers in these islands including high value consumers.

Commission's View:

The Commission has noted the stakeholder's concern and directs the Petitioner to expedite the release of new connections within the timelines as per the provisions of the Supply Code 2018 and Electricity Act 2003.

2.2.17. Inefficiencies of the department

Stakeholder's Comment:

The stakeholder has submitted that there are a total of 4 engines that supply power to the Havelock island whereas two of them are not currently working. Two cranes that are used for carrying transformers in case of faults and repairs are under breakdown.

Petitioner's Response:

The Petitioner has submitted that DG#I have been repaired and put to operation on 20.07.2022. Further the department is in process of Executing Agreement with M/s Express Genset Consortium for purchase of 1 MW power at Swaraj Dweep to mitigate the power rise. However, at present there is no shortage of power at Swaraj Dweep. Further the cranes mentioned above used for the purpose is not within the jurisdiction of Electricity Department.

Commission's View:

The Commission has noted the stakeholder's concerns and directs the Petitioner to perform a periodic preventative maintenance for all the DG sets and other electrical Equipment in order to maintain the system reliability and quality of supply.

2.2.18. Provisional billing of the consumers

Stakeholder's Comment:

The stakeholder has shared the concern that the department is only providing provisional bills to the consumers and has not yet released the final bills.

Petitioner's Response:

The Petitioner has submitted that JERC Tariff Order FY 2021-22 Dated 31.05.2021 have been challenged before Hon'ble APTEL and the final bills shall be released after the final order of Hon'ble APTEL.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.19. Increase in expenditure for Domestic Consumers

Stakeholder's Comment:

The stakeholder has submitted that the monthly expenditure for every household has already increased a lot due to increase in prices of all commodities and due to inflation. Request to not change the electricity tariff as well.

Petitioner's Response:

The Petitioner has submitted that over last few years department have witnessed exorbitant hike in fuel price. This is most important factor for proposing increase in the tariff rates. So far this heavy burden is borne by A&N Administration through UT budget. There is already a huge gap in NRR & RR, thereby causing huge financial loss to the state ex-chequer. The marginal hike proposed in the tariff proposal F.Y. 2022-23 to bridge the huge gap of NRR & RR to an extent.

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 5 of the Tariff Order.

2.2.20. Subsidy for farmers

Stakeholder's Comment:

The stakeholder has submitted that the farmers of A&N are getting monthly bills of around INR 7000, INR 12000, etc even though there is no power supply for at least 6 hours per day. Many other states in India provide subsidized or free electricity supply to the farmers. The farmers cultivating beetle-nut and coconut on the islands of A&M require subsidized or free electricity to sustain their farming.

Petitioner's Response:

The Petitioner has submitted that electricity is provided to all the agriculture consumers at highly subsidized rates compared to any other categories. Any further subsidy may cause huge loss to the govt. exchequer.

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 5 of the Tariff Order.

2.2.21. Free electricity upto certain units

Stakeholder's Comment:

The stakeholder has submitted that the consumers of A&N islands are requesting for free electricity supply upto 300-400 units.

Petitioner's Response:

The Petitioner has submitted that electricity is already been provided to all the consumers at highly subsidized rates and any further subsidy may cause huge loss to the govt. exchequer.

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 5 of the Tariff Order.

2.2.22. Increase in cost of medical treatments

Stakeholder's Comment:

The stakeholder has submitted that there are only 20-25 clinics and not many retail medical stores in A&N islands. The costs of medical treatments are already very high, and the margins are very low due to discounted sales. Increase in electricity tariff will lead to huge increase in the cost of medical treatments.

Petitioner's Response:

The Petitioner has submitted that a separate category for hospitals has been proposed in Tariff Petition FY 2022-23 and the proposed tariff is less than commercial category which was earlier applicable for hospitals.

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 5 of the Tariff Order.

2.2.23. Request for refund of extra charges paid

Stakeholder's Comment:

The stakeholder has submitted that the hotels are still paying electricity tariff as per Commercial rates even after JERC's order to change the tariff for hotels to industrial rates. Request the department to please refund the extra charges paid to the department.

Petitioner's Response:

The Petitioner has submitted that the said JERC Order Dated 02.12.2020 have been challenged before Hon'ble APTEL on the ground that the said order came in view of unauthorized concession made by the official against whom competent authority has initiated action and the matter has been referred to CBI.

Commission's View:

The Stakeholder may note the reply of the Petitioner.

2.2.24. Hotels to run on their own DG set for most part of the day

Stakeholder's Comment:

The stakeholders have submitted that the electricity department has issued directions for the hotels to run their own DG sets from 5pm to 11.30pm. Raids are conducted by the authorities to ensure the same. If the hotels have to survive on their own supply, then why is the department increasing tariff for hotels? The hotels don't wish to pay for the inefficiencies of the department.

Petitioner's Response:

The Petitioner has submitted that in view of sudden rise in 4-5 MW power demand in Port Blair and South Andaman and as a part of Demand side management, to tide over prevailing power scenario at Port Blair, the competent authority had directed that all large commercial establishments requested to meet their demand through their installed DG sets during peak hours. And in line to the same, defence establishment requested to meet the power demand during peak hours through captive generation.

Commission's View:

The stakeholders may note the Petitioner's response. The Commission directs the Petitioner to take steps to arrange for additional power to mitigate the situation and duly follow the JERC (Standards of Performance) Regulations, 2015.

3. Chapter 3: Annual Performance Review of FY 2021-22

3.1. Background

The Tariff Order for the FY 2021-22 was issued by the Commission on May 31, 2021 approving the ARR and Retail Tariff for the FY 2021-22. This Chapter covers the Annual Performance Review (APR) of the FY 2021-22 vis-à-vis the cost parameters approved by the Commission in the Tariff Order dated May 31, 2021. The Annual Performance Review for the FY 2021-22 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.

3.2. Approach for Review for the FY 2021-22

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 2021-22 has been done based on the actual data as provided by the Petitioner for the FY 2021-22 of 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 31, 2021.

3.3. Energy Sales, Connected Load and Number of Consumers

Petitioner's Submission

The Petitioner has submitted a revised estimate of energy sales as 280.69 MU for the FY 2021-22, based on the sales during the first half of FY 2021-22 and projections for the second half of FY 2021-22. Similarly, the Petitioner has proposed the connected load and consumers of 339,888 kW and 145,394 respectively for FY 2021-22.

Commission's Analysis

The Commission has considered the actual category wise data for FY 2021-22 and CAGR for various categories as per the actual data over the last 5 years (FY 2014-15 to FY 2019-20) for calculating the category wise sales, connected load and number of consumers respectively for FY 2021-22 as described in ensuing paragraphs.

3.3.1. Energy Sales

The Commission in the Business Plan Order had approved the category wise energy sales, number of consumers and connected load based on historical trends and actual data available for last 4-5 years. The detailed methodology has been discussed in the Business Plan Order. The Commission retains the same energy sales as approved in the Business Plan Order.

Table 6: Sales projected for FY 2021-22 (MU)

S. No.	Category	Provisional Sales FY 2021-22	Projected Sales for FY 2021-22
1	Domestic	156.42	156.42
2	Commercial	61.02	61.02

S. No.	Category	Provisional Sales FY 2021-22	Projected Sales for FY 2021-22
3	Industrial	10.98	10.98
4	Bulk	29.63	29.63
5	Public Lighting	5.53	5.53
6	Irrigation, Pumps & Agriculture	1.73	1.73
7	**Total Sales**	**265.31**	**265.31**

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

Table 7: Energy Sales (MU) approved for FY 2021-22 by the Commission

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	147.98	148.96	156.42
2	Commercial	47.18	76.17	61.02
3	Industrial	9.7	13.48	10.98
4	Bulk	30.46	33.88	29.63
5	Public Lighting	6.15	7.07	5.53
6	Irrigation, Pumps & Agriculture	1.03	1.14	1.73
7	**Total Sales**	**242.50**	**280.69**	**265.31**

3.3.2. Number of Consumers

The Commission in the Business Plan Order had approved the category wise energy sales, number of consumers and connected load based on historical trends and actual data available for last 4-5 years. The detailed methodology has been discussed in the Business Plan Order. The Commission retains the same number of consumers as approved in the Business Plan Order.

Table 8: Number of Consumers projected for FY 2021-22

S. No.	Category	Provisional Number of Consumers FY 2021-22	Projected Consumers for FY 2021-22
1	Domestic	121211	121211
2	Commercial	21711	21711
3	Industrial	441	441
4	Bulk	69	69
5	Public Lighting	753	753
6	Irrigation, Pumps & Agriculture	531	531
7	**Total Consumers**	**144,716**	**144,716**

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

Table 9: Number of Consumers approved for FY 2021-22 by the Commission

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	120910	121728	121211
2	Commercial	21514	21748	21711
3	Industrial	485	479	441
4	Bulk	68	72	69
5	Public Lighting	743	838	753

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
6	Irrigation, Pumps & Agriculture	509	529	531
7	**Total Consumers**	**144,228**	**145,394**	**144,716**

3.3.3. Connected Load

The Commission in the Business Plan Order had approved the category wise energy sales, number of consumers and connected load based on historical trends and actual data available for last 4-5 years. The detailed methodology has been discussed in the Business Plan Order. The Commission retains the same connected load as approved in the Business Plan Order.

Table 10: Connected Load projected for FY 2021-22 (kW)

S. No.	Category	Provisional Connected Load FY 2021-22	Projected Connected Load for FY 2021-22
1	Domestic	221250	221250
2	Commercial	101610	101610
3	Industrial	14512	14512
4	Bulk	15803	15803
5	Public Lighting	2986	2986
6	Irrigation, Pumps & Agriculture	1216	1216
7	**Total Connected Load**	**357,377**	**357,377**

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

Table 11: Connected Load approved by the Commission for FY 2021-22 (kW)

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	200208	198404	221250
2	Commercial	94837	105614	101610
3	Govt. Connection	15759	16603	14512
4	Industrial	15172	15153	15803
5	HT Consumers	2786	2800	2986
6	Public Lighting	1297	1314	1216
7	**Total Connected Load**	**330,059**	**339,888**	**357,377**

The Commission approves energy sales of 265.31 MU, connected load of 357,377 kW and number of consumers as 144,716 in the APR of FY 2021-22.

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

Petitioner's submission

The Petitioner has proposed Intra-State T&D loss level at 17.91% against an approved loss of 13.34% in the Tariff Order.

Commission's analysis

The Commission had approved loss level of 13.34% for FY 2021-22 in the MYT Order dated May 20, 2019 and subsequently, in the Tariff Order dated May 31, 2021 while determining ARR for the FY 2021-22. 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 Commission in the APR of FY 2021-22 finds it appropriate to consider the loss level of 13.34% as approved in the MYT Order for FY 2021-22. The following table provides the Intra-State distribution loss approved in the Tariff Order, the Petitioners submission and now approved by the Commission.

Table 12: Intra-State distribution loss (%)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Intra-State distribution loss	13.34%	17.91%	13.34%

The Commission approves Intra-State T&D loss of 13.34% in the APR of FY 2021-22.

3.5. Energy Balance

Petitioner's submission

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

Table 13: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	280.69
2	Transmission and Distribution losses (%)	17.91%
	Transmission and Distribution losses (MU)	61.24
3	**Total Energy Requirement (for sale to retail consumers)**	**341.92**
B	**Energy Availability at Periphery**	
1	Power Purchase	261.82
2	Own Generation	80.10
3	**Total Energy Availability**	**341.92**
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 2021-22, the Petitioner's submission and the Energy Balance now approved by the Commission.

Table 14: Energy Balance (MU) approved by the Commission for FY 2021-22

S. No.	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**			
1	Total Sales within the UT	242.50	280.69	265.31
2	Transmission and Distribution losses (%)	13.34	17.91	13.34
	Transmission and Distribution losses (MU)	37.33	61.23	40.84

S. No.	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
3	**Total Energy Requirement (for sale to retail consumers)**	**279.83**	**341.92**	**306.15**
B	**Energy Availability at Periphery**			
1	Power Purchase	257.48	261.82	261.82
2	Own Generation	98.92	80.10	44.33
3	**Total Energy Availability**	**356.40**	**341.92**	**306.15**
C	**Total shortfall/(Surplus)**	**-76.57**	**0.00**	**0.00**

In the APR of FY 2021-22, the Commission has estimated a shortfall/(surplus) quantum of 0.00 MU.

3.6. 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. The Petitioner has submitted the revised estimates of fuel cost and also procured power from various IPPs and other generators for FY 2021-22 on the basis of the revised estimates of energy sales for the FY 2021-22 & cost figures during the first half of FY 2021-22. Accordingly, the Petitioner has claimed the power purchase cost of INR 709.55 crore as against the approved cost of INR 474.27 crore in the Tariff Order dated May 31, 2021.

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. 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.

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 tariffs notified in order to bring transparency in the power procurement plan and accordingly, the same may be deducted from the opening gross block of FY 2022-23

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 Cost approved by the Commission for FY 2021-22

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)	31.15	304.00	79.78	9469608.55	0.98	203.99	30,527.03
HPP -1 (5 MW)	38.15	273.51	79.78	10262780.40	0.00	0.00	0.00
HPP-2 (10MW)	65.18	258.46	79.78	17532451.60	0.00	0.00	0.00
Other HPPs	0.29	269.00	79.78	78708.32	0.00	0.00	0.00
NTPC DG 5MW	46.38	269.00	79.78	12476369.03	0.00	0.00	0.00
NTPC DG 10MW	65.76	269.00	79.78	17690058.70	0.00	0.00	0.00
DG P/Plant Niel 0.96MW	0.23	277.00	79.78	63924.68	0.00	0.00	0.00
DG P/Plant Havelock 3 MW	10.13	269.00	79.78	2724265.22	0.00	0.00	0.00
Mayabunder	9.54	269.00	79.78	2566129.00	0.00	0.00	0.00
Baratang	1.20	269.00	79.78	323278.82			
Total	**261.82**			**73187574.31**			**30,527.03**

The Commission has considered the fixed cost for various power plants as per the PPAs. 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 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)	31.15	75.55	0.62	0.00	76.17
2	KHEP (Kalpong Hydro)	13.16	0.00	0.00		0.00
3	Solar(Own)	0.02	0.00	0.00		0.00
4	HPP -1 (5 MW)	38.15	81.87	0.00	4.01	85.88
5	HPP-2 (10MW)	65.18	139.87	0.00	7.63	147.50
6	NTPC - SPV	5.39	0.00	0.00	5.04	5.04
7	Other HPPs	0.29	0.63	0.00	0.30	0.93
8	NTPC DG 5MW	46.38	99.53	0.00	6.91	106.45
9	NTPC DG 10MW	65.76	141.13	0.00	9.54	150.66
10	DG P/Plant Niel 0.96MW	0.23	0.51	0.00	0.02	0.53
11	DG P/Plant Havelock 3 MW	10.13	21.73	0.00	0.94	22.68
12	SECI Solar	0.91	0.00	0.00	0.42	0.42
13	M/s. MUNDRA	3.12	0.00	0.00	0.69	0.69
14	NLC	15.55	0.00	0.00	10.34	10.34
15	Mayabunder	9.54	20.47	0.00	1.18	21.66
16	Baratang	1.20	2.58	0.00	0.13	2.71
17	**Total**	**306.15**	**583.88**	**0.62**	**47.14**	**631.64**

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 17: Power Purchase & Fuel Cost approved for FY 2021-22 (INR crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase	474.27	539.90	555.47
2	Own Generation		169.65	76.17
3	**Total Cost**	**474.27**	**709.56**	**631.64**

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.

The Commission approves power purchase quantum of 306.15 MU and cost of INR 631.64 Crore in the APR of FY 2021-22.

3.7. 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 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 42.87 MU comprising of 20.17 MU Solar and 22.69 MU Non-Solar. Out of which, the Petitioner has only claimed to purchase the solar energy of around 24.98 MU and Non-solar energy of 13.16 MUs, thereby resulting in a shortfall in RPO compliance. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2021-22:

Table 18: Cumulative RPO compliance till FY 2021-22 (MU)

Particulars	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
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 (Net of Hydro Generation)	**229.56**	**239.59**	**262.52**	**221.15**	**252.15**
RPO Target					
Solar	5.74	8.63	12.34	13.49	20.17
Non-Solar	9.64	12.94	17.85	17.69	22.69
Total RPO Target	**15.38**	**21.56**	**30.19**	**31.18**	**42.87**
RPO Compliance (Actual Purchase)					
Solar	6.94	8.00	10.08	18.95	24.98
Non-Solar	12.81	14.79	5.75	11.11	13.16
Total RPO Compliance (Actual Purchase)	**19.75**	**22.79**	**15.84**	**30.06**	**38.14**

Particulars	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
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**
RPO Compliance (REC+ Actual)					
Solar	6.94	8.00	10.08	18.95	24.98
Non-Solar	12.81	14.79	5.75	11.11	13.16
Total RPO Compliance	**19.75**	**22.79**	**15.84**	**30.06**	**38.14**
Net Shortfall/(Surplus) for this year	-4.37	-1.23	14.35	1.12	4.73
Cumulative Shortfall in RPO Compliance till current year	**0.00**	**0.00**	**14.35**	**15.47**	**20.20**

The Commission notes that there is a net shortfall in RPO compliance for FY 2021-22 (4.73 MU) and cumulative shortfall of 20.20 MU till FY 2021-22. The Commission also directs the Petitioner to complete the RPO obligation on priority.

3.8. 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.

3.8.1. Employee Expenses

Petitioner's submission

The Petitioner has submitted employee expenses of INR 167.61 Crore against the approved expenses of INR 123.33 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, 2018, 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 2021-22. The Commission has considered the employee growth rate for FY 2019-20, FY 2020-21 and FY 2021-22 as submitted by the Petitioner along with the average CPI of previous three years to arrive at the employee expenses for FY 2021-22.

The CPI Inflation has been computed as follows:

Table 19: Computation of CPI Inflation (%)

<table>
<tr><th>FY</th><th>Increase in CPI Index</th><th>Average increase in CPI Index over 3 years</th><th>Average increase in CPI Index over 3 years</th><th>Average increase in CPI Index over 3 years</th></tr>
<tr><td>2016-17</td><td>4.12%</td><td rowspan="3">4.22%</td><td></td><td rowspan="2"></td></tr>
<tr><td>2017-18</td><td>3.08%</td><td rowspan="3">5.35%</td></tr>
<tr><td>2018-19</td><td>5.45%</td><td rowspan="3">6.00%</td></tr>
<tr><td>2019-20</td><td>7.53%</td><td rowspan="2"></td></tr>
<tr><td>2020-21</td><td>5.02%</td><td></td></tr>
</table>

Table 20: Employee recruitment plan as submitted by the Petitioner

S. No	Particulars	FY 2018-19 (Base Year)	FY 2019-20	FY 2020-21	FY 2021-22
1	Opening Employee	2,162	2,060	1,973	1821
2	Recruitment	5	51	5	304
3	Retirement	107	138	157	109
4	Closing Employee	2,060	1,973	1,821	2016
5	Growth rate	-4.72%	-4.22%	-7.70%	10.71%

Table 21: Employee Expenses approved for FY 2021-22 (INR Crore)

S. No	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	EMPn-1 (INR Crore)	95.17	94.99	92.37
2	Gn (%)	-4.22%	-7.70%	10.71%
3	CPIinflation (%)	4.22%	5.35%	6.00%
4	**Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)**	**94.99**	**92.37**	**108.40**

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

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	EMPn-1 (INR Crore)	112.80	167.61	92.37
2	Gn (%)	3.78%		10.71%
3	CPIinflation (%)	5.35%		6.00%
4	**Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)**	**123.33**		**108.40**

The Commission now approves employee expenses of INR 108.40 Crore in the APR of the FY 2021-22.

3.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted a revised estimate of A&G expenses of INR 2.48 crore as against the approved value of INR 39.97 crore in Tariff Order.

Commission's analysis

In accordance with MYT Regulations, 2018, 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 2021-22. 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 2021-22.

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

Table 23: A&G Expenses approved for FY 2021-22 (INR Crore)

S. No	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	A&Gn-1 (INR Crore)	34.55	36.01	37.93
2	CPIinflation (%)	4.22%	5.35%	6.00%
3	Provision (INR Crore)	0.00	0.00	0.00
4	**Gross A&G Expenses = (A&Gn-1) x (CPIinflation)**	**36.01**	**37.93**	**40.21**

Table 24: A&G Expenses approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	A&Gn-1 (INR Crore)	37.93	**2.48**	37.93
2	CPI inflation (%)	5.35%		6.00%
3	Provision (INR Crore)	0.00		0.00
4	**Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)**	**39.97**		**40.21**

The Commission now approves the Administrative & General (A&G) expenses of INR 40.21 Crore in the APR of the FY 2021-22.

3.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has submitted a revised estimate of R&M expenses of INR 103.63 crore as against the approved value of INR 54.69 crore in the Tariff Order dated March 31, 2021.

Commission's analysis

In accordance with MYT Regulations, 2018, 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 25: Computation of WPI Inflation (%)

FY	Increase in WPI Index	Average increase in WPI Index over 3 years
2018-19	4.28%	2.42%
2019-20	1.68%	
2020-21	1.29%	

Further, the Commission has considered the opening GFA with considering the assets created out of TRP funds as at the time of approving the k-factor, the lower GFA was considered even though the R&M Expenses was incurred to repair and maintain the assets created out of TRP funds as well. The Commission will consider the actual R&M Expenses at the time of truing up and may approve accordingly. The R&M expenses as approved by the Commission for FY 2021-22 have been provided in the following table:

Table 26: R&M Expenses approved by Commission for FY 2021-22 (INR Crore)

S. No	Particulars	FY 2021-22
1	Opening GFA (GFAn-1)	257.67
2	K factor approved (K) (%)	24.99%
3	Avg. WPI Inflation (%)	2.42%
4	**R&M Expenses = K* (GFAn-1)* (1+ WPIinflation)**	**65.95**

Table 27: R&M Expenses approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	**Repair & Maintenance Expenses (R&M)**	**54.69**	**103.63**	**65.95**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 65.95 Crore in the APR of FY 2021-22.

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

The following table provides the O&M expenses approved in the ARR of FY 2021-22, Petitioner's submission and now approved by the Commission.

Table 28: 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	123.33	167.61	108.40
2	Administrative & General Expenses (A&G)	39.97	2.48	40.21
3	Repair & Maintenance Expenses	54.69	103.63	65.95
4	**Total Operation & Maintenance Expenses**	**217.98**	**273.72**	**214.55**

The Commission approves the Operation & Maintenance (O&M) Expenses of INR 214.55 Crore in the APR of FY 2021-22.

3.9. Capital Expenditure & Capitalisation

Petitioner's submission

The Petitioner has submitted revised capitalisation of INR 28.36 Crore as against the approved capitalisation of INR 28.36 Crore in the Tariff Order dated May 31, 2021.

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 29: Capitalisation approved by the Commission for FY 2021-22 (INR Crore)

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

The Commission approves capitalisation of INR 28.36 Crore in the APR of FY 2021-22. The same shall be reviewed at the time of True-up.

3.10. Impact of considering assets created out of TRP Funds for 2020-21

The Commission vide order dated May 10, 2022 had considered that the assets created out of TRP funds have been funded through special grant in the form of TRP fund. Further, the Commission granted the liberty to the Petitioner to provide the proof of funding for assets created out of TRP fund as equity along with the asset wise details of year-on-year capitalisation and depreciation from the date of capitalisation for the Commission's consideration.

The Petitioner has now submitted the proof of the funding along with the details of the assets with year-on-year capitalisation and depreciation from the date of capitalisation. The Commission has considered the proof of funding as submitted by the Petitioner and accordingly has considered the funding of the assets created out of TRP funds as equity infusion. Further, in accordance with Regulation 26 of the MYT Regulations, 2018, since the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a normative loan.

As per the Fixed Asset Register for the assets created out of TRP funds, the opening GFA as on 1.4.2020 is INR 286.44 crore and accordingly, table below provides the details of funding for the assets created out of TRP funds:

Table 30: Funding of assets created out of TRP funds (INR Crore)

Particulars	FY 2020-21
Opening GFA	286.44
Debt	200.51
Equity	85.93

The Commission has analysed the FAR as submitted by the Petitioner and has computed the year-on-year depreciation considering the depreciation rates as considered by the Commission in various MYT periods to compute the accumulated depreciation as on 1.4.2020 and has arrived at the figure of INR 128.08 crore. The Commission would like to highlight that the Petitioner had failed to claim the capital expenditure for the assets created out of fund just at the time of filling of the first tariff petition before JERC and has brought the same to Commission's attention after almost a decade. Addition of these assets in their respective year of capitalisation would result in increase in various Annual Revenue Requirement components - interest on loan, return on equity, depreciation, loan repayment and interest on working capital. There would be no change in O&M expenses as these are linked with historical O&M expenses. During a normal course of proceedings, the Commission had to revise the true-up from the financial year in which these assets get capitalised. However, in case of Electricity Department Andaman & Nicobar Islands, the year-on-year revenue gap along with any other expenditure as determined by the Commission had historically been met through Budgetary Support from the Andaman and Nicobar Administration. Therefore, the Commission has not revised the ARR due to inclusion of assets created from TRP fund for previous years (before FY 2020-21) and included the assets created out of TRP funds in the Gross fixed assets from 1.4.2020 onwards in-line with the proposal of the Petitioner.

Further, the Commission has considered that the depreciation accrued over the years from the date of capitalisation towards the repayment of the loan. Further, in case of the Petitioner, no actual loan has been availed, hence, the accumulated depreciation has been adjusted from the normative loan value. Accordingly, the following table provides the Interest on Loan approved for the assets created out of TRP funds for the FY 2020-21:

Table 31: Interest on loan approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved Now
1	Opening Normative Loan	200.51
2	Less: Accumulative Depreciation	128.08
3	Net Normative Loan	72.42
4	Less: Normative Repayment equal to Depreciation	10.05
5	Closing Normative Loan	62.37
6	Average Normative Loan	67.40
7	Rate of Interest (%)	8.00%
8	**Interest on Loan**	**5.39**

For the purpose of computing the depreciation, the Commission has considered the asset wise depreciation rate prescribed in MYT Regulations, 2018, provided in the table below:

Table 32: Depreciation Rate (%)

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

The following tables provides the depreciation as approved for FY 2020-21 on account of inclusion of assets created out of TRP funds:

Table 33: Calculation of additional depreciation for FY 2020-21 (INR Crore)

Description	Opening GFA as per audited accounts	Less: Assets depreciated upto 90% till FY 2019-20	Revised Opening GFA	Addition/ Deletion during the year	Closing GFA	Depreciation Rate	Depreciation
Plant & Machinery	269.82	0.00	269.82	0.00	269.82	3.60%	9.71
Building & Civil Engineering Works	16.39	0.00	16.39	0.00	16.39	1.80%	0.30
Furniture & Fixtures & Office Equipments	0.00	0.00	0.00	0.00	0.00	6.00%	0.00
Land	0.00	0.00	0.00	0.00	0.00	0.00%	0.00
Vehicles	0.23	0.00	0.23	0.00	0.23	18.00%	0.04
Total	**286.44**	**0.00**	**286.44**	**0.00**	**286.44**		**10.05**

Further, the RoE has been calculated on the average of opening and closing of equity during the year @ 16% post-tax basis. The following table provides the total return on equity approved for the FY 2020-21:

Table 34: RoE approved by Commission for FY 2020-21 (INR Crore)

Particulars	Now Approved by Commission
Opening Equity	85.93
Additions on account of new capitalisation	0.00
Closing Equity	85.93
Average Equity	85.93
Return on Equity (%)	16.00%
Return on Equity	**13.75**

The table below provides the summary of the additional impact on account of considering funding of assets created out of TRP funds:

Table 35: Additional impact approved by Commission for FY 2020-21 (INR Crore)

Particulars	Now Approved by Commission
Depreciation	10.05
Interest on Loan	5.39
Equity	13.75
Total Impact	**29.19**

3.11. 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 the true-up order dated May 10, 2022 along with the closing value of assets created out of TRP funds for FY 2020-21. In accordance with the MYT Regulations, 2018, the Commission has determined the Capital Structure for FY 2021-22 is as follows:

Table 36: GFA addition approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Closing Gross Fixed Assets for FY 2020-21			566.10
2	Less: Unserviceable assets			21.99
3	Opening Gross Fixed Assets	212.55	566.10	544.11
4	Addition During the FY	28.36	28.36	28.36
5	Adjustment/Retirement During the FY	0.00	0.00	0.00
6	Closing Gross Fixed Assets	240.91	594.46	572.47

Table 37: Normative Loan addition approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Closing Normative Loan for FY 2020-21			63.65
2	Closing Normative Loan for FY 2020-21 for TRP assets			62.37
3	Opening Normative Loan	32.39	295.63	126.02
4	Add: Normative Loan During the year	19.85	19.85	19.85
5	Less: Normative Repayment equivalent to Depreciation	8.24	17.57	18.47*
6	Closing Normative Loan	44.00	297.91	127.40

**Depreciation calculated in next section*

Table 38: Normative Equity addition approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
	Closing Equity for FY 2020-21			77.30
	Closing Equity for FY 2020-21 for TRP assets			85.93
1	Opening Equity	63.77	169.83	163.23
2	Additions on account of new capitalisation	8.51	8.51	8.51
3	Closing Equity	72.28	178.34	171.74

3.12. Depreciation

Petitioner's submission

The Petitioner has submitted the depreciation of INR 17.57 crore as per MYT Regulations 2018 as against the approved depreciation of INR 8.24 crores in the Tariff Order dated May 31, 2021.

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 39: Depreciation Rate (%)

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

The closing GFA of FY 2020-21 as approved in the true-up order dated May 10, 2022 along with the closing value of assets created out of TRP funds for FY 2020-21 has been considered as opening GFA of FY 2021-22. Further, depreciation has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during the year. Further, as the latest Fixed Asset Register is available for FY 2020-21 only, therefore, the Commission has determined the depreciable GFA after deducting the value of assets that have achieved 90% depreciation as reflected in the FAR of FY 2020-21.

The following table provides the calculation of depreciation and the depreciation approved by the Commission for FY 2021-22:

Table 40: Computation of Depreciation for FY 2021-22 (In INR Crore)

Description	Opening GFA as per audited accounts	Less: Assets depreciated upto 90% till FY 2020-21	Revised Opening GFA	Addition/ Deletion during the year	Closing GFA	Depreciation Rate	Depreciation
Plant & Machinery	466.07	34.40	431.67	23.89	455.56	3.60%	15.97
Building & Civil Engineering Works	53.82	0.40	53.43	4.32	57.75	1.80%	1.00
Furniture & Fixtures & Office Equipments	17.73	0.70	17.03	0.15	17.18	6.00%	1.03
Land	0.90	0.00	0.90	0.00	0.90	0.00%	-
Vehicles	5.58	2.97	2.61	0.00	2.61	18.00%	0.47
Total	**544.11**	**38.47**	**505.64**	**28.36**	**534.00**		**18.47**

Table 41: Depreciation approved by the Commission for FY 2021-22 (In INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	212.55	566.10	544.11
2	Less: Assets depreciated upto 90% till FY 2020-21	0.00	0.00	38.47
3	Net Gross Fixed Assets	212.55	566.10	505.64
4	Addition During the FY	28.36	28.36	28.36
5	Closing Net Fixed Assets	240.91	594.46	534.00
6	Average Net Fixed Assets	226.73	580.28	519.82
7	Weighted Average Depreciation rate (%)	3.64%	3.03%	3.55%
	Depreciation	**8.24**	**17.57**	**18.47**

The Commission now approves depreciation of INR 18.47 Crore in the APR of the FY 2021-22.

3.13. 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 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 that relevant year plus 100 basis points.

Further, the Petitioner submitted that the EDA&N has finalized the Fixed Asset Register up-to 31.03.2021. The closing GFA as per the FAR as on 31.03.2021 is INR 566.10 crore. It is submitted that several Fixed Assets pertaining to previous years which were omitted from the Accounts have been incorporated in the FAR after reconciliation with Accounts. The Proforma Accounts for the FY 2017-18, FY 2018-19, FY 2019-20 & FY 2020-21 has been compiled with above updated asset details and have been audited by AG. EDA&N has considered the closing normative loan for the FY 2020-21 as the opening normative loan for the FY 2021-22.

Thereafter, 70% of the estimated asset capitalization/addition during FY 2021-22 has been considered for calculation of closing normative loan for the FY 2021-22. Normative repayment of loan for the FY 2021-22 has been considered equivalent to depreciation for the FY 2021-22.

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.

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. Further, the opening loan balances has been considered equivalent to the closing loan balances of FY 2020-21 as approved in the true-up order dated May 10, 2022 along with the closing value of loan balances for FY 2020-21 for assets created out of TRP funds.

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

Table 42: Interest and Finance Charges approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	32.39	295.63	126.02
2	Add: Normative Loan During the year	19.85	19.85	19.85
3	Less: Normative Repayment equivalent to Depreciation	8.24	17.57	18.47
4	Closing Normative Loan	44.00	297.91	127.40

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
5	Average Normative Loan	38.20	296.77	126.71
6	Rate of Interest (%)	8.00%	8.00%	8.00%
7	**Interest on Loan**	**3.06**	**23.74**	**10.14**

The Commission approves Interest and Finance Charges of INR 10.14 Crore in the APR of the FY 2021-22

3.14. 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. Further, the Petitioner submitted that the EDA&N has finalized the Fixed Asset Register up-to 31.03.2021. The closing GFA as per the FAR as on 31.03.2021 is INR 566.10 crore. It is submitted that several Fixed Assets pertaining to previous years which were omitted from the Accounts have been incorporated in the FAR after reconciliation with Accounts. The Proforma Accounts for the FY 2017-18, FY 2018-19, FY 2019-20 & FY 2020-21 has been compiled with above updated asset details and have been audited by AG. EDA&N has considered the closing equity for the FY 2020-21 as the opening equity for the FY 2021-22. Thereafter, 30% of the estimated asset capitalization/addition during FY 2021-22 has been considered for calculation of closing equity for the FY 2021-22. 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 2020-21 as approved in the true-up order dated May 10, 2022 along with the closing value of equity for FY 2020-21 for assets created out of TRP funds. 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 43: RoE approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	63.77	169.83	163.23
2	Additions on account of new capitalisation	8.51	8.51	8.51
3	Closing Equity	72.27	178.34	171.74
4	Average Equity	68.02	174.08	167.49
5	Rate of Return	16.00%	16.00%	16.00%
6	**Return on Equity**	**10.88**	**27.85**	**26.80**

The Commission approves the Return on Equity of INR 26.80 Crore in the APR of the FY 2021-22.

3.15. 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 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 2021-22.

3.16. 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. 9.00% (7.00% + 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 44: Interest on Working Capital submitted by the Petitioner (INR Crore)

S. No.	Particulars	FY 2020-21
1	O&M Expense - 1 month	22.81
2	Maintenance Spare @ 40% of R&M Exp - one month	3.45
3	Two Months Receivables	37.42
4	Less : Amount held as Security Deposit	0.00
5	Total Working Capital	63.68
6	Interest Rate	9.00%
7	**Interest on Working Capital**	**5.73**

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 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 2021-22 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 2021 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 45: Interest on Working Capital approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	O&M Expense for 1 month	18.16	22.81	17.88
2	Maintenance spares at 40% of R&M expenses for one (1) month;	1.82	3.45	2.20

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
3	Receivables equivalent to two (2) months of the expected revenue at the prevailing tariff	26.80	37.42	31.32
4	Less: Amount held as security deposits	0.00	0.00	0.00
5	Net Working Capital	46.78	63.68	51.40
6	Rate of Interest (%)	9.75%	9.00%	9.00%
7	**Interest on Working Capital**	**4.56**	**5.73**	**4.63**

The Commission approves the Interest on Working Capital as INR 4.63 Crore in the APR of the FY 2021-22.

3.17. 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 2021-22.

3.18. Non-Tariff Income

Petitioner's submission

The Petitioner has submitted the Non-Tariff Income of INR 3.25 Crore in line with the Non-Tariff Income as approved by the Commission in the Tariff Order.

Commission's analysis

The Commission sought the details of Non-tariff Income along with the breakup for FY 2021-22 and the same has been provided in table below:

Table 46: Details of Non-Tariff Income as submitted by the Petitioner for FY 2021-22 (INR Crore)

S. No	Particulars	Value
1	Meter Rent	1.94
2	New Service Connection	0.14
3	Estimates, RC Fees Etc.	0.89
4	Miscellaneous & Others	0.30
5	Sale of Waste Oil	0.05
6	NRSE	0.00
7	**Non-Tariff Income**	**3.32**

The Petitioner has wrongly submitted the Non-Tariff Income of INR 3.25 crores in the tariff petition and after detailed scrutiny, the Commission has approved the Non-Tariff Income of INR 3.32 crores for FY 2021-22. 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 47: Non-Tariff Income approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	**Non-Tariff Income**	**3.25**	**3.32**	**3.32**

The Commission approves Non-Tariff Income of INR 3.32 crore in the APR of FY 2021-22. The same shall be considered at actuals at the time of True-up of FY 2021-22.

3.19. 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 1054.92 Crore after adjusting the Non -Tariff Income for FY 2021-22.

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 2021-22 as provided in the table below:

Table 48: Aggregate Revenue Requirement approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost	474.27	539.90	631.64
2	Fuel Cost		169.65	
3	O&M Expenses	217.98	273.72	214.55
4	Depreciation	8.24	17.57	18.47
5	Interest and Finance charges	3.06	23.74	10.14
6	Interest on Working Capital	4.56	5.73	4.63
7	Return on Equity	10.88	27.85	26.80
8	Interest on Security Deposit	0.00	0.00	0.00
9	Impact of allowing assets creating out of TRP funds for FY 2020-21	-	-	29.19
10	**Total Revenue Requirement**	**719.00**	**1058.17**	**935.41**
11	Less: Non-Tariff Income	3.25	3.25	3.32
12	**Net Revenue Requirement**	**715.75**	**1054.92**	**932.09**

The Commission now approves the net ARR of INR 932.09 crore in the APR of FY 2021-22.

3.20. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the revenue from the sale of power at existing tariff as INR 224.49 crore determined on the basis of energy sales in the territory for FY 2021-22.

Commission analysis

The category wise revenue at existing retail tariff is calculated as per the tariff rates applicable for FY 2021-22 as per tariff order dated May 31, 2021. 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 2021-22. The revenue from category/ sub-category/ slab-wise revenue as computed by the Commission for FY 2021-22 has been shown in the following table:

Table 49: Revenue at existing tariff computed by the Commission for FY 2021-22 (INR Crore)

S. No.	Category	Sales (MUs)	Revenue from Fixed charges	Revenue from Energy Charges	Total	ABR (INR/unit)
1	Domestic	156.42	3.05	62.43	65.48	4.19
2	Commercial	33.32	0.91	36.46	37.37	11.22
3	Govt. Connections	27.70	0.30	29.15	29.45	10.63
4	Industrial	10.98	0.97	9.26	10.23	9.32
5	Bulk	29.63	2.11	38.52	40.63	13.71
6	Public Lighting	5.53	0.60	3.87	4.47	8.08
7	Irrigation, Pumps & Agriculture	1.73	0.03	0.28	0.31	1.78
8	**Total**	**265.31**	**7.97**	**179.97**	**187.93**	**7.08**

The Commission has determined revenue from the sale of power at existing tariff as INR 187.93 Crore in the APR of FY 2021-22.

3.21. Standalone Revenue Gap/Surplus

Petitioner’s submission

Based on the ARR and the revenue from Retail tariff, the standalone revenue gap of INR 830.43 Crore is arrived at in the APR of FY 2021-22.

Commission analysis

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

Table 50: Standalone Revenue Gap/ Surplus at existing tariff (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Net Revenue Requirement	715.75	1054.92	932.09
2	Revenue from Retail Sales at Existing Tariff	166.19	224.49	187.93
3	**Net Gap /(Surplus)**	**549.56**	**830.43**	**744.15**

The Commission approves the standalone gap at INR 744.15 Crore in the APR of FY 2021-22, which will be met through the budgetary support from the Andaman & Nicobar Administration as confirmed by the Petitioner vide Letter Reference No. EL/PL/10-1/2021/2004 dated May 27, 2021.

4. Chapter 4: Determination of Aggregate Revenue Requirement for the 3rd MYT Control Period (FY 2022-23 to FY 2024-25)

4.1. Background

In this Chapter, the Commission has determined the Aggregate Revenue Requirement for the 3rd MYT Control Period (FY 2022-23 to FY 2024-25). The determination of Aggregate Revenue Requirement has been done in accordance with the MYT Regulations, 2021.

4.2. Approach for determination of ARR for each year of the 3rd MYT Control Period

The Commission has approved the Business Plan for the third Control for the Petitioner for period from FY 2022-23 to FY 2024-25 vide order dated August 1, 2022. In this section the Commission had approved Capital investment Plan, Power Procurement Plan, Sales and Demand Projection, trajectory for certain variable for FY 2022-23 to FY 2024-25. Accordingly, as per the provision of the MYT Regulations, 2021, the Commission has approved various components of ARR based on the approved Business Plan in this chapter.

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

Petitioner's Submission

The Petitioner has projected the number of consumers, connected load and the category wise sales as submitted in the Business Plan petition for FY 2022-23 to FY 2024-25. The Petitioner's projection of number of consumers, connected load and sales for the upcoming Multi-Year Control Period, are as given in the tables below:

Table 51: Petitioner's submission on projection of Number of Consumers for upcoming Multi-Year Control Period

Number of Consumer	Growth Rate	Base Year (Estimated)	Projections		
Consumer Category		**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**
Domestic	2.64%	121,728	124,941	128,239	131,624
Commercial	2.31%	21,748	22,251	22,766	23,293
Industrial	2.31%	479	490	501	513
Bulk	3.44%	72	75	77	80
Public Lighting	3.85%	838	870	904	939
Irrigation, Pumps & Agriculture	10.66%	529	585	648	717
Total		**145,394**	**149,213**	**153,136**	**157,166**

Table 52: Petitioner's submission on projection of Connected Load (kW) for upcoming Multi-Year Control Period

Connected Load	Growth Rate	Base Year (Estimated)	Projections		
Consumer Category		**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**
Domestic	8.44%	198,404	215,157	233,325	253,027
Commercial	13.79%	105,614	120,180	136,756	155,618
Industrial	13.79%	16,603	18,893	21,499	24,464
Bulk	5.73%	15,153	16,022	16,941	17,912
Public Lighting	0.52%	2,800	2,815	2,830	2,844
Irrigation, Pumps & Agriculture	8.57%	1,314	1,426	1,549	1,681
Total		**339,888**	**374,494**	**412,899**	**455,547**

Table 53: Petitioner's submission on projection of Sales (MU) for upcoming Multi-Year Control Period

Number of Consumer	Growth Rate	Base Year (Estimated)	Projections		
Consumer Category		**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**
Domestic	4.22%	148.96	155.23	161.78	168.60
Commercial	5.18%	76.17	80.11	84.27	88.63
Industrial	5.18%	13.48	14.18	14.91	15.68
Bulk	5.00%	33.88	35.57	37.35	39.22
Public Lighting	5.00%	7.07	7.42	7.79	8.18
Irrigation, Pumps & Agriculture	2.23%	1.14	1.17	1.19	1.22
Total		**280.70**	**293.68**	**307.29**	**321.53**

Commission's Analysis

The Commission has already approved the number of consumers, connected load and category wise sales for the third control period in the Business Plan order. Accordingly, the same has been considered as approved by the Commission, which is as follows:

Table 54: Number of consumers approved by the Commission for FY 2022-23 to FY 2024-25

Number of Consumer	CAGR Approved	Base Year (Estimated)	Projections		
Consumer Category		**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**
Domestic	2.83%	121,211	124,643	128,172	131,802
Commercial	2.38%	21,711	22,228	22,757	23,298
Industrial	0.35%	441	443	444	446
Bulk	1.55%	69	70	71	72
Public Lighting	3.41%	753	779	805	833
Irrigation, Pumps & Agriculture	8.83%	531	578	629	685
Total		**144,716**	**148,740**	**152,878**	**157,135**

Table 55: Connected Load approved by the Commission for FY 2022-23 to FY 2024-25 (kW)

Connected Load	CAGR Approved	Base Year (Estimated)	Projections		
Consumer Category		**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**
Domestic	7.04%	221,250	236,832	253,511	271,364
Commercial	9.09%	101,610	110,844	120,918	131,907
Industrial	0.72%	14,512	14,617	14,723	14,830
Bulk	4.40%	15,803	16,498	17,224	17,982
Public Lighting	3.19%	2,986	3,081	3,179	3,281
Irrigation, Pumps & Agriculture	5.36%	1,216	1,281	1,350	1,422
Total		**357,377**	**383,154**	**410,904**	**440,785**

Table 56: Category wise Sales approved by the Commission for FY 2022-23 to FY 2024-25 (MU)

Sales	CAGR Approved	Base Year (Estimated)	Projections		
Consumer Category		**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**
Domestic	4.35%	156.42	163.22	170.31	177.72
Commercial	7.11%	61.02	65.36	70.00	74.98
Industrial	5.00%	10.98	11.53	12.11	12.71
Bulk	0.33%	29.63	29.73	29.82	29.92
Public Lighting	0.15%	5.53	5.54	5.55	5.55
Irrigation, Pumps & Agriculture	5.18%	1.73	1.82	1.91	2.01
Total		**265.31**	**277.19**	**289.71**	**302.89**

Further, the Commission in the Business Plan order highlighted that the category wise sales, connected load and number of consumers data as submitted by the Petitioner is inconsistent and unreliable. Further, the Petitioner has not made any adjustment related to transfer of hotel category consumers between the Commercial and Industrial category in the data for the period which has been used to project the sales, connected load and number of consumers for the control period. The Commission has considered the data as submitted by the Petitioner for projecting the sales, connected load and number of consumers for the control period and may consider revising the projections based on the availability of the accurate and reliable data in the next tariff petition.

Accordingly, the Commission directs the Petitioner to submit the historical category wise slab wise sales, connected load and number of consumers with adjustments pertaining to the shifting of hotel industry consumers between the Industrial and Commercial Category.

4.4. Intra-State Transmission and Distribution Loss

Petitioner's submission

The Petitioner has considered the Transmission and Distribution (T&D) losses as submitted in the Business Plan petition for FY 2022-23 to FY 2024-25 for determination of the ARR.

Commission's analysis

The Commission has already approved the Transmission & Distribution losses for the third control period in the Business Plan order.

Table 57: T&D Losses approved by the Commission for FY 2022-23 to FY 2024-25 (%)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	T&D loss trajectory	15.91%	13.91%	11.91%

4.5. Energy Requirement

Petitioner's submission

The Petitioner has submitted that the energy requirement for the control period from FY 2022-23 to FY 2024-25 has been projected based on the sales grossed up with T&D losses submitted in Business Plan petition. The summary of the energy requirement as estimated by the Petitioner is as given below:

Table 58: Energy requirement as estimated by the Petitioner for the upcoming Control Period

Energy Balance	FY 2022-23	FY 2023-24	FY 2024-25
	(Projected)	(Projected)	(Projected)
	MU's	MU's	MU's
Energy Sales			
Total Energy Sales	**293.68**	**307.29**	**321.53**
Overall T & D Losses %	**17.01**	**16.67**	**16.08**
Overall T & D Losses (MUs)	60.19	61.47	61.61
Total Energy Requirement	**353.88**	**368.76**	**383.14**

Commission's analysis

The Commission has already approved the energy requirement for the third control period from FY 2022-23 to FY 2024-25 in the Business Plan Order. Accordingly, the Commission has considered the same for FY 2022-23 to FY 2024-25, which is as follows:

Table 59: Energy Requirement approved by the Commission for FY 2022-23 to FY 2024-25

S. No.	Particulars	Revised Estimate for Base Year FY 2021-22	Approved FY 2022-23	Approved FY 2023-24	Approved FY 2024-25
1	**Energy Sales**	**265.31**	**277.19**	**289.71**	**302.89**
2	Overall T&D losses (%)	13.34%	15.91%	13.91%	11.91%
3	Overall T&D losses (MU)	40.84	52.44	46.81	40.95
4	**Total Energy Requirement (MU)**	**306.15**	**329.63**	**336.52**	**343.85**

In view of the sales projections approved by the Commission in Section 4.3, the Commission approves the RPO obligation for each year of the Control Period based on the JERC (Procurement of Renewable Energy) Regulations, 2010 and subsequent amendments thereof, as shown below:

Table 60: RPO target approved by the Commission for FY 2022-23 to FY 2024-25

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Sales within State (MU) (A)	277.19	289.71	302.89
Solar Obligation			
Solar RPO (%)	9.00%	10.00%	11.00%
Total power to be procured to meet solar obligation (MU)	24.95	28.97	33.32
Non-Solar Obligation			

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Non- Solar RPO (%)	9.00%	9.25%	9.50%
Total power to be procured to meet non- solar obligation (MU)	24.95	26.80	28.77
HPO Obligation			
HPO Obligation (%)	0.35%	0.66%	1.08%
Total power to be procured to meet hydro obligation (MU)	0.97	1.91	3.27
Total power to be procured to meet solar and non-solar RPO	**50.86**	**57.68**	**65.36**

The Commission in the Business Plan Order has directed the Petitioner to comply with the entire RPO target irrespective of Solar or Non-Solar Sources as per JERC (Procurement of Renewable Energy) Regulations, 2010 and subsequent amendments thereof.

Accordingly, the source wise Energy requirement approved by the Commission is as follows:

Table 61: Details of Source wise Energy Requirement approved by the Commission for FY 2022-23 to FY 2024-25 (MU)

S. No.	Particulars	Approved FY 2022-23	Approved FY 2023-24	Approved FY 2024-25
1	**Total Energy Requirement**	**329.63**	**336.52**	**343.85**
2	Solar Power	25.45	28.01	30.81
3	Hydro Power	13.16	13.16	13.16
4	Diesel Power	291.03	295.35	299.88

Further, the Commission directs the Petitioner to submit the action plan for complying the shortfall in the RPO till FY 2022-23 while filing the next tariff petition.

4.6. Power Purchase Quantum & Cost

Petitioner's submission

The energy requirement of EDA&N is mainly met from own generation and power purchase from HPPs & NTPC (SPV), NVVN, Mundra etc. There is no availability of power from Central Generating Stations or from other sources/ open market/ power exchanges etc. Own generation accounted for around 14% of the total power requirement for FY 2020-21 and balance 86% of power requirement was met from power purchase and is estimated that approximately 23%- 25% & 75%-77% of the total energy requirement for FY 2021-22 shall be met by own generation and power purchase respectively. The present scenario is likely to continue and is projected that energy requirement for FY 2022-23, 2023-24 and 2024-25 and mix of own generation and power purchase shall be in approximately in the above range. The expected power generation/procurement sources for FY 2022-23, 2023-24 and 2024-25 are provided in the table below:

Table 62: Details of Power Procurement Sources as submitted by the Petitioner for the Control Period (MU)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Power Purchase	271.38	283.77	295.60
Own Generation	82.50	84.99	87.54
Total	**353.88**	**368.76**	**383.14**

The present power availability of EDA&N is as listed below:

Table 63: Details of the power procurement from power purchase and own generation

Generating Station	Purchase of Power (MW)	Own generation (MW)	Total Availability (MW)
Purchase			
HPP- I	5.00		5.00
HPP-II	10.00		10.00
HPP NTPC (Aggreko)	5.00		5.00
NTPC GM Solar PV Plant	5.00		5.00
HPP NTPC (Express Engg.)	10.00		10.00
DG Power Plant at Shaheed Dweep	0.40		0.40
DG Power Plant at Swaraj Dweep	3.23		3.23
SECI (Rooftop SPV) Port Blair	1.00		1.00
Mundra (Rooftop SPV) Port Blair	2.84		2.84
Mundra (Rooftop SPV) Car Nicobar	0.31		0.31
HPP (Express Engg.) Mayabundar	1.60		1.60
HPP (Express Engg.) Baratang	0.80		0.80
NLC Ground Mounted SPV Plant	20.00		20.00
HPP (Express Engg.) Gandhi Nagar	0.082		0.082
HPP (Express Engg.) Ganesh Nagar	0.148		0.148
HPP (Express Engg.) Shanti Nagar	0.18		0.18
HPP (Express Engg.) Smith Island	0.148		0.148
Own Generation			
Diesel		60.04	60.04
Hydro		5.25	5.25
Total	**65.738**	**65.29**	**130.88**

The power purchase cost for the third Control Period from FY 2022-23 to FY 2024-25 as proposed by the Petitioner is as follows:

Table 64: Projected Power Purchase Cost proposed by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

S. No.	Type of Fuel	FY 2022-23	FY 2023-24	FY 2024-25
1	Power Purchase	592.84	647.64	716.28
2	Own Generation	186.96	202.96	222.20
3	**Total**	**779.80**	**850.60**	**938.48**

Commission's Analysis

As per Regulation 13.1 of the MYT Regulations, 2021, power purchase and fuel cost are uncontrollable parameters. Thus, the power purchase and fuel cost need to be revisited every year by the Commission based on the audited accounts. The Commission has considered that the energy demand net of renewable generation shall be met from the Diesel Generation (both own generation and HPPs/IPPs) based on sales projected for FY 2021-22 as Diesel generation is the main source of power in Andaman & Nicobar Islands and may vary as per the demand.

The Commission vide deficiency note sought the plant wise historical data such as generation quantum, specific fuel consumption, diesel and lube oil consumption. However, the Petitioner has submitted the details for only last six months of FY 2021-22. The Commission has considered the last six months data of FY 2021-22 for the computation of SFC for the department owned plants and has considered the SFCs for HPPs/IPPs as per the PPA signed by the Petitioner.

After detailed scrutiny, the Commission has approved an average Diesel SFC of 288.54 ml/kWh for all the DG sets considered under own generation. Further, the Petitioner has not provided any historical details for the Lube oil consumption, therefore, in absence of the same, the Commission has considered the average SFC of 0.98 ml/kWh as approved by the Commission in MYT Order dated May 20, 2019.

Further, the Commission sought the bills for the HSD and Lube oil procurement for FY 2017-18 to FY 2021-22, however, the Petitioner have only submitted the bill details of HSD for FY 2021-22. Based on the assessment of bills and considering the volatile nature of prices of HSD, the Commission has approved the average HSD cost of INR 79.78/litre for FY 2021-22. However, the Petitioner has not provided the details of Lube oil procurement and their bills for the Commission's reference. Therefore, in absence of the same, the Commission has considered the Lube oil rate of INR 203.99/litre for FY 2021-22 after escalating the Lube oil cost for FY 2020-21 by 5%.

Further, the Commission has considered the Y-o-Y escalation of 5% on HSD and Lube oil prices while allowing the fuel cost for the control period. Accordingly, the fuel cost for the third Control Period from FY 2022-23 to FY 2024-25 has been computed as follows:

i. Availability of Power for the HPPs/IPPs has been considered as projected by the Petitioner.

ii. Availability of Power from own DG sets has been considered after adjusting the power purchase quantum from the power requirement computed based on the approved sales and T&D losses

iii. Cost of HSD has been considered at INR 79.78/litre for FY 2021-22 with 5% y-o-y escalation over the control period (i.e. the average of HSD price prevailing during FY 2021-22).

iv. Cost of Lube Oil has been considered at INR 203.99.78/litre for FY 2021-22 with 5% y-o-y escalation over the control period.

v. Specific Consumption of HSD has been considered as average of the actual specific consumption for the last six months of FY 2021-22.

vi. The fixed cost for the power purchase has been considered as per the PPAs submitted by the Petitioner in the true-up and tariff petitions.

Accordingly, the Commission has approved the fuel cost and power purchase cost from FY 2022-23 to FY 2024-25 as per the following tables:

Table 65: Fuel Cost approved by the Commission for FY 2022-23

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)	45.08	288.54	83.77	13006004.36	0.98	214.19	44174.07
HPP -1 (5 MW)	39.49	269.00	83.77	10624030.18	0.00	0.00	0.00
HPP-2 (10MW)	66.75	269.00	83.77	17955806.22	0.00	0.00	0.00
Other HPPs	0.30	269.00	83.77	81479.02	0.00	0.00	0.00
NTPC DG 5MW	49.01	269.00	83.77	13184537.35	0.00	0.00	0.00
NTPC DG 10MW	68.14	269.00	83.77	18328888.78	0.00	0.00	0.00
DG P/Plant Niel 0.96MW	0.24	277.00	83.77	66174.75	0.00	0.00	0.00

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)
DG P/Plant Havelock 3 MW	10.48	269.00	83.77	2820159.42	0.00	0.00	0.00
Mayabunder	9.88	269.00	83.77	2656456.78	0.00	0.00	0.00
Baratang	1.24	269.00	83.77	334658.33	0.00	0.00	0.00
Total	**290.62**			**79058195.18**			**44174.07**

Table 66: Fuel Cost approved by the Commission for FY 2023-24

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)	39.56	288.54	87.96	11415989.38	0.98	224.90	38773.68
HPP -1 (5 MW)	41.33	269.00	87.96	11118183.72	0.00	0.00	0.00
HPP-2 (10MW)	69.79	269.00	87.96	18772795.54	0.00	0.00	0.00
Other HPPs	0.32	269.00	87.96	85186.38	0.00	0.00	0.00
NTPC DG 5MW	51.24	269.00	87.96	13784433.71	0.00	0.00	0.00
NTPC DG 10MW	71.24	269.00	87.96	19162853.34	0.00	0.00	0.00
DG P/Plant Niel 0.96MW	0.25	277.00	87.96	69185.74	0.00	0.00	0.00
DG P/Plant Havelock 3 MW	10.96	269.00	87.96	2948476.72	0.00	0.00	0.00
Mayabunder	10.32	269.00	87.96	2777325.47	0.00	0.00	0.00
Baratang	1.30	269.00	87.96	349885.07	0.00	0.00	0.00
Total	**296.32**			**80484315.07**			**38773.68**

Table 67: Fuel Cost approved by the Commission for FY 2024-25

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)	35.06	288.54	92.35	10117424.29	0.98	236.14	34363.19
HPP -1 (5 MW)	43.11	269.00	92.35	11597881.20	0.00	0.00	0.00
HPP-2 (10MW)	75.78	269.00	92.35	20384507.15	0.00	0.00	0.00
Other HPPs	0.33	269.00	92.35	88593.54	0.00	0.00	0.00
NTPC DG 5MW	53.29	269.00	92.35	14335811.08	0.00	0.00	0.00
NTPC DG 10MW	74.09	269.00	92.35	19929367.22	0.00	0.00	0.00
DG P/Plant Niel 0.96MW	0.26	277.00	92.35	71953.24	0.00	0.00	0.00
DG P/Plant Havelock 3 MW	11.40	269.00	92.35	3066415.74	0.00	0.00	0.00
Mayabunder	10.74	269.00	92.35	2888418.44	0.00	0.00	0.00
Baratang	1.35	269.00	92.35	363880.60	0.00	0.00	0.00

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)
Total	**305.42**			**82844252.50**			**34363.19**

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

Table 68: Power Purchase Cost approved by the Commission for FY 2022-23

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)	45.08	108.95	0.95	0.00	109.89
2	KHEP (Kalpong Hydro)	13.16	0.00	0.00	0.00	0.00
3	Solar (Own)	0.02	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	39.49	88.99	0.00	4.15	93.14
5	HPP-2 (10MW)	66.75	150.41	0.00	7.81	158.22
6	NTPC - SPV	5.58	0.00	0.00	5.21	5.21
7	Other HPPs	0.30	0.68	0.00	0.30	0.99
8	NTPC DG 5MW	49.01	110.44	0.00	7.30	117.75
9	NTPC DG 10MW	68.14	153.54	0.00	9.88	163.42
10	DG P/Plant Niel 0.96MW	0.24	0.55	0.00	0.02	0.58
11	DG P/Plant Havelock 3 MW	10.48	23.62	0.00	0.97	24.60
12	SECI Solar	0.94	0.00	0.00	0.43	0.43
13	M/s. MUNDRA	3.23	0.00	0.00	0.71	0.71
14	NLC	16.10	0.00	0.00	10.70	10.70
15	Mayabunder	9.88	22.25	0.00	1.22	23.48
16	Baratang	1.24	2.80	0.00	0.13	2.94
17	**Total**	**329.63**	**662.25**	**0.95**	**48.85**	**712.05**

Table 69: Power Purchase Cost approved by the Commission for FY 2023-24

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)	39.56	100.41	0.87	0.00	101.28
2	KHEP (Kalpong Hydro)	13.16	0.00	0.00	0.00	0.00
3	Solar (Own)	0.03	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	41.33	97.79	0.00	4.34	102.13
5	HPP-2 (10MW)	69.79	165.12	0.00	8.17	173.28
6	NTPC - SPV	5.83	0.00	0.00	5.45	5.45
7	Other HPPs	0.32	0.75	0.00	0.30	1.05
8	NTPC DG 5MW	51.24	121.24	0.00	7.64	128.88
9	NTPC DG 10MW	71.24	168.55	0.00	10.33	178.88
10	DG P/Plant Niel 0.96MW	0.25	0.61	0.00	0.02	0.63
11	DG P/Plant Havelock 3 MW	10.96	25.93	0.00	1.02	26.95
12	SECI Solar	0.98	0.00	0.00	0.44	0.44
13	M/s. MUNDRA	3.38	0.00	0.00	0.74	0.74
14	NLC	16.83	0.00	0.00	11.19	11.19

S. No.	Particulars	Units generated (MU)	Cost of HSD (INR Cr)	Cost of Lube (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
15	Mayabunder	10.32	24.43	0.00	1.28	25.71
16	Baratang	1.30	3.08	0.00	0.14	3.22
17	**Total**	**336.51**	**707.90**	**0.87**	**51.06**	**759.84**

Table 70: Power Purchase Cost approved by the Commission for FY 2024-25

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)	35.06	93.44	0.81	0.00	94.25
2	KHEP (Kalpong Hydro)	13.16	0.00	0.00	0.00	0.00
3	Solar (Own)	0.03	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	43.11	107.11	0.00	4.53	111.64
5	HPP-2 (10MW)	75.78	188.26	0.00	8.87	197.12
6	NTPC - SPV	6.06	0.00	0.00	5.67	5.67
7	Other HPPs	0.33	0.82	0.00	0.30	1.12
8	NTPC DG 5MW	53.29	132.40	0.00	7.94	140.34
9	NTPC DG 10MW	74.09	184.05	0.00	10.74	194.80
10	DG P/Plant Niel 0.96MW	0.26	0.66	0.00	0.02	0.69
11	DG P/Plant Havelock 3 MW	11.40	28.32	0.00	1.06	29.38
12	SECI Solar	1.02	0.00	0.00	0.45	0.45
13	M/s. MUNDRA	3.51	0.00	0.00	0.77	0.77
14	NLC	14.65	0.00	0.00	9.74	9.74
15	Mayabunder	10.74	26.68	0.00	1.33	28.01
16	Baratang	1.35	3.36	0.00	0.14	3.50
17	**Total**	**343.84**	**765.10**	**0.81**	**51.58**	**817.48**

The Commission would like to highlight that 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 as part of various components of Annual Revenue Requirement for the department as a whole and has been discussed in the subsequent sections. Similarly, no separate cost has been approved for own renewable based generation, foe which the Petitioner needs to file a separate petition for the determination of tariff.

4.7. Energy Balance

Petitioner's submission

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

Table 71: Energy Balance (MU) submitted by the Petitioner for the control period

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
A	**Energy Requirement**			
1	Total Sales within the UT	293.68	307.29	321.53
2	Transmission and Distribution losses (%)	17.01	16.67	16.08
	Transmission and Distribution losses (MU)	60.19	61.47	61.61
3	**Total Energy Requirement (for sale to retail consumers)**	**353.88**	**368.76**	**383.14**

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
B	**Energy Availability at Periphery**			
1	Power Purchase	271.38	283.77	295.60
2	Own Generation	82.50	84.99	87.54
3	**Total Energy Availability**	**353.88**	**368.76**	**383.14**
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**0.00**

Commission's analysis

The energy balance for the upcoming Control Period based on the Commission's analysis is given below:

Table 72: Energy Balance projections approved by the Commission for the upcoming Control Period

Energy Balance	FY 2022-23	FY 2023-24	FY 2024-25
Total Energy Sales	**277.19**	**289.71**	**302.89**
Overall T & D Losses %	**15.91**	**13.91**	**11.91**
Overall T & D Losses (MUs)	52.44	46.81	40.95
Total Energy Requirement	**329.63**	**336.52**	**343.85**
Power Purchase	271.38	283.77	295.60
Own Generation	58.25	52.75	48.25
Total Energy Availability	**329.63**	**336.52**	**343.85**
ENERGY SURPLUS/(GAP)	-	-	-

4.8. Operation & Maintenance Expenses

Regulation 61 of the MYT Tariff Regulations, 2021 stipulates as follows:

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

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

Where,

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

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

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

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

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

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

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

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

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

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

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

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

4.8.1. Employee Expenses

Petitioner's submission

The Petitioner has determined the employee cost for the control period by taking the actual employee expenses for the FY 2020-21 as base and escalating the same at the rate of 5.35% year over year i.e. average increase in CPI from 2018-19 to 2020-21. Further, the growth factor (Gn) for the respective years has been considered for meeting additional manpower requirement.

Table 73: Employee Expenses projected by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Employee Expenses	**178.25**	**176.43**	**171.39**

Commission's analysis

The Commission has averaged the actual employee expenses for FY 2018-19 to FY 2020-21 to arrive at the employee expenses for the median year FY 2019-20. Thereafter, the employee expenses, thus, arrived for FY 2019-20 have been escalated by the CPI inflation twice to arrive at employee expenses for the base year, FY 2021-22. The resultant employee expenses have been escalated by Growth Rate determined based on the manpower plan approved in the Business Plan Order and CPI Inflation to arrive upon the employee expenses for each year of the Control Period.

The CPI Inflation has been computed as follows:

Table 74: Computation of CPI Inflation (%)

<table>
<tr><th>FY</th><th>Increase in CPI Index</th><th>Average increase in CPI Index over 3 years</th><th>Average increase in CPI Index over 3 years</th><th>Average increase in CPI Index over 3 years</th></tr>
<tr><td>2016-17</td><td>4.12%</td><td rowspan="3">4.22%</td><td></td><td></td></tr>
<tr><td>2017-18</td><td>3.08%</td><td rowspan="3">5.35%</td><td></td></tr>
<tr><td>2018-19</td><td>5.45%</td><td rowspan="3">6.00%</td></tr>
<tr><td>2019-20</td><td>7.53%</td><td></td></tr>
<tr><td>2020-21</td><td>5.02%</td><td></td><td></td></tr>
</table>

Table 75: Employee Expenses as approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

Particulars	Average of the preceding 3 years	Base Year	FY 2022-23	FY 2023-24	FY 2024-25
EMPn-1	134.06		147.19	157.49	156.85
Gn (%)			0.94%	-6.04%	-7.79%
CPI Inflation (%) (Average of FY 2016-17 to FY 2018-19)		4.22%			
CPI Inflation (%) (Average of FY 2017-18 to FY 2019-20)		5.35%			
CPI Inflation (%) (Average of FY 2018-19 to FY 2020-21)			6.00%	6.00%	6.00%
Gross Employee Expense EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation)	**134.06**	**147.19**	**157.49**	**156.85**	**153.30**

4.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has determined the A&G expenses for the control period by taking the actual A&G expenses for the FY 2020-21 as base and escalating the same at the rate of 5.35% year over year i.e. average increase in CPI from 2018-19 to 2020-21.

Table 76: A&G Expenses projected by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
A&G Expenses	**2.62**	**2.76**	**2.91**

Commission's analysis

Similar to the methodology followed while estimating the employee expenses, the Commission has determined the A&G expenses for the median year of FY 2019-20 after taking the average of actual A&G expenses of FY 2018-19, FY 2019-20 and FY 2020-21. The resultant A&G expenses have been escalated by CPI Inflation twice to arrive upon the A&G expenses for the base year, i.e. FY 2021-22. Thereafter, the A&G expenses are escalated by CPI Inflation to determine the A&G expenses for each year of the Control Period.

The A&G expenses approved by the Commission in the MYT Control Period have been provided in the following table:

Table 77: A&G Expenses as approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

Particulars	Average of the preceding 3 years	Base Year	FY 2022-23	FY 2023-24	FY 2024-25
A&Gn-1	11.21		4.96	5.26	5.57
CPI Inflation (%) (Average of FY 2016-17 to FY 2018-19)		4.22%			
CPI Inflation (%) (Average of FY 2017-18 to FY 2019-20)		5.35%			
CPI Inflation (%) (Average of FY 2018-19 to FY 2020-21)			6.00%	6.00%	6.00%
Provision		-	-	-	-
Gross A&Gn = A&Gn-1 x (1+CPIinflation)	**11.21**	**12.31**	**13.05**	**13.84**	**14.67**

4.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has submitted that the R&M Expenses for the control period has been projected in accordance with Regulation 61.4 of the MYT Regulations, 2021 considering K factor as per average of the ratio of R&M expenses to GFA for last 3 financial years (FY 2018-19, FY 2019-20 & FY 2020-21) and WPI as per average increase in FY 2018-19 to FY 2020-21. Thereafter, projected R&M expenses for each year of the control period i.e FY 2022-23, 2023-24 and 2024-25 has been calculated considering the opening GFA for the respective year and applying the 'K' factor & average WPI as above. Accordingly, the proposed R&M Expenses for the Control period is as follows:

Table 78: R&M Expenses projected by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
R&M Expenses	108.83	110.16	117.07

Commission's analysis

The Petitioner in the true up petition had sought to revise the opening GFA as on FY 2020-21 based on the physical verification of assets and considering the assets created out of TRP fund. Further, the Petitioner has submitted that these assets have been under commercial operation for the long time, but the same were not included in the Fixed Asset Details earlier and in the books of accounts of FY 2020-21. The Commission would like to highlight that at the time of deciding the 'K' factor in the previous MYT Order, the Commission was only aware of GFA as per the provisional accounts, which were substantially lower than the GFA claimed in the true-up of FY 2020-21. However, the actual R&M Expenses for the past years, based on which the 'K' factor was approved for the 2nd Control period, were expensed for the maintenance for all the assets including the assets now identified in the physical verification report. Further, there is gap in the opening GFA of FY 2018-19 and FY 2019-20 vis-à-vis the opening GFA of FY 2020-21, which will result in an erratic value of the k-factor for the upcoming control period.

Therefore, for the purpose of computing k-factor, the Commission has included the identified value of assets created out of TRP and computed the K factor considering the % of actual R&M expense to modified opening GFA for FY 2018-19 to FY 2020-21 as follows:

Table 79: Computation of K factor approved by the Commission for FY 2022-23 to FY 2024-25

Particulars	FY 2018-19	FY 2019-20	FY 2020-21
Actual R&M Expense	41.47	60.31	45.66
Opening GFA	518.85	518.86	520.23
Actual R&M Expense as % of Opening GFA	7.99%	11.62%	8.78%
K Factor (Average of Actual R&M Expense as % of Opening GFA)	9.46%		

The 'K' factor is kept constant for all the years and multiplied with the opening GFA approved for (n-1)th year. The resultant amount is then escalated by WPI Inflation to arrive upon the R&M Expenses for each year of the Control Period.

The WPI Inflation has been computed as follows:

Table 80: Computation of WPI Inflation (%)

FY	Increase in WPI Index	Average increase in WPI Index over 3 years
2018-19	4.32%	2.42%
2019-20	1.62%	

FY	Increase in WPI Index	Average increase in WPI Index over 3 years
2020-21	1.31%	

Accordingly, the R&M expenses approved by the Commission for the Third Control period from FY 2022-23 to FY 2024-25 is as follows:

Table 81: R&M Expenses as approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
K-Factor	9.46%	9.46%	9.46%
Opening GFA	572.47	579.80	617.53
WPI Inflation	2.42%	2.42%	2.42%
R&Mn = K x (GFAn-1) x (1+WPIinflation)	**55.49**	**56.20**	**59.86**

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

The Total O&M expense approved by the Commission for the Control period from FY 2022-23 to FY 2024-25 is as follows:

Table 82: O&M Expenses approved by the Commission for FY 2022-23 to FY 2024-25 (In INR Cr)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Employee Expenses	157.49	156.85	153.30
2	Administrative & General Expenses (A&G)	13.05	13.84	14.67
3	Repair & Maintenance Expenses	55.49	56.20	59.86
4	**Total Operation & Maintenance Expenses**	**226.03**	**226.88**	**227.82**

4.9. Gross Fixed Assets (GFA) and Capitalization

Petitioner's submission

The Petitioner has submitted that opening value of gross fixed assets (GFA) for 2021-22 has been taken from the audited accounts for the FY 2020-21 and the same has been increased by estimated addition of assets during the FY 2021-22. Thereafter, planned additions during FY 2022-23, FY 2023-24 and FY 2024-25 as per the Business Plan have been considered and accordingly, GFA has been computed for the control period. The GFA for the control period is provided in the table below.

Table 83: GFA details as proposed by the Petitioner (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	594.46	601.79	639.52
Assets Capitalised	7.33	37.73	72.88
Closing GFA	601.79	639.52	712.40

Commission's analysis

The Commission has considered the closing GFA for FY 2021-22 as per revised estimate based on provisional accounts and Fixed Asset Register. The capitalization amount has been taken as allowed by the Commission in the Business Plan order. Accordingly, the approved GFA and capitalisation for the control period is as follows:

Table 84: GFA and capitalisation approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	572.47	579.80	617.53
Capitalisation	7.33	37.73	72.88
Closing GFA	579.80	617.53	690.41

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 27 of the JERC MYT Regulations, 2021 specifies the following:

"27. Debt to Equity Ratio

27.1 In case of Existing Projects, debt to equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2022 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.

27.2 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 24, 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.

27.3 Any expenditure incurred or projected to be incurred on or after April 1, 2022, 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."

In accordance with above, since the Petitioner has submitted that the entire capitalisation is funded through equity, equity higher than 30% of capitalisation has been considered as normative loan. Further, as per the submission of the Petitioner no assets haven been created by way of consumer contribution or Government grant.

Therefore, in accordance with the JERC MYT Regulations, 2021, the Commission has determined the Capital Structure for each year of the MYT Control Period as follows:

Table 85: Funding plan approved by the Commission (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Actual Capitalisation	7.33	37.73	72.88
Actual Funding			
Equity from Central Govt.	7.33	37.73	72.88

In accordance with the JERC MYT Regulations, 2021, the Commission has determined the Capital Structure for the control period as follows:

Table 86: GFA addition approved by the Commission (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Gross Fixed Assets	572.47	579.80	617.53
2	Addition During the FY	7.33	37.73	72.88
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	579.80	617.53	690.41

Table 87: Normative Loan addition approved by the Commission (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Normative Loan	127.40	113.44	119.95
2	Add: Normative Loan During the year	5.13	26.41	51.02
3	Less: Normative Repayment equivalent to Depreciation	19.10*	19.90*	21.87*
4	Closing Normative Loan	113.44	119.95	149.10

Depreciation calculated in next section

Table 88: Normative Equity addition approved by the Commission (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Equity	171.74	173.94	185.26
2	Additions on account of new capitalisation	2.20	11.32	21.86
3	Closing Equity	173.94	185.26	207.12

4.11. Depreciation

Petitioner's submission

The Petitioner has computed the Depreciation rate for FY 2022-23 to FY 2024-25 based on the average depreciation rates for FY 2020-21. The proposed depreciation for the control period from FY 2022-23 to FY 2024-25 by the Petitioner is as follows:

Table 89: Depreciation submitted by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Depreciation	**17.70**	**18.38**	**19.69**

Commission's analysis

Regulation 31 of the MYT Regulations, 2021 stipulates the following:

"31. Depreciation

31.1 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.

31.2 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.

31.3 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.

31.4 In case of existing assets, the balance depreciable value as on April 1, 2022, shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to March 31, 2021, from the gross depreciable value of the assets.

31.5 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.

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

31.7 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.

31.8 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.

31.9 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.

31.10 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 determined the depreciation for the third control period from FY 2022-23 to FY 2024-25 based on the approved GFA and depreciation rates specified in JERC MYT Regulations, 2021. As the latest Fixed Asset Register is available for FY 2020-21 only, therefore, the Commission has determined the depreciable GFA after deducting the value of assets that have achieved 90% depreciation as reflected in the FAR of FY 2020-21. Further, it is observed that the entire assets have been funded through equity only, hence the petitioner is not eligible for AAD (Advance Against Depreciation). Accordingly, the approved depreciation for FY 2022-23 to FY 2024-25 is as follows:

Table 90: Depreciation approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Gross Opening GFA	572.47	579.80	617.53
Less: Assets depreciated upto 90% till FY 2020-21	38.47	38.47	38.47
Net Opening GFA	534.00	541.33	579.06
Addition	7.33	37.73	72.88
Closing GFA	541.33	579.06	651.94
Average GFA	537.66	560.19	615.50
Depreciation Rate	3.55%	3.55%	3.55%
Depreciation	**19.10**	**19.90**	**21.87**

4.12. Interest on Loan

Petitioner's submission

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

Table 91: Interest on loan proposed by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Normative Loan	317.76	310.32	344.76
2	Add: Normative Loan During the year	5.13	26.41	51.02
3	Less: Normative Repayment equal to Depreciation	17.70	18.38	19.69
4	Closing Normative Loan	305.19	318.35	376.08
5	Average Normative Loan	311.47	314.33	360.42
6	Rate of Interest (%)	8.00%	8.00%	8.00%
7	**Interest on Loan**	**24.92**	**25.15**	**28.83**

Commission's analysis

Regulation 29 of the MYT Regulations, 2021 stipulates the following:

"29. Interest on Loan

29.1 The loans arrived at in the manner indicated in Regulation 27 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.

29.2 The normative loan outstanding as on April 1, 2022, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2021, from the gross normative loan.

29.3 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 31.

29.4 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.

29.5 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.

29.6 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.

29.7 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.

29.8 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.

29.9 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.

29.10 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.

29.11 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."

Accordingly, the Commission has considered 70% of the GFA addition approved for the control period as normative loan. Further to arrive at the opening loan of FY 2022-23, the Commission has considered approved closing loan of FY 2021-22 in the APR section. Interest rate on loan has been considered as per the provision of the Regulation as SBI MCLR as on 1st April 2021 plus 100 basis points. The Interest on Loan approved by the Commission for FY 2022-23 to FY 2024-25 is as follows:

Table 92: Interest on loan as approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Normative Loan	127.40	113.44	119.95
2	Add: Normative Loan During the year	5.13	26.41	51.02
3	Less: Normative Repayment equal to Depreciation	19.10	19.90	21.87
4	Closing Normative Loan	113.44	119.95	149.10
5	Average Normative Loan	120.42	116.69	134.52
6	Rate of Interest (%)	8.00%	8.00%	8.00%
7	**Interest on Loan**	**9.63**	**9.34**	**10.76**

4.13. Return on Equity (RoE)

Petitioner's submission

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

Table 93: Return on equity as submitted by the Petitioner (INR Crore)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Equity Amount	178.34	180.54	191.86
2	Equity Addition during year (30% of Capitalization)	2.20	11.32	21.86
3	Closing Equity Amount	180.54	191.86	213.72
4	Average Equity Amount	179.44	186.20	202.79
5	Return on Equity (%)	16.00%	16.00%	16.00%
6	**Total Return on Equity**	**28.71**	**29.79**	**32.45**

Commission's analysis

Regulations 28.2 and 28.3 of the JERC MYT Regulations, 2021 stipulate the following:

"28.2 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.

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

The Commission is of the view that historically, all the assets have been funded through budgetary support of the Government which is equivalent to equity infusion only. Therefore, the Commission has restricted the normative equity at 30% of the approved GFA. Further, the opening equity of FY 2022-23 has been considered as per the closing equity of FY 2021-22 approved by the Commission in the APR section. Accordingly, the approved Return on Equity for the Third Control Period is as follows:

Table 94: Return on equity as approved by the Commission (INR Crore)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Equity Amount	171.74	173.94	185.26
2	Equity Addition during year (30% of Capitalization)	2.20	11.32	21.86
3	Closing Equity Amount	173.94	185.26	207.12
4	Average Equity Amount	172.84	179.60	196.19
5	Return on Equity (%)	16.00%	16.00%	16.00%
6	**Total Return on Equity**	**27.65**	**28.74**	**31.39**

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 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 29.11 of the JERC MYT Regulations, 2021 stipulates the following:

"29.11 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 for the control period. However, the Petitioner is directed to pay/adjust the interest on security deposits of consumers as per the Supply Code, 2018.

4.15. Interest on Working Capital

Petitioner's submission

The Petitioner has submitted that working capital has been computed in accordance to Regulation 64.1 of the Tariff Regulations, 2021. Further, Interest on working capital for the control period FY 2022-23, FY 2023-24 and FY 2024-25 has been calculated on the working capital for the respective year at SBI MCLR for 1 year tenor as on 1st April, 2021 plus 200 basis points as provided in Regulation 32.4 of MYT Regulations, 2021. The SBI MCLR for 1 year tenor as on 1st April, 2021 was 7.00%, hence rate of interest considered for calculating interest on loan is 9.00%.

The proposed Interest on Working Capital for the control period is as follows:

Table 95: Interest on Working Capital proposed by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	O&M Expense - 1 month	24.14	24.11	24.28
2	Maintenance Spare @ 40% of R&M Exp - one month	3.63	3.67	3.90
3	Two Months Receivables	39.80	41.71	43.72
4	Less: Power Purchase cost for(1) month	49.40	53.97	59.69
5	Less : Amount held as Security Deposit	0.00	0.00	0.00
6	Total Working Capital	18.16	15.53	12.21
7	Interest Rate	9.00%	9.00%	9.00%
8	**Interest on Working Capital**	**1.63**	**1.40**	**1.10**

Commission's analysis

As per Regulation 32 and Regulation 64 of the JERC MYT Regulations, 2021, Interest on Working Capital is to be computed as follows:

"32. Interest on Working Capital

.....

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

32.3 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.

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

"64. Norms of Working Capital for Retail Supply Business

64.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Retail Supply Business for the Financial Year, computed as 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 Consumers at the prevailing tariff;

Less

(d) Power Purchase cost for one (1) month; plus

(e) 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."

The Commission has noted that the Petitioner provides fuel in advance for the HPPs and only pay for the conversion charges to these generators. In light of the same, the Commission has only considered the fixed cost of generation through these DG sets for computing the total working capital requirement.

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

Table 96: Interest on Working Capital approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	O&M Expense - 1 month	18.84	18.91	18.99
2	Maintenance Spare @ 40% of R&M Exp - 1 4month	1.85	1.87	2.00
3	Two Months Receivables	36.04	37.72	39.50
4	Less: Power Purchase cost for (1) month	4.07	4.26	4.30
5	Less: Amount held as Security Deposit	0.00	0.00	0.00
6	Total Working Capital	52.65	54.24	56.18
7	Interest Rate	9.00%	9.00%	9.00%
8	**Interest on Working Capital**	**4.74**	**4.88**	**5.06**

4.16. Income Tax

Petitioner's submission

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

Commission's analysis

Regulation 33 of JERC MYT Regulations, 2021 stipulates the following:

"33. Tax on Income

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

33.2 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.

33.3 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.

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

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

It is observed that the Petitioner has not made any claim towards the tax on income, therefore the Commission has not approved any income tax for the third control period.

4.17. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner has not projected any provision for bad debts from sale of power to the consumers for the control period. An exercise is being done to determine category wise bad debts and the same shall be claimed in future flings. Thus, for FY 2022-23, 2023-24 and 2024-25 EDA&N has not projected provision for bad debts.

Commission's analysis

Regulation 63 of the JERC MYT Regulations, 2021 stipulates the following

"63. Provision for bad and doubtful debts

63.1 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."

It is observed that the Petitioner has not made any claim towards the provision for bad & doubtful debts, therefore the Commission has not approved any provision for bad & doubtful debts for the third control period. The Commission will review the same at the time of truing up.

4.18. Non-Tariff Income

Petitioner's submission

The Petitioner has submitted that the Non-tariff income for the FY 2022-23, FY 2023-24 and FY 2024-25 has been projected by escalating the actual Non-tariff income of FY 2021-22 by 2% Y-o-Y. The table below provides the Non-Tariff Income as projected by the Petitioner for the 3rd Control period:

Table 97: Non -tariff Income as projected by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Non- Tariff Income	3.32	3.38	3.45

Commission's analysis

Regulation 65 of the JERC MYT Regulations, 2021 stipulates the following:

"65. Non-Tariff Income

65.1 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.

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

(a) Income from rent of land or buildings;

(b) Income from sale of scrap in excess of 10% of the salvage value;

(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 has approved the Non-Tariff Income of INR 3.25 crores for FY 2021-22 as per actuals. The Commission has projected the Non-Tariff Income by escalating the Non-Tariff Income approved for FY 2021-22 by 5% on Y-o-Y basis and accordingly, the Non-Tariff Income approved by the Commission is tabulated below:

Table 98: Non -tariff Income approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Non- Tariff Income	3.49	3.66	3.84

4.19. Aggregate Revenue Requirement (ARR)

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

Table 99: Aggregate Revenue Requirement approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

S. No	Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
		Claimed	Approved	Claimed	Approved	Claimed	Approved
1	Power Purchase Cost	592.84	602.15	647.64	658.56	716.28	723.24
2	Fuel Cost	186.96	109.89	202.96	101.28	222.20	94.25
3	O&M Expenses	289.70	226.03	289.35	226.88	291.37	227.82
4	Depreciation	17.70	19.10	18.38	19.90	19.69	21.87
5	Interest and Finance charges	24.92	9.63	25.15	9.34	28.83	10.76
6	Interest on Working Capital	1.63	4.74	1.40	4.88	1.10	5.06
7	Return on Equity	28.71	27.65	29.79	28.74	32.45	31.39
8	Interest on Security Deposit	0.00	0.00	0.00	0.00	0.00	0.00

S. No	Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
		Claimed	Approved	Claimed	Approved	Claimed	Approved
9	**Total Revenue Requirement**	**1142.46**	**999.20**	**1214.67**	**1049.57**	**1311.92**	**1114.38**
10	Less: Non-Tariff Income	3.32	3.49	3.38	3.66	3.45	3.84
11	**Net Revenue Requirement**	**1139.14**	**995.72**	**1211.29**	**1045.91**	**1308.47**	**1110.54**

4.20. Revenue at existing Retail Tariff and Gap for FY 2022-23

Petitioner's submission

The Petitioner has estimated the revenue of INR 238.78 crores at existing tariff for FY 2022-23 and accordingly, has arrived at the revenue gap of INR 900.36 crore

Commission's analysis

Based on the slab-wise information provided by the Petitioner and category-wise sales, connected load and number of consumers approved by the Commission, the computed revenue from sale of power for the FY 2022-23 by the Commission is as follows.

Table 100: Revenue at existing tariff computed by the Commission for the FY 2022-23 (INR Crore)

S. No.	Category	Sales (MUs)	Revenue from Fixed charges (INR Crore.)	Revenue from Energy Charges (INR Crore)	Total (INR Cr.)	ABR (INR/ unit)
1	Domestic	163.22	2.33	65.14	67.47	4.13
2	Commercial	35.69	0.94	39.05	39.99	11.21
3	Govt. Connections	29.67	0.31	31.22	31.53	10.63
4	Industrial	11.53	0.97	9.72	10.70	9.28
5	Bulk	29.73	2.20	38.64	40.84	13.74
6	Public Lighting	5.54	0.62	3.88	4.49	8.11
7	Irrigation, Pumps & Agriculture	1.82	0.03	0.29	0.33	1.79
8	**Total**	**277.19**	**7.40**	**187.95**	**195.35**	**7.05**

The Commission has determined revenue from sale of power at existing tariff as INR 195.35 Crore in FY 2022-23.

4.21. 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 900.36 Crore for the FY 2022-23.

Commission's analysis

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

Table 101: Standalone Revenue Gap/ Surplus approved at existing tariff for the FY 2022-23 (INR Crore)

S. No	Particulars	Petitioner's submission	Now Approved
1	Annual Revenue Requirement	1139.14	995.72
2	Revenue from sale of power	238.78	195.35
3	**Revenue Gap/(Surplus)**	**900.36**	**800.37**

The standalone revenue gap at existing retail tariff is INR 800.37 Crore for the FY 2022-23, while has been dealt in detail by the Commission in the ensuing chapters.

5. Chapter 5: Tariff Principles and Design

5.1. Overall Approach

The Commission while designing retail tariffs for the FY 2022-23 has kept in view the principles of determination of tariff as set out in the Electricity Act, 2003 (EA 2003), Tariff Policy, 2016 and the JERC MYT Regulations, 2021.

The provision of supply of electricity to all the people is an essential driver for development, and also influences social and economic change. In this Tariff Order, the Commission has continued with its endeavor 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 mandates the Commission to strike a fine balance between the interests of various stakeholders including Utilities and consumers. Since the majority of the energy sales within EDA&N's jurisdiction is towards tourism related businesses, the Commission has attempted to ensure that, while tourism is promoted, but not at the cost of other segments of society. The Commission has also taken into consideration the Petitioner's submissions as well as the public responses in these proceedings.

5.2. Applicable Regulations

Regulation 20 of the JERC MYT Regulations, 2021 states the following:

"***20. Annual determination of tariff***

20.1 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 18, 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 68 of the JERC MYT Regulations, 2021 states the following:

"68. Determination of Tariff

68.1 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.

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

68.3 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.

68.4 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.

Considering the fact that almost all the sales is restricted to LT level, the Commission is of the view that the functional demarcation of costs will not be of substantial impact on the present tariff structure. Further, as every island of Andaman and Nicobar has its own microgrid with very low peak demand, there are practically no options for open access available for the consumers of Andaman and Nicobar Islands. Therefore, 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 consumer's tariff.

Accordingly, the Commission has designed the tariff for different categories of consumers as discussed in ensuing sections.

5.3. Cumulative Revenue Gap/ (Surplus) at Existing Tariff

Petitioner's Submission

The Petitioner has proposed revenue gap of INR 900.36 Crore for FY 2022-23 at existing tariff. The revenue gap submitted by the Petitioner for FY 2022-23 is as follows:

Table 102: Revenue Gap at existing tariff submitted by the Petitioner for FY 2022-23 (INR Crore)

Sr. No.	Particulars	FY 2022-23
1	Net Revenue Requirement	1139.14
2	Revenue from Sale of Power at existing Tariff	238.78
3	**Net Gap during the year**	**900.36**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**900.36**

Commission's View

The Commission based on the ARR and Revenue from sale of power computed above, has derived revenue gap for the FY 2022-23 at existing tariff as shown in table below:

Table 103: Revenue Gap determined by the Commission at existing tariff for FY 2022-23 (INR Crore)

Sr. No.	Particulars	FY 2022-23
1	Net Revenue Requirement	995.72
2	Revenue from Sale of Power at existing Tariff	195.35
3	**Net Gap during the year**	**800.37**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**800.37**

Further, the Petitioner has submitted that the revenue gap as determined by the Commission shall be met from the budgetary support by the Government. Therefore, the Commission has not carried forward the standalone revenue gap as determined in the true-up and APR of previous years, for the purpose of computing the cumulative revenue gap for the FY 2022-23.

Accordingly, the Commission determined the revenue gap of INR 800.37 Crore for FY 2022-23 at existing tariff.

5.4. Treatment of Gap /(Surplus) and Tariff Design

From above, it can be seen that at existing tariff, there is revenue gap of INR 800.37 Crore for FY 2022-23. However, the Commission has appropriately revised the tariffs for FY 2022-23 as compared to tariffs for FY 2021-22, in view of the budgetary support by the Government to meet the balance revenue gap.

5.4.1. Tariff Proposal

Petitioner Submission

1. The Petitioner has proposed that at existing tariff, the average cost of supply comes to INR 38.79 per unit, whereas the Average Billing Rate (ABR) is INR 8.13 per unit. Thus, there is a gap of INR 30.66 per unit.
2. The Petitioner has submitted that category wise cost of supply has not been computed by EDA&N till date. EDA&N shall initiate an exercise & calculate the cost of supply of every category consumers after analysis of various cost factors associated with the supplying power to various categories of consumers. However, for determining the differential subsidy for various categories of consumers, EDA&N has considered average cost of supply of Rs.38.79 per unit as full cost tariff for recovery of the proposed ARR. Accordingly, the category wise subsidy & proposed subsidized tariff for the FY 2022-23 has been calculated.
3. The Petitioner has proposed to increase energy charges by 45.17% while keeping the fixed charges at the same level.

Accordingly, the tariff proposal submitted by the Petitioner for FY 2022-23 for individual category is as follows:

Table 104: Tariff proposal submitted by the Petitioner for FY 2022-23

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	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	2.25	0 to 100 units	INR 20 per connection per month or part thereof for Single Phase & INR 70 per	2.60
101 to 200 units		5.00	101 to 200 units		7.00
201 to 500 units		7.20	201 to 500 units		9.50

Existing			Proposed		
Category	**Fixed Charge**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
501 units & above	connection per month for three phase or part thereof for three phase	8.50	501 to 1000 units	connection per month for three phase or part thereof for three phase	11.00
			1000 units & above		13.00
			Domestic (Bed & Break Fast)		
			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	3.00
			101 to 200 units		8.40
			201 to 500 units		12.00
			501 to 1000 units		15.00
			1000 units & above		20.00
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	10.00
201 to 500 Units		9.50	201 to 500 Units		13.00
501 units & above		12.75	501 to 1000 units		18.00
			1000 units & above		25.00
			Private Education Institution/ Hospitals		
			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		11.50
			501 to 1000 units		16.00
			1000 units & above		23.00
			Hotels/ Restaurant/ Resorts		
			0-200 Units	INR 30 per connection per month or part thereof	10.00
			201 to 500 Units		13.00

Existing			Proposed		
Category	**Fixed Charge**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
			501 to 1000 units	for Single Phase & INR 125 per connection per month for three phase or part thereof for three phase	18.00
			1000 units & above		25.00
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	10.00	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	11.50
501 units & above		11.50	501 units & above		13.25
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	8.00
501 units & above		9.00	201 to 500 Units		11.00
			501 to 1000 units		15.00
			1000 units & above		25.00
Bulk Supply	INR 100/kVA/Month or part thereof	13.00	**Bulk Supply**	INR 100/kVA/Month or part thereof	17.50
Public Lighting	INR 150/kVA/Month or part thereof	7.00	**Public Lighting**	INR 150/kVA/Month or part thereof	8.50
Irrigation Pumps & Agriculture			**Irrigation Pumps & Agriculture**		
All units	INR 50/kVA/Month or part thereof	1.60	0 to 500 units	INR 50/kVA/Month or part thereof	2.00
			501 & above units		4.00
EV Charging Stations		6.90	**EV Charging Stations**		8.60

Existing			Proposed		
Category	**Fixed Charge**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
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.	

Accordingly, the computation of impact of proposed tariff on revenue for FY 2022-23 is as follows:

Table 105: Average Tariff Hike for FY 2022-23 as submitted by the Petitioner (INR Crore)

Sr. No.	Particulars	Units	FY 2022-23	
			Existing	**Proposed**
1	Net ARR for FY 2022-23	INR Crore	1139.14	1139.14
2	Revenue for FY 2022-23	INR Crore	238.78	346.64
3	**Gap (1-2)**	**INR Crore**	**900.36**	**792.51**
4	Total Sales	MU	293.68	293.68
5	Average Cost of Supply	INR/kWh	38.79	38.79
6	Average Billing Rate	INR/kWh	8.13	11.80
7	Per Unit Gap	INR/kWh	30.66	26.99
8	Average Tariff Hike	INR/kWh		3.67
9	Tariff Hike in %	%		45.17%

Commission View

The Commission has determined the retail tariff for the FY 2022-23 in accordance with the principles stated in the Electricity Act, 2003 Tariff Policy, 2016, and the JERC MYT Regulations, 2021. 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 allows 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 and Commercial consumers for defining slab ranges and setting tariffs

5. Revenue stability: Tariff should ensure adequate fixed cost recovery for utilities from fixed/demand charges

6. Avoiding tariff shocks: Tariff shocks should be avoided and stakeholders should be able to predict 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 Distribution Licensee. For example, in order to ensure that tariffs are kept in check for domestic consumers, while still allowing cost recovery for Distribution Licensees, cross subsidy has been 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 Distribution Licensees 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 Licensees 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 caused/contributed by each consumer category towards total cost incurred by the Distribution Licensee. By determining consumer category wise costs of supply, the Distribution Licensee would be in a better position to allocate costs where relevant and determine how tariffs can be levied fairly on each category.

b) Approach:

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

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.

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 domestic consumer. Thus, it believes that the most progressive way forward for the Distribution Licensee is to accurately determine the cost of supply is to attempt to determine Cost of Supply for various consumer categories and also voltage level. The Commission notes that States like Andhra Pradesh and Telangana have determined Category wise Cost of Supply albeit with several assumptions and the Distribution Licensee must also attempt to determine the same.

The Commission is of the opinion that for determination of the Category wise Cost of Supply, the embedded cost methodology is an appropriate starting point.

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 Cost of Supply in this Order but directs the Petitioner to start maintaining this data and submit the same in the tariff proceedings of next year. In absence of the requisite data for determination of voltage-wise/category-wise cost of supply as mentioned above, the Commission as part of this Tariff Order has determined the tariff according to the Average Cost of Supply (ACoS).

2. *Tariff Affordability*

a) Context

The Commission understands that the consumer base of Distribution Licensee is varied and covers a wide spectrum of socio-economic backgrounds, specially the domestic category consumers. It is also 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 Distribution Licensee has to undertake 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 for social impact assessment of electricity tariffs, 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 Distribution Licensee across tariff slabs can be mapped across the established economic levels to develop the final affordability ratio matrix for the Distribution Licensee'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.

Based on the discussions above, the Commission is continuing with its existing approach of determination of tariff for various consumer categories based on the Average Cost of Supply (ACoS) and reduction of Cross Subsidy amongst various consumer categories, ensuring consumer tariffs progressively moving towards the cost.

3. Cross Subsidy

As per Section 61 (g) of the Electricity Act 2003

*"(g) that the **tariff progressively reflects the cost of supply** of electricity and also, **reduces and eliminates cross-subsidies** within the period to be specified by the Appropriate Commission;"*

For reduction of cross subsidies, the Tariff Policy 2016 in Section 8.3 stipulates as below:

*"For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought **within ±20% of the average cost of supply**. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy."*

In order to achieve the objectives of the Tariff Policy 2016 of bringing down the cross subsidy levels amongst various consumer categories within ±20% of the average cost of supply, the Commission has tried to rationalize the tariff applicable to various consumer categories.

The limit of cross subsidy, as envisaged in the Tariff Policy 2016, can not be achieved by rationalizing the tariff in a single year, as this may lead to tariff shock to the cross subsidized consumers. In this Tariff Order, the Commission has continued its approach of rationalization of the tariff for various consumer categories and reducing the cross subsidy.

Accordingly, in this Tariff Order, the Commission has designed tariff for various consumer categories considering the Average Cost of supply in line with the provisions of the Tariff Policy, 2016. However, The Commission, after analysis of the various components of the ARR for FY 2022-23, has come to the conclusion that the utility has to increase the average tariff from the existing level of INR 7.05 per unit to INR 35.92 per unit to recover the full amount of ARR as projected for FY 2022-23. Bringing the tariff to the prevalent Average Cost of Supply will cause the tariff shock to the consumers in the islands of Andaman & Nicobar. Therefore, the Commission has increased the tariff levels for categories with higher subsidy support higher than the average hike and either maintained the tariff levels or increased tariff at lower-than-average tariff hike for categories with comparatively lower subsidy support. Further, the Commission has introduced the kW/kVA based billing for the fixed charges for consumers under the Domestic, Commercial and Government Connections categories along with the new tariff slabs for Commercial and Industrial category. Further, the Commission has also introduced a separate category for "Hotels/ Restaurant/ Resorts" as per the Petitioner's proposal in the tariff schedule for FY 2022-23.

The approved tariff for FY 2022-23 is as follows:

Table 106: Existing vs. Tariff approved by the Commission for FY 2022-23

Existing			Approved		
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 15 per connection per month or part thereof	2.10
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 15/kW/Month or part thereof	2.50
101 to 200 units		5.00	101 to 200 units		5.45
201 to 500 units		7.20	201 to 500 units		7.80
501 units & above		8.50	501 units & above		9.20
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 25/kVA/Month or part thereof	8.20
201 to 500 Units		9.50	201 to 500 Units		10.20
501 units & above		12.75	501 to 1000 units		13.50
			1000 units & above		15.00
			Hotels/ Restaurant/ Resorts		
			0-200 Units	INR 30/kVA/Month or part thereof	8.00
			201 to 500 Units		10.00

Existing			Approved		
Category	**Fixed Charge**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
			501 to 1000 units		13.00
			1000 units & above		14.50
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	10.00	0-500 Units	INR 30/kVA/Month or part thereof	10.50
501 units & above		11.50	501 units & above		13.50
Industrial			**Industrial**		
LT Industrial			**LT Industrial**		
0 to 500 units	INR 50/kVA/Month or part thereof	6.00	0 to 500 units	INR 50/kVA/Month or part thereof	6.85
501 units & above		9.00	501 to 1000 units		9.60
			1000 units & above		11.00
HT Industrial			**HT Industrial**		
0 to 500 units	INR 50/kVA/Month or part thereof	6.00	0 to 500 units	INR 50/kVA/Month or part thereof	6.60
501 units & above		9.00	501 to 1000 units		9.40
			1000 units & above		10.50
Bulk Supply	INR 100/kVA/Month or part thereof	13.00	**Bulk Supply**	INR 100/kVA/Month or part thereof	13.00
Public Lighting	INR 150/kVA/Month or part thereof	7.00	**Public Lighting**	INR 150/kVA/Month or part thereof	8.00

Existing			Approved		
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	1.75
EV Charging Stations		6.90	**EV Charging Stations**		7.80
	-				
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.	

5.4.2. Revenue from Approved Retail Tariff for FY 2022-23

Based on the retail tariff approved above, the revenue at revised tariff approved by the Commission for FY 2022-23 is given in the following Table:

Table 107: Revenue at tariff approved by the Commission for FY 2022-23

S. No.	Category	Sales (MUs)	Revenue from Fixed charges (INR Crore.)	Revenue from Energy Charges (INR Crore)	Total (INR Cr.)	ABR (INR/ unit)
1	Domestic	163.22[1]	5.37	71.06	76.43	4.68
2	Commercial*	35.69	3.33	42.63	45.96	12.88
3	Govt. Connections	29.67	0.84	34.26	35.09	11.83
4	Industrial	11.53	0.97	11.52	12.49	10.84
5	Bulk	29.73	2.20	38.64	40.84	13.74
6	Public Lighting	5.54	0.62	4.43	5.05	9.11
7	Irrigation, Pumps & Agriculture	1.82	0.03	0.32	0.35	1.94
	Total	**277.19**	**13.37**	**202.86**	**216.22**	**7.80**

**The Revenue for the Hotel/Resort/Restaurants category has been considered under the Commercial category due to unavailability of the reliable category wise and slab wise sales, number of consumer and connected load data. Further, the fixed charges for various categories under kVA billing has been computed considering the power factor of 0.9*

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

Table 108: Revenue gap at tariff approved by the Commission for FY 2022-23 (in INR crore)

S. No.	Particulars	FY 2022-23	
		Claimed	**Approved**
1	Net Revenue Requirement	1139.14	995.72
2	Revenue from Sale of Power at Revised Tariff	346.64	216.22
3	**Net Gap during the year**	**792.50**	**779.49**
4	Add: Previous Year Gap	0.00	0.00

[1] **Lifeline Connection** – Sales data for lifeline connection has been considered as part of Domestic Category as once these consumers consumed more than 100 units, they are charged under the Domestic Category and continue to be part of Domestic Category till the monthly consumption falls below 100 units. 6.45% of the sales is attributed to Lifeline Connections as per the data shared by the Petitioner.

S. No.	Particulars	FY 2022-23	
		Claimed	Approved
5	**Total Gap**	**792.50**	**779.49**

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

Table 109: Percentage recovery of ACOS at existing and approved tariffs for FY 2022-23

S. No.	Category	Average Cost of Supply (INR/unit) (With Fuel Cost)	Average Billing Rate at existing tariff (INR/unit)	Average Billing Rate at approved tariff (INR/unit)	ABR at existing tariff as % of AcoS	ABR at proposed tariff as % of AcoS
1	Domestic	35.92	4.13	4.68	11.50%	13.03%
2	Commercial*	35.92	11.21	12.88	31.21%	35.86%
3	Govt. Connections	35.92	10.63	11.83	29.59%	32.93%
4	Industrial	35.92	9.28	10.84	25.84%	30.18%
5	Bulk	35.92	13.74	13.74	38.25%	38.25%
6	Public Lighting	35.92	8.11	9.11	22.58%	25.36%
7	Irrigation, Pumps & Agriculture	35.92	1.79	1.94	4.98%	5.40%
8	**Total**	**35.92**	**7.05**	**7.80**	**19.63%**	**21.71%**

Further, the Commission has highlighted the impact of fuel cost in the average cost of supply and the level of cost coverage with and without fuel cost at the approved tariffs for FY 2022-23 in the following table:

Table 110: Percentage recovery of ACOS with and without fuel cost at approved tariffs for FY 2022-23

S. No.	Category	Average Cost of Supply (INR/unit) (With Fuel Cost)	Average Cost of Supply (INR/unit) (Without fuel cost)	Average Billing Rate at approved tariff (INR/unit)	ABR as % of AcoS with fuel cost	ABR as % of AcoS without fuel cost
1	Domestic	35.92	10.23	4.68	13.03%	45.75%
2	Commercial	35.92	10.23	12.88	35.86%	125.90%
3	Govt. Connections	35.92	10.23	11.83	32.93%	115.64%
4	Industrial	35.92	10.23	10.84	30.18%	105.96%
5	Bulk	35.92	10.23	13.74	38.25%	134.31%
6	Public Lighting	35.92	10.23	9.11	25.36%	89.05%
7	Irrigation, Pumps & Agriculture	35.92	10.23	1.94	5.40%	18.96%
8	**Total**	**35.92**	**10.23**	**7.80**	**21.71%**	**76.25%**

Further, the Commission has computed the category wise cost coverage through the budgetary support at the existing and approved tariffs for FY 2022-23 in the following table, thus highlighting that even though the

Commission has increased the tariff levels for categories with higher subsidy support higher than the average hike, the subsidy support still remains higher for these categories vis-à-vis the other categories.

Table 111: Category wise cost coverage through the budgetary support at the existing and approved tariffs for FY 2022-23

S. No.	Category	Average Cost of Supply (INR/unit)	Average Billing Rate at existing tariffs (INR/unit)	Budgetary Support at existing tariffs (INR/unit)	Average Billing Rate at approved tariffs (INR/unit)	Budgetary Support at approved tariffs (INR/unit)
1	Domestic	35.92	4.13	31.79	4.68	31.24
2	Commercial	35.92	11.21	24.71	12.88	23.04
3	Govt. Connections	35.92	10.63	25.29	11.83	24.09
4	Industrial	35.92	9.28	26.64	10.84	25.08
5	Bulk	35.92	13.74	22.18	13.74	22.18
6	Public Lighting	35.92	8.11	27.81	9.11	26.81
7	Irrigation, Pumps & Agriculture	35.92	1.79	34.13	1.94	33.98
8	**Total**	**35.92**	**7.05**	**28.87**	**7.80**	**28.12**

The Commission observes that the ABR at the revised tariff is not able to cover even the ACoS without considering the fuel cost. The following table provides the ACoS and ABR at the tariff approved by the Commission:

Table 112: Approved ACoS and ABR by the Commission at approved tariff for FY 2022-23

Sr. No.	Particulars	FY 2022-23
1	Net Revenue Requirement (INR Crore)	995.72
2	Revenue from Revised Tariff (INR Crore)	216.22
3	Energy Sales (MU's)	277.19
4	Average cost of supply/unit (INR/kWh)	35.92
5	Average Billing Rate (INR/kWh)	7.80
6	**Gap (INR/kWh)**	**28.12**
7	**Tariff Hike (%)**	**10.69%**

The highlights of the tariff structure approved by the Commission for FY 2022-23 is as follows:

1. The Commission has approved tariff hike of 10.69% for FY 2022-23 over the tariffs applicable for FY 2021-22.
2. The Commission has introduced the kW/kVA based billing for the fixed charges for consumers under the Domestic, Commercial and Government Connections categories in the tariff schedule for FY 2022-23.
3. The Commission has introduced a new category "Hotels/ Restaurant/ Resorts" with tariffs applicable to various Hotels, Restaurants and Resorts establishments in the islands of Andaman & Nicobar.
4. Further, the Commission has introduced new tariff slabs in Commercial and Industrial Category and has introduced separate tariffs for LT Industrial and HT Industrial under the Industrial Category.
5. The Commission has approved the average revenue for FY 2022-23 as INR 7.80/kWh as against the approved Average Cost of Supply of INR 35.92/kWh.

The Petitioner has submitted a letter vide Reference No. 2-4/Tariff/2021-Accts/Electricity dated July 25, 2022 confirming that the Revenue Gap will be borne by the administration of Andaman & Nicobar Islands, with budgetary support from the Government of India.

6. Chapter 6: Tariff Schedule

6.1. Tariff Schedule

Sr. No.	Category	Fixed Charges	Energy Charge (INR/kWh)
1.	**Life Line Connection**		
	0 to 100 units	INR 15/- per service connection per month or part thereof	2.10
2.	**Domestic Connection**		
	0 to 100 units	INR 15/- per KW per month or part thereof	2.50
	101 to 200 units		5.45
	201 to 500 units		7.80
	501 units & above		9.20
3.	**Commercial**		
	0-200 Units	INR 25/- per KVA per month or part thereof	8.20
	201 to 500 Units		10.20
	501 to 1000 Units		13.50
	1001 Units & above		15.00
4.	**Hotels/ Restaurant/ Resorts**		
	0-200 Units	INR 30/- per KVA per month or part thereof	8.00
	201 to 500 Units		10.00
	501 to 1000 Units		13.00
	1001 Units & above		14.50
5.	**Govt. Connection**		
	0-500 Units	INR 30/- per KVA per month or part thereof	10.50
	501 Units & above		13.50
6.	**Industrial**		
	LT Industrial		
	0-500 Units	INR 50/- per KVA per month or part thereof	6.85
	501 to 1000 Units		9.60
	1001 Units & above		11.00
	HT Industrial		
	0-500 Units	INR 50/- per KVA per month or part thereof	6.60
	501 to 1000 Units		9.40
	1001 Units & above		10.50
7.	**Bulk Supply**		
	All Units	INR 100/- per KVA per month or part thereof	13.00

Sr. No.	Category	Fixed Charges	Energy Charge (INR/kWh)
8.	**Public Lighting**		
	All Units	INR 150/- per KVA per month or part thereof	8.00
9.	**Irrigation Pumps and Agriculture**		
	All Units	INR 50/- per KVA per month or part thereof	1.75
10.	**Electric Vehicle Charging Station**		7.80
11.	**Temporary supply**		
	All Units	1.5 times the rate applicable to the relevant category of consumers.	

6.2. 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, 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	

Sr. No.	Category	Applicability	Point of Supply news
		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	Hotels/ Restaurant/ Resorts	This schedule will apply to all consumers, using electrical energy for running their hotels, restaurants and resorts establishments.	The supply will be given through a single delivery and metering point and at a single voltage.
5	Government Connection	This schedule will apply to all government connections.	The supply will be given through a single delivery and metering point and at a single voltage.
6	Industrial Supply		
	LT Industrial	The schedule will apply for supply of energy at Low Tension for lighting, fan and power to industrial establishments & industries such as wood-based, cottage, small scale, medium-scale, finishing shell based and any other establishments/ organisations engaged in the manufacturing and processing of goods for sale, rice mills, flour mills, workshops, dry docks, factories base repair organisations, public water works & gem cutting units	The supply will be given through a single delivery and metering point and at a single voltage.
	HT Industrial	The schedule will apply for supply of energy at 11 kV and above levels for lighting, fan and power to industrial establishments & industries such as wood-based, cottage, small scale, medium-scale, finishing shell based and any other establishments/ organisations engaged in the manufacturing and processing of goods for sale, rice mills, flour mills, workshops, dry docks, factories base repair organisations, public water works & gem cutting units	The supply will be given through a single delivery and metering point and at a single voltage.
7	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.
8	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.
9	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.

RKumar
Secretary, JERC
(For Goa & UTs)

Sr. No.	Category	Applicability	Point of Supply news
10	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)	
11	Temporary Supply	The supply may be given for a limited period as per the provisions of JERC Supply Code Regulations, 2018, and amendments thereon.	

6.3. 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 neither fall 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 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 1.5% 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

Secretary, JERC
(For Goa & UTs)

(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.

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.

6.4. 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	

S. No.	PARTICULARS	Rate (INR)
	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
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	As per procedure prescribed in Regulation 8.50 of the JERC Electricity Supply Code Regulation 2018
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

7. Chapter 7: 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.

7.1. 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:

7.1.1. Collection of arrears

Originally issued in Tariff Order dated 04th June 2012
Commission's latest directive in Tariff Order dated 31st May 2021 *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.*
Petitioner's response in the present Tariff Petition *The department is making all efforts to collect the arrears from the consumers and inline to the same various departments have been informed at the level of Administration to settle their outstanding dues through PFMS portal. Moreover, due to COVID resurgence and lockdown, the actual details in respect of outstanding dues of various consumers at far-flung and remote areas of these islands are still awaited and the same will be submitted subsequently for which Hon'ble Commission is requested to consider the submission of department in view of prevailing situation.*
Commission's response The Commission has noted the Petitioner submission and accordingly, drops this directive.

7.1.2. 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 31st May 2021 *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.*
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 & FY 2020-21 has been finalized and audited by the AG(A&N) & Hon'ble Commission in response to Petition No. 64/2021 filed by Electricity Department issued True up order dated 10.05.2022 in respect of the above years.*

Commission's response

The Commission has noted the Petitioner's submission and accordingly, drops this directive.

7.1.3. *Bill Payment*

Originally issued in Tariff Order dated 04th June 2012

Commission's latest directive in Tariff Order dated 31st May 2021

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.

Petitioner's response in the present Tariff Petition

The online bill payment is facilitated to consumers of almost South, North and Middle Andaman areas as being well connected through Data Centre by Leased Lines. BSNL has been requested for Lease Line connectivity for connecting entire major stations of Southern Group viz. Car Nicobar, Teressa, Chowra, Katchal, Kamorta and Campbell Bay under Nicobar District which is expected to be completed in next six months.

Commission's response

The Commission has noted the Petitioner's submission and directs the Petitioner to submit the progress report within 3 months of issuance of this order.

7.1.4. *Energy Audit*

Originally issued in Tariff Order dated 04th June 2012

Commission's latest directive in Tariff Order dated 31st May 2021

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.

Petitioner's response in the present Tariff Petition

A draft RFP in line to the model SBD of BEE is submitted for the approval of competent authority to carry out the Energy Audit in Electricity Department for F.Y. 2021-22 and F.Y. 2022-23 through the list of BEE accredited Energy Auditors. Besides this, it is to submit that the department does not fulfill the basic requisite criteria of officials in respect of professional qualification / experience in the field of IT, Finance & Certified Energy Manager required for carrying out Quarterly Periodic Energy Accounting being one of the pre-requisites of BEE Regulations, 2021. The matter is being consistently taken up with BEE for support and guidance on the matter.

Moreover, the Department with M/s Zenith Energy Services (P) Ltd. {authorized by Bureau of Energy Efficiency (BEE)} has carried out "Baseline Data collection and verification Audit for DISCOMs' including collection and review of the energy related data which is under final stage of completion and shall be submitted to BEE subsequently.

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. Further, the Petitioner is directed to submit the Energy Audit report along with the next tariff petition positively.

7.1.5. State load Dispatch Centre

Originally issued in Tariff Order dated 26th February 2018
Commission's latest directive in Tariff Order dated 31st May 2021 *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.*
Petitioner's response in the present Tariff Petition *The Energy Management Center is functional and all the technical datas from all RTUs at five locations are captured and monitored at EMC. At present following operations can be managed from EMC such as opening & closing of all feeders, operating all tie lines through remote, starting & synchronization of all DG sets having electronic controllers, isolation of DG set through remote, Monitoring Energy flow of all the feeders & DG sets and generation of MIS report.* *Further, certain pending and left out rectification works with regard to Automation and Real time monitoring of energy/ power flow is being pursued with PGCIL.*
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 month from issuance of this order.

7.1.6. Slab wise details

Originally issued in Tariff Order dated 26th February 2018
Commission's latest directive in Tariff Order dated 31st May 2021 *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.*
Petitioner's response in the present Tariff Petition *Category-wise sales, number of consumers and connected load, T&D losses, plant-wise generation/purchase, fuel cost already submitted in reply to the True-up queries*
Commission's response The Commission has not received proper data pertaining to slab wise sales, number of consumers and connected load, 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 revenue gap.

7.1.7. Introduction of Fixed charges

Originally issued in Tariff Order dated 26th February 2018
Commission's latest directive in Tariff Order dated 31st May 2021 *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 information along with the tariff petition for next year failing which the Commission may take appropriate assumptions for forecasting the revenue.*

Petitioner's response in the present Tariff Petition *The Fixed charges and Energy charges details of all the consumers under Web based billing system is enclosed for ready reference.*
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 information along with the tariff petition for next year failing which the Commission may take appropriate assumptions for forecasting the revenue.

7.1.8. T&D Losses

Originally issued in Tariff Order dated 26th February 2018
Commission's latest directive in Tariff Order dated 31st May 2021 *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.*
Petitioner's response in the present Tariff Petition *Following initiatives have been taken to reduce T&D Losses:* • *Under IPDS / DDUGJY Scheme 76,000 Smart Meters have been installed to replace Mechanical Meters and defective Electronic / Static meters. This will improve management of voltage control and reducing operation cost by checking data entry errors. 54% consumers has been converted to Smart meters and remaining consumers shall be covered under RDSS for which action has been initiated.* • *High value consumers were also brought under smart metering.* • *Engagement of Energy Auditor and Managers for carrying out Energy Audit in the department is under process.* • *Harnessing of benefit of RDSS scheme wherein 100% consumer and system metering, DTs and Feeder metering, replacement of HT / LT lines, Conductors, Cables etc. will be focused in the action plan. All Distribution Transformers metering to be completed under RDSS Scheme.* • *Effort by Administration to reduce gap between Annual Revenue Requirement for which cost reflective tariff petition F.Y. 2022-23 filed before Hon'ble Commission*
Commission's response It is disheartening to see that even though many efforts have been made by the Petitioner, the T&D loss is on the increasing trend as per the true-up data. The Commission has noted the Petitioner's submission, however, the Petitioner is directed to make all out efforts such as identification of high loss areas, regular checking of connections, meter replacement in such areas etc. 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.

7.1.9. Billing the Hotel Industry Consumers under the Industrial Category

Originally issued in Tariff Order dated 31st May 2021

Commission's latest directive in Tariff Order dated 31st May 2021 *It has come to Commission's notice that the Hotels are being charged under Commercial tariff by EDA&N in violation of Commission's Review Order dated December 2, 2020 which categorizes 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.*
Petitioner's response in the present Tariff Petition *It is apposite to mention that aggrieved by the order passed by Hon'ble Commission on 02.12.2020, Electricity Department has preferred two separate Appeals which is pending for adjudication before APTEL The matter is scheduled for hearing on 25.05.2022. Following are pivotal to submit before the Hon'ble Commission:* *In the review proceedings for Petition No. 30/2020 & 31/2020, the concerned officer, in disobedience of the directions given by the Hon'ble LG and without consulting the law and finance departments filed an affidavit in support of the Hoteliers by giving consent to the prayer made by the hoteliers from charging the electricity on industrial rate.* *In view of the unauthorized concessions made by the said officers, the said review petition came to be allowed by an order dated 02.12.2020 passed by the Hon'ble JERC. The Hon'ble LG after perusing the orders dated 02.12.2020 and the replies filed by the department, observed that all relevant facts were not placed before the Hon'ble Commission and views of the Law and Finance Department were not obtained before filing reply. A disciplinary proceeding has been initiated against the officers and was placed under suspension. Further, A&N Administration has requested MHA for CBI enquiry on the matter.*
Commission's response Since, the Commission has introduced a separate category for the hotel industry consumers, the Petitioner is directed to comply with the Commission's Order and applicable tariff schedule; and accordingly drops this directive.

7.1.10. Details of Hotel industry consumers

Originally issued in Tariff Order dated 31st May 2021
Commission's latest directive in Tariff Order dated 31st May 2021 *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.*
Petitioner's response in the present Tariff Petition *List of consumers under Hotel and Restaurants/ Resorts with connected load, unit sold as obtained from WBBS Software is attached.*
Commission's response The Commission has reviewed the data submitted by the Petitioner and finds it erroneous and accordingly, directs the Petitioner to submit the slab wise sales, number of consumers and connected load for the category "Hotels/ Restaurant/ Resorts" at the time of filing of next tariff petition.

7.1.11. Approval for new Power Purchase Agreements

Originally issued in Tariff Order dated 31st May 2021
Commission's latest directive in Tariff Order dated 31st May 2021 *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.
Petitioner's response in the present Tariff Petition *The direction of Hon'ble Commission has been noted and accordingly all future Power Purchase Agreements shall be signed with the approval of Hon'ble Commission.*
Commission's response The Commission has noted the Petitioner's submission and directs the Petitioner to comply with the Commission's directive.

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

Originally issued in Tariff Order dated 31st May 2021
Commission's latest directive in Tariff Order dated 31st May 2021 *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.*
Petitioner's response in the present Tariff Petition *The details of all the consumers under Web based billing system is enclosed for ready reference.*
Commission's response The Commission has not received any data pertaining to slab wise sales data, connected load and number of consumers for the Commercial and Government Connections Categories and directs the Petitioner to submit the requisite information along with the tariff petition for next year.

7.1.13. Tariff Determination for Own Renewable Generation

Originally issued in Tariff Order dated 31st May 2021
Commission's latest directive in Tariff Order dated 31st May 2021 *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.*
Petitioner's response in the present Tariff Petition *It is submitted that the ED A&N shall file separate tariff determination petition for fully owned renewable generation at the time of filing Petition for determination of retail tariff for F.Y. 2023-24. Hon'ble Commission may kindly consider the same.*
Commission's response The Commission has noted the Petitioner's submission and directs 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.

7.2. New Directives issued in this Order

7.2.1. Submission of slab wise category wise data

The Commission directs the Petitioner to submit the historical category wise slab wise sales, number of consumers and connected load with adjustments pertaining to the shifting of hotel industry consumers between the Industrial and Commercial Category within 3 months from the issuance of this Order.

7.2.2. Fuel Consumption data for own DG sets

The Petitioner is directed to submit the DG set wise monthly HSD and Lube oil consumption along with generation data for the DG sets owned and managed by the Department at the time of filing of next tariff petition.

7.2.3. Detailed Project Reports for projects proposed for the Control period

The Commission directs the Petitioner to submit the details such as Detailed Project Reports, cost benefit analysis etc at the time of filing of next tariff petition for Commission's consideration, failing which the Commission may be forced to disallow the capital expenditure.

7.2.4. Promotion of renewable energy across Andaman & Nicobar Islands

The Commission has noted the Petitioner has not been able to achieve its RPO compliance from last few years. The Petitioner is directed to comply with RPO and prepare the action plan to meet the shortfall in RPO till FY 2022-23 and submit the same along with next tariff petition. The Petitioner may start by installing the solar PVs on the Government Buildings to promote its installation across the islands which will also bring down their power purchase cost.

Annexures

Annexure 1: List of Stakeholders who attended the Public hearing on 24th and 27th May 2022

Table 113: List of Stakeholders who attended hearing at Swaraj Dweep

S.No.	Name of Person (Mr/Ms)/ Stakeholders for Swaraj Dweep
1	Shri. Alok Mridha
2	Shri. Ajit KR.ROY
3	Smt. Devjani Sikder
4	Smt. Mamta Mondal
5	Smt. Geeta Biswas
6	Smt. Shilpa Samaddar
7	Smt. Deepika Halder
8	Shri Dhamanjoy Roy
9	Shri. Bhabatosh Biswan
10	Smt. Maloti mondal
11	Smt. Mala Halder
12	Smt. Rina Samadder
13	Smt. Saniti Sarkar
14	Shri. Puma ch. Helder
15	Shri. Eduared Suni
16	Shri. Manic Suxdar
17	Shri. Munna Kumar
18	Shri. Jitan Ghorami
19	Shri. Gourav Biswas
20	Smt. Rita Dhani
21	Smt. Sunita Dhali
22	Smt. Trapati Sethi
23	Surpdeb Jaydehar
24	Smt. Manisha Gharani
25	Shri. Aloka Biswas
26	Smt. Suparna Biswas
27	Shri. Rajesh Mistry
28	Shri. Uttam Kumar Hawlader
29	Shri. Sanjay Basu
30	Shri. Bidhen Mandal
31	Shri. Ram Krihsana Banu
32	Shri. Sushoban Sarkar
33	Shri. Shibu Chakarverthy
34	Shri. Rasidra Nath Mandal
35	Shri. Abhishek Roy
36	Shri. Abinash Biswas

S.No.	Name of Person (Mr/Ms)/ Stakeholders for Swaraj Dweep
37	Shri. Dinesh Bechor
38	Shri. Sujit kumarbarai
39	Shri. Robin Baroi
40	Shri. Rameavah
41	Shri. Amitabh Roy
42	Shri. Aviket Star
43	Shri. Azar Ali
44	Shri. Haror Lal Roy
45	Smt. Deepak Chakraborty
46	Shri. Abhijit Mallick
47	Shri. Dijnkar Gur
48	Shri. Ashok Sihdar
49	Smt.Reetu
50	Shri. Subodh Samaddar
51	Shri. Dev
52	Shri. Mahu
53	Shri. Narayan Dads
54	Shri. Raghupati Mondal
56	Shri. Ajeet Singh Hadar
57	Shri. Ashok Ojha

Table 114: List of Stakeholders who attended hearing at Port Blair

S.No.	Name of Person (Mr/Ms)/ Stakeholders for Port Blair
1	Smt.Sampa Banerjee
2	Shri. Joshna Bala
3	Shri. K Vardhan Mi
4	Shri. Prabhakar Rai Sharma
5	Shri. Sahjh h. Nall
6	Shri. Akshay Khata
7	Shri. Bishvv Padaram
8	Shri. R.Ravichandra
9	Shri. C.R.Chowdhy
10	Shri. K.P. Mohandas
11	Shri. SK. Mujibar
12	Shri. D Sandeep
13	Shri. Tapas Bhatt
14	Shri. Jamal Bhatt
15	Shri. G.Lakhamani Rao
16	Shri. S.Karma Rao
17	Shri. Pankaj Tripathi
18	Shri. B. Venlceterh
19	Shri. Kamal
20	Shri. Anupam Mondal
21	Shri. Paritish

S.No.	Name of Person (Mr/Ms)/ Stakeholders for Port Blair
22	Shri. Mohd Rafi
23	Shri. Somjit Mridha
24	Shri. Dinesh kumarp
25	Shri. P Babu
26	Smt. Sasi Nair
27	Shri. M. Soamy
28	Smt.A.Santosh Kumar
29	Shri. Mohammed
30	Shri.K.Boobattey
31	Shri. B.Dinush Kumar
32	Shri. Govind Roy
33	Smt.Shina
34	Shri. Anuj
35	Shri. Jeevan
36	Smt.Hema
37	Shri. V.Minu
38	Shri. Nalin G
39	Shri. Saji Vavghes
40	K.Sarkar
41	Shri. A.R. Mareickav
42	Shri. R Aayalal
43	Shri. V.k.Anil
44	Shri. Dmffrat Singh
45	Shri. Sajid Shan
46	Shri. Sanjay
47	Shri. K.p.Usman
48	Shri. P.Namaswamy
49	Shri. M.Raja
50	Shri. S.B.
51	Shri. Ranjit
52	Shri. S.Muthuraman
53	Shri. E.Kodanda Rao
54	Shri. A.Chandra Kumar
55	Shri. V.Govindan
56	Shri. M.Ausasyam
57	Shri. Ashraf
58	Shri. Antony sterphen
59	Shri. V Vinita Rao
60	Shri. Dinesh
61	Shri. B. Nagendran
62	Shri. M. Murugesman
63	Shri. Srawan dginurth
64	Shri. Hanumant jain
65	Shri. Manujeshar

S.No.	Name of Person (Mr/Ms)/ Stakeholders for Port Blair
66	Dr. R. Dev Das
67	Shri. L moorthy
68	Shri. Anil Goel
69	Shri. Dakshin B
70	Shri. Zaqir J
71	Shri. Diwakar Moorthy
72	Shri. P.J. Shikhar
73	Shri. Sargar kumar
74	Shri. Abilash Sharma
75	Shri. Vikash larry
76	Shri. Arun singh
77	Shri. P.D. Parsad
78	Shri. G. Alagar Raja
79	Shri. Sourav Gain
80	Adv. Vishal Biswas
81	Shri. Adarsh Ilango
82	Shri. C-Ramajayan
83	Shri. S.Venuga Pal
84	Shri. Maraj Kr
85	Shri. S. Sujth
86	Shri. K.Gopinath
87	Shri. S.kanniappan
88	Shri. Sahsh
89	Shri. Predi
90	Shri. Kishen Lal
91	Shri. L.Kannan
92	Shri. Muruhan
93	Smt. Sheela
94	Shri. Shyamlal Chawdhry
95	Shri. Bishnu Pada Ray
96	Shri. Grish Arora
97	Shri. Pushkar Anand
98	Shri. Rajesh Anand
99	Shri. Nasreen
100	Shri. Hameeda
101	Smt. Kiran Shashtri
102	Shri. Hubaida Begum
103	Shri. M.A.Sajid
104	Shri. Simson
105	Shri. Gyan Prakash Kishna
106	Shri. K.Ibrahim
107	Shri. Sadab Riaz
108	Shri. Palash Mali
109	Shri. Kenjith.K

S.No.	Name of Person (Mr/Ms)/ Stakeholders for Port Blair
110	Shri. Sivabalan
111	Shri. Sidhant K.Pathak
112	Shri. Somin
113	Shri. V.Suresh
114	Shri. Biswas
115	Shri. K.Jayashee
116	Shri. Sudhama
117	Shri. E. Rao

Table 115: List of Stakeholders/Institutions who submitted written comments

S.No.	Name of Person (Mr/Ms)/ Stakeholders / Institutions
1	Sh. Vikas Lall, Hotel Aparupa (A) Pvt.
2	Sh. Zakir, M/s. Jadwet Hotels
3	Coral Reef Resort Pvt. Ltd.
4	Coral Reef Resort Pvt. Ltd.
5	TSG Hotels & Resorts
6	Sh. Farhan Jadwet for Jadwet Mahindra Automobile Industry
7	TSG Automobiles
8	Sh. Tanveer Singh, Director Hotel Shompen
9	Sh. Tanveer Singh, Director Hotel Shompen
10	Sh. Tanveer Singh, Director Hotel Seven Island
11	Sh. Tanveer Singh, Director Hotel Summber Sands
12	Hoteliers Association of A&N Islands
13	Mrs. Usha Moorthy, Proprietor Diviyun Manor
14	Laghu Udyog Bharati
15	Sh. M H Jadwet, Partner M/s. Jadwet Trading Company
16	TSG AQUA
17	Andaman Chamber of Commerce & Industry (ACCI)
18	Sh. Chintan Shah, Vice President Andabar Cold Stores Pvt. Limited
19	Southern Holdings & Investments
20	TSG AQUA
21	Sh. Diwakar Moorthy, Operations Manager, Cinema Theatre
22	Sh. Gavaskar S GM-Finance & Accounts, Gennext motors (Andaman) Pvt. Limited
23	DI Estate Welfare Association
24	M/s. Andaman Cold Chain
25	Sh. Abhishek Kumar, Hotel Mainak
26	Family of Mahatma Gandhi International School
27	RIFLEX Industries Pvt. Ltd
28	Reef Atlantis
29	TSG
30	Sh. Arun
31	M/s. Shiva Tank
32	Andaman Cottage Match Industries
33	K. K. Furniture

S.No.	Name of Person (Mr/Ms)/ Stakeholders / Institutions
34	Integrated Coco Carbon & Agro Products Pvt. Ltd
35	Ajoy Bairagi, Bharatiya Janata Party
36	Kavitha Udhay Kumar Chairperson, Municipal Council
37	Hoteliers Association of A&N Islands
38	Vishal Jolly, Bharatiya Janata Party
39	Mahesh Kishan