TARIFF ORDER

Annual Performance Review for FY 2022-23 and Aggregate Revenue Requirement (ARR) and Determination of Retail Tariff for the FY 2023-24

Petition No. 97/2023

For

Electricity Department Andaman & Nicobar Administration (EDA&N)

28th March 2023

JOINT ELECTRICITY REGULATORY COMMISSION
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List of abbreviations

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

Before the

Joint Electricity Regulatory Commission

For the State of Goa and Union Territories, Gurugram

QUORUM

Smt. Jyoti Prasad, Member (Law)

Petition No. 97/2023

In the matter of

Approval for the Annual Performance Review for the FY 2022-23, Aggregate Revenue Requirement (ARR) and Retail Tariff for the FY 2024-25.

And in the matter of

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

ORDER

1) This Order is passed in respect of a Petition filed by the Electricity Department Andaman & Nicobar Administration (EDA&N) (herein after referred to as "The Petitioner" or "EDA&N" or "The Licensee") for approval of Annual Performance Review for the FY 2022-23, Aggregate Revenue Requirement (ARR) and Retail Tariff for the FY 2023-24 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 27th January 2023. 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 7th March 2023 and 10th March 2023 at Port

Blair and Swaraj Dweep respectively, and all the Stakeholders/Electricity Consumers present in the Public Hearing were heard.

3) The Commission could not carry out the True-up for FY 2021-22, since the Petitioner has not submitted the true-up petition for FY 2021-22. The Commission shall revisit the ARR for the FY 2021-22 after the submission of true-up petition along with audited accounts by the Petitioner.

4) The Commission based on the Petitioner's submissions, relevant JERC 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 2022-23 and ARR along with Retail Tariff for the FY 2023-24.

5) 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 2022-23:

Table 1: Standalone Revenue Gap/ (Surplus) approved for FY 2022-23 (INR Crore)

S. No	Particulars	Petitioner's submission	Approved by Commission
1	Net Revenue Requirement	1149.47	1140.07
2	Revenue from Retail Sales at Existing Tariff	241.58	243.00
3	**Net Gap /(Surplus)**	**907.89**	**897.07**

(b) The following table provides ARR, Revenue and gap as submitted by the Petitioner and approved by the Commission for FY 2023-24:

Table 2: Standalone Revenue Gap/ (Surplus) approved for FY 2023-24 (INR Crore)

S. No	Particulars	Petitioner's submission	Approved by Commission
1	Net Revenue Requirement	1207.41	1203.56
2	Revenue from Retail Sales at Approved Tariff	254.23	297.91
3	**Net Gap /(Surplus)**	**953.19**	**905.65**

(c) The Petitioner has proposed a hike of 43.91% in the energy charges.

(d) The Commission has approved a marginal tariff hike of 12.14% for FY 2023-24 over the tariff for FY 2022-23.

(e) The Commission has approved the average billing rate for FY 2023-24 as INR 10.23/kWh as against the approved Average Cost of Supply of INR 41.34/kWh.

(f) The Commission approves the standalone gap at INR 905.65 Crore in the ARR of FY 2023-24, which will be met through the budgetary support from the Andaman & Nicobar Administration as confirmed by the Petitioner vide Letter Reference No. M/3/2022-Plg-ELE-ELE dated March 24, 2023.

(g) This Order shall come into force with effect from 1 April 2023 and shall, unless amended or revoked, continue to be in force till further orders of the Commission.

6) 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.

Secretary (I/c), JERC
(For Goa and UTs)

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

8) Ordered accordingly.

Sd/-

(Jyoti Prasad)

Member (Law)

Place: Gurugram
Date: 28th March 2023

(Certified Copy)

(S.D Sharma)

Secretary (I/c), JERC

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 30 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.

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

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

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

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

The key duties being discharged by EDA&N are:

- Laying and operating of electric lines, sub-stations and electrical plants that are primarily maintained for the purpose of distributing electricity in the area of Andaman & Nicobar Islands.
- Operating and maintaining sub-stations and dedicated transmission lines connected therewith as per the provisions of the Act and the rules framed there under;
- Generation of electricity for the supply of electricity required within the boundary of the UT and for the distribution of the same in the most economical and efficient manner;
- Supplying electricity, as soon as practicable to any person requiring such supply, within its competency to do so under the said Act;
- Implementation of schemes for distribution and generally for promoting the use of electricity within the UT.

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

1.4. Multi Year Tariff Regulations, 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 JERC 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.

1.5. Filing and Admission of the Present Petition

The present Petition was admitted on January 27, 2023 and marked as Petition No. 97/2023. The Commission and the Petitioner subsequently uploaded the Petition on their respective websites.

1.6. Interaction with the Petitioner

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

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

Table 3: List of interactions with the Petitioner

S. No	Subject	Date
1	Issue of First Discrepancy Note	10.02.2023
2	Reply received from the Petitioner with regard to first discrepancy Note	21.02.2023 and 02.03.2023
3	Technical Validation Session (TVS)	03.03.2023
4	Public hearing	07.03.2023 and 10.03.2023
5	Reply received from the Petitioner with regard to TVS discrepancy Note	18.03.2023 and 21.03.2023
6	Petitioner's reply to the Stakeholders' comments sought by the Commission	24.03.2023

1.7. 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:

Table 4: Details of Public Notices published by the Commission

S. No.	Date	Name of Newspaper	Language
1	February 10, 2023	Andaman Express	English
2		Arthik Lipi	Bengali
3		Sanmarg	Hindi
4		The Echo of India	English
5	March 5, 2023	Andaman Express	English
6		Arthik Lipi	Bengali
7		Sanmarg	Hindi
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 Notices published by the Petitioner

S. No.	Date	Name of Newspaper	Language
1	February 16, 2023	Dweep Samachar	Hindi
2	February 16, 2023	Daily Telegram	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 to be conducted by the Commission on March 7, 2023 and March 10, 2023.

1.8. Public Hearing

The Public Hearing was held on 7th March 2023 and 10th March 2023 at Swaraj Dweep Island and Port Blair respectively 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, 2021.

The Public Hearing was held on on 7th March 2023 and 10th March 2023 at Swaraj Dweep Island and Port Blair respectively on the Petition for the APR of the FY 2020-21, Aggregate Revenue Requirement (ARR) and Tariff for the FY 2021-22. During the Public Hearing, a few stakeholders who had submitted their comments in writing also presented their views in person before the Commission. Other participants from the general public, who had not submitted written suggestions/ comments earlier, were also given an equal opportunity to present their views/ suggestions in respect to the Petition.

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

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

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

2.2.1. Tariff Hike

Stakeholders' Comments

Various stakeholders raised their objection for the hike in Tariff proposed by Electricity Department.

Petitioner's Response

It is submitted that over last year department have witnessed exorbitant hike in fuel price. This is most important factor for proposing meager increase in the tariff rates. Even with this meager hike still the gap between Net revenue requirement (NRR) & Revenue Realised (RR) has to be met by UT Budget which is a burden to the govt. exchequer. Moreover, the department always intends to promote and encourage high value consumers to move towards small scale renewable plants on their respective premises, which shall reduce their dependency on the grid and shall 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 6 of the Tariff Order.

2.2.2. Categorizing of Hotels/Restaurants by Electricity Department

Stakeholders' Comments

Objection for separately categorizing of Hotels/Restaurants by Electricity Department.

Petitioner's Response

It is submitted that the Electricity Department sought separate category for Hotel Establishment being commercial activity with tariff less than that of Commercial Category, bearing in mind that charging hotels under industrial category would have huge financial implication on the state exchequer.

Commission's View

The Commission has noted the stakeholders' concerns and would like to highlight that the new Hotel Category was formed as per the Petitioner's suggestion and keeping in mind to provide relief to the Hotel category as it has lower tariff than the Commercial category.

2.2.3. Power Interruption in Port Blair

Stakeholders' Comments

Objection on Power Interruption at Port Blair.

Petitioner's Response

It is submitted that due to ongoing summer season, the peak demand of Port Blair, South Andaman is 40 MW, especially during peak hours from 05.30 PM to 10.00 PM the power demand and available capacity is under hand to mouth situation.

The available generation capacity is 37 MW catered by Two departmental and four Private Power Plants at Port Blair, South Andaman. The day demand is of 34 MW is met through Solar Power plant and DG plants.

Due to non availability of Battery Energy Storage System (BESS) with Solar Plants the grid gets collapsed frequently for sudden solar power drop /increase in the grid due to frequent cloud intermittency as per climatic condition.

However, at present through Demand Side Management to ensure optimal utilization of available power with additional power from private plants, the department is successful to mitigate the sudden rise in power demand during evening peak hours.

The projects under pipeline as Long term solutions are as below:

- 50 MW LNG Power Plant
- JICA - 15 MWhr Battery Energy Storage System (BESS) will be established by JICA under Grant-in-Aid Scheme.
- 20 MWhr BESS by SECI: RE plan approved by MNRE wherein establishment of 20 MWhr Battery Energy Storage System is also proposed. SECI has been nominated as a Nodal Agency by MNRE for implementation of RE Plan in A&N Islands.

Commission's View

The Petitioner is advised to be more prepared for such type of situation and should proactively plan the power requirement at optimal cost.

2.2.4. Subsidy

Stakeholders' Comments

No subsidy provided by the Electricity Department to the public as compared to the other department in A&N Islands.

Petitioner's Response

It is submitted that Electricity Department offers power to its consumers at much cheaper subsidized rate as compared to its counterpart DISCOMs/ department active in other UTs. This huge subsidy causes a huge gap in Annual Revenue Requirement (ARR) and Revenue Realized (RR). Any further subsidy may attract heavy burden on govt exchequer.

Commission's View

The Commission would like to highlight that the average cost of supply in case of Andaman & Nicobar Islands is very high in comparison to other states, thereby making it difficult to provide free electricity. Further, UT Administration is already providing budgetary support to Electricity Department thus subsiding the consumers to a huge extent. The Commission has discussed the principles adopted for approving the Tariff in Chapter 6 of the Tariff Order.

2.2.5. Objection certificate from legal heir of premises for new electric connection.

Stakeholders' Comments

Stakeholders at Swaraj Dweep raised objection on requirement for no objection certificate from legal heir of premises for new electric connection.

Petitioner's Response

New electric connection is released after receiving documents from the consumers as an acceptable proof of ownership or occupancy of premises in accordance to Clause 5.30 of Electricity Supply Code Regulation, 2018.

Commission's View

The Commission has noted the stakeholders concern and would like to highlight that the procedure for new electricity connections shall be governed as per the provisions of JERC Supply Code Regulations, 2018 as amended from time to time.

2.2.6. Categorizing of Hotels/Restaurants by Electricity Department

Stakeholders' Comments

The Hotelier Association raises inter alia serious concerns with respect to the continuance of a separate categorization for hotels under "hotels/restaurants/resorts" thereby removing them from the previous category of being "Industrial" in order to deprive it from receiving the tariff benefits amongst other subsidies extended by the government. The Association also condemns the Department's constant harassment being meted towards the hotel sector for who the department has yet again proposed a steep enhancement of the tariff for the Industrial Sector by almost double from Rs.10.50 per kWh (under industrial, as categorized as on date) to Rs. 20.30 per kWh (under the new proposed category) and consequently placing them at par with the rates applicable to Commercial Consumer (which currently is at Rs.15 KWh & proposed to be at Rs.21 pkWh) by the EDA&N in the subject petition.

This Hon'ble 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. The Department is in blatant violation of the directions passed by this Hon'ble Commission and has willfully not complied with this Order. (ii) This Hon'ble 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. The Department is in blatant violation of the directions passed by this Ld. Commission and has willfully not complied with this Order. (iii) The Hon'ble Commission, with respect to FY 2021-22, had in its Tariff Order dt.

31.05.2021 passed in relation to the A&N islands 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 noncompliance of the Commission's said Order which attracts penal action in the Electricity Act, 2003. The Department is in blatant violation of the directions passed by this Ld. Commission and has willfully not complied with this Order 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 Hon'ble Calcutta High Court by way of Contempt Petition, wherein the Hon'ble 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 (Orders passed by the Hon'ble High Court attached as "Annexure D"). The Department is in blatant violation of the directions passed by the Hon'ble High Court as well and has willfully not complied with this Order till date and continues to charge Hotels under Commercial tariff.

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 renowned hotels in the Islands such as Coral Cove, GB Oceania Hotel Dizzy Heights, Hotel Gold Star. Hotel Gold India etc. had even shut operations due to financial difficulties.

Petitioner's Response

It is submitted that The Electricity Department sought separate category for Hotel Establishment being commercial activity with tariff less than that of Commercial Category, bearing in mind that charging hotels under industrial category would have huge financial implication on the state exchequer. The Hike in tariff is to bridge the gap between NRR & RR. Whereas submission "tariff for the Industrial Sector by almost double from Rs.10.50 per kWh (under industrial, as categorized as on date)" is false as all the hotels are placed under new category "Hotels/Restaurant/ Resorts" for FY 2022-23 w.e.f. 01.08.2022 for which the rate per unit is Rs. 14.50 for consumption of 1001 & above and is proposed to be Rs. 20.30 per unit for FY 2023-24.

The Order Dated 02.12.2020 in Petition No. 30 of 2020 & 31 of 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 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 Hon'ble 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 Hon'ble Commission in the course of proceedings of review, were without instructions and authority of the Administration. The Hon'ble Lt. Governor, on the perusal of the pleadings, noticed that relevant facts were not placed before the Hon'ble Commission and the views of Law & Finance Departments of the Administration were not obtained before filing reply before the Hon'ble Commission.

It is 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 as of now.

Commission's View

The Commission has noted the stakeholders' concerns and would like to highlight that the new Hotel Category was formed as per the Petitioner's suggestion and keeping in mind to provide relief to the Hotel category as it has lower tariff than the Commercial category.

3. Chapter 3: True-up of FY 2021-22

3.1. Background

The True-up of FY 2021-22 has to be carried out in accordance with Regulation 11 of the JERC MYT Regulations, 2018, stated as follows:

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

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

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

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

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

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

3.2. Approach for True-up for FY 2021-22

Petitioner's submission:

The Petitioner has not submitted the True-Up Petition for FY 2021-22 as the accounts for FY 2021-22 is under compilation. Further, the true-up petition for FY 2021-22 shall be filed as soon as accounts audit is complete.

Commission's analysis:

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

The Commission directs that the audit of the financial accounts to be completed on priority. The Commission reiterates its direction to the Petitioner to prepare and submit the audited accounts for FY 2021-22 based on commercial principles along with the True-up Petitions by 30th November 2023.

The True-up would therefore be taken up only after submission of the audited accounts. Accordingly, the Commission has decided not to take up True-up for the FY 2021-22 in the current Order. Any parameter considered for the determination of ARR and revenue gap/surplus in the subsequent chapters will be considered as per the Commission's MYT Order dated 1st August 2022. Further, the Commission directs the Petitioner to submit the audited accounts for the FY 2021-22 along with Petition for determination of ARR for the FY 2024-25 by 30th November 2023.

4. Chapter 4: Annual Performance Review of FY 2022-23

4.1. Background

The MYT Order for the 3rd control period was issued by the Commission on August 1, 2022 approving the ARR and Retail Tariff for the FY 2022-23. This Chapter covers the Annual Performance Review (APR) of the FY 2022-23 vis-à-vis the cost parameters approved by the Commission in the MYT Order dated August 1, 2022. The Annual Performance Review for the FY 2022-23 is to be carried out as per provisions of Regulation 12 of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021.

4.2. Approach for Review for the FY 2022-23

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 2022-23 has been done based on the actual data as provided by the Petitioner for the initial 9 months of FY 2022-23 including the Power Purchase Quantum and the Cost, Energy Sales, Capitalisation etc. depending on which the estimates for the remaining months of the financial year have been made. The various cost elements constituting the Aggregate Revenue Requirement have been approved based on the actual information submitted by the Petitioner, the JERC MYT Regulations, 2021 and on the basis of the norms approved in the MYT Order dated August 1 , 2022.

4.3. Energy Sales, Connected Load and Number of Consumers

Petitioner's Submission

The Petitioner has submitted a revised estimate of energy sales as 280.48 MU for the FY 2022-23, based on the actual energy sales for first half of FY 2022-23. Similarly, the Petitioner has proposed the number of consumers and connected load as 148,912 and 376,634 kW respectively for FY 2022-23.

Commission's Analysis

The Commission has considered the actual category wise sales data for initial 9 months of FY 2022-23 and the Petitioner's submission for calculating the category wise sales, connected load and number of consumers respectively for FY 2022-23

4.3.1. Energy Sales

The Commission has projected the category wise sales data for FY 2022-23 by grossing up the category wise actual sales for initial 9 months of FY 2022-23 as submitted by the Petitioner as shown in the following table:

Table 6: Sales projected for FY 2022-23 (MU)

S. No.	Category	Actual Sales for initial 9 months of FY 2022-23	Projected Sales for FY 2022-23
1	Domestic	116.84	155.79
2	Commercial	53.38	71.17
3	Industry	9.18	12.24
4	Bulk	18.87	25.15
5	Public Lighting	3.30	4.39
6	Irrigation, Pumps & Agriculture	1.15	1.53
7	**Total Sales**	**202.69**	**270.27**

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

Table 7: Energy Sales (MU) for FY 2022-23 approved by the Commission

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	163.22	168.45	155.79
2	Commercial	65.36	59.39	71.17
3	Industry	11.53	10.43	12.24
4	Bulk	29.73	33.57	25.15
5	Public Lighting	5.54	7.38	4.39
6	Irrigation, Pumps & Agriculture	1.82	1.27	1.53
7	**Total Sales**	**277.19**	**280.48**	**270.27**

4.3.2. Number of Consumers

The Commission has considered the category wise number of consumers for FY 2022-23 as per the number of consumers in initial 9 months of FY 2022-23 as shown in table below:

Table 8: Number of Consumers projected for FY 2022-23 (MU)

S.No.	Category	Actual Consumers for initial 9 months of FY 2022-23	Projected Number of Consumers for FY 2022-23
1	Domestic	117,587	117,587
2	Commercial	20,379	20,379
3	Industry	390	390
4	Bulk	57	57
5	Public Lighting	663	663
6	Irrigation, Pumps & Agriculture	604	604
7	**Total Consumers**	**139,680**	**139,680**

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

Table 9: Number of Consumers approved for FY 2022-23 by the Commission

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	124,643	124,889	117,587
2	Commercial	22,228	22,167	20,379
3	Industry	443	449	390
4	Bulk	70	70	57
5	Public Lighting	779	766	663
6	Irrigation, Pumps & Agriculture	578	571	604
7	**Total Consumers**	**148,741**	**148,912**	**139,680**

4.3.3. Connected Load

Similarly, the Commission has considered the category wise connected load for FY 2022-23 as per the connected load in initial 9 months of FY 2022-23 as shown in table below:

Table 10: Connected Load projected for FY 2022-23 (kW)

S. No.	Category	Actual connected load for initial 9 months of FY 2022-23	Projected Connected Load for FY 2022-23
1	Domestic	249014	249014
2	Commercial	108106	108106
3	Industry	13242	13242
4	Bulk	19975	19975
5	Public Lighting	3015	3015
6	Irrigation, Pumps & Agriculture	1355	1355
7	**Total Connected Load**	**394,706**	**394,706**

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

Table 11: Connected Load approved by the Commission for FY 2022-23 (kW)

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	236,832	228555	249014
2	Commercial	110,844	110472	108106
3	Industry	14,617	14807	13242
4	Bulk	16,498	18101	19975
5	Public Lighting	3,081	3232	3015
6	Irrigation, Pumps & Agriculture	1,281	1467	1355
8	**Total Connected Load**	**383,153**	**376,634**	**394,706**

The Commission approves energy sales of 270.27 MU, connected load of 394,706 kW and number of consumers as 139,680 in the APR of FY 2022-23.

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

Petitioner's submission

The Petitioner has proposed Intra-State T&D loss level at 17.01% against an approved loss of 15.91% in the MYT Order.

Commission's analysis

The Commission had approved loss level of 15.91% for FY 2022-23 in the MYT Order dated August 1, 2022. The Petitioner has not provided any justification for the revision in distribution losses for FY 2022-23. Therefore, the Commission in the APR of FY 2022-23 finds it appropriate to consider the loss level of 15.91% as approved in the MYT Order for FY 2022-23. 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	15.91%	17.01%	15.91%

The Commission approves Intra-State T&D loss of 15.91% in the APR of FY 2022-23.

4.5. 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	280.48
2	Distribution losses (%)	17.01%
	Distribution losses (MU)	57.49
3	**Energy Requirement @ periphery**	**337.96**
B	**Energy Availability**	
1	Power Purchase	253.61
2	Own Generation	84.35
3	**Total Energy Availability**	**337.96**
C	**Total shortfall/(Surplus)**	**0.00**

Commission's analysis

The Commission has determined the Energy Balance based on the revised estimates of energy sales. The table below provides the Energy Balance as approved by the Commission in the MYT Order of FY 2022-23. There was an energy surplus of 20.02 MU and the same has been adjusted with the own generation, the Petitioner's submission and the Energy Balance now approved by the Commission.

Table 14: Energy Balance (MU) approved by the Commission for FY 2022-23

S. No.	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**			
1	Total Sales within the UT	277.19	280.48	270.27
2	Distribution losses (%)	15.91%	17.01%	15.91%
	Distribution losses (MU)	52.44	57.49	51.14
3	**Energy Requirement @ periphery**	**329.63**	**337.96**	**321.41**

S. No.	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
B	**Energy Availability**			
1	Renewable Generation			22.90
2	Power purchase generation			230.71
3	**Total Power Purchase**	**271.38**	**253.61**	**253.61**
4	Renewable Generation			14.56
5	Diesel Generation			53.24
6	**Total Own Generation**	**58.25**	**84.35**	**67.80**
7	**Total Energy Availability**	**329.63**	**337.96**	**321.41**
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**0.00**

In the APR of FY 2022-23, the Commission has estimated a shortfall/(surplus) quantum of 0.00 MU.

4.6. Power Purchase Quantum & Cost

Petitioner's submission

The energy requirement is met mainly from own generation apart from procurement of power from the IPPs and other generators. However, there is no availability of power from Central Generating Stations (CGS) or from other sources/ open market/ power exchanges, etc. Accordingly, the Petitioner has claimed the fuel cost of INR 206.30 crore as against the approved cost of INR 109.89 crore and the power purchase cost of INR 638.45 crore as against the approved cost of INR 602.16 crore in the Tariff Order dated August 1, 2022. The Petitioner has submitted the IPP and HPPs wise power generation, fuel consumption and power purchase cost including own generation for FY 2022-23 as presented in the following tables:

Table 15: Power Purchase Quantum and Cost from IPPs and Fuel Cost for Own Generation for FY 2022-23

S. No.	Particulars	Units generated (MU)	Variable Charges (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
1	Own Generation (HSD)	73.26	206.30	0.00	206.30
2	KHEP (Kalpong Hydro)	14.56	0.00	0.00	0.00
3	Solar(Own)	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	9.02	23.23	0.95	24.17
5	HPP-2 (10MW)	23.01	59.26	2.30	61.56
6	NTPC - SPV	5.57	0.00	5.21	5.21
7	Other HPPs	57.18	148.51	8.18	156.69
8	NTPC DG 5MW	51.57	132.82	5.67	138.50
9	NTPC DG 10MW	81.01	208.66	11.18	219.84
10	DG P/Plant Niel 1.8 MW	5.14	13.23	0.46	13.69
11	DG P/Plant Havelock 2.84 MW	3.75	9.66	0.43	10.09
12	SECI Solar	0.94	0.00	0.47	0.47
13	M/s. MUNDRA	3.01	0.00	0.66	0.66
14	NLC SPV Plant	13.38	0.00	7.56	7.56
15	Secretariat	0.04	0.00	0.01	0.01
16	**Total**	**341.43**	**801.67**	**43.08**	**844.76**

Commission's Analysis

As per Regulation 13.1 of the JERC MYT Regulations, 2021, power purchase and fuel cost are uncontrollable parameters. Thus, the power purchase and fuel cost must be revisited every year by the Commission based on the audited accounts. The Commission has considered that the power requirement shall be met mainly from own generation apart from procurement of power from the IPPs and other generators. The Petitioner has considered the power purchase quantum and own generation units as proposed in energy balance. Accordingly, the Commission approves the power purchase quantum and own generation units as determined in the energy balance.

The Commission has decided to allow the power purchase cost in the APR on provisional basis and directs the Petitioner to get the PPAs approved on the priority basis failing which the Power Purchase Cost in respect to new PPAs signed shall be disallowed in the true-up of FY 2021-22. The Commission further directs the Petitioner to get PPA approved by the Commission before procuring power from any generating station.

Further, the Commission has noted that while claiming the power purchase cost for fully owned renewable generation has been submitted as Nil considering the same are being considered in the Gross Block in lieu of the power purchase fixed costs. The Petitioner is directed to file a separate tariff determination petition for fully owned renewable generation to get the fixed charges 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 2023-24

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 August 1, 2022. Further, the Commission has determined the per unit cost for HSD as per the invoices submitted by the Petitioner for FY 2022-23 and per unit cost for lube oil equal to the value approved in the MYT order. 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 16: Fuel Requirement for various IPPs, HPPs & Own generations as approved by the Commission

Particulars	Units generated (MU)	SFC of HSD (ml/kWh)	Per Litre cost of HSD (INR)	Total Consumption of HSD (Litre)	SFC of Lube (ml/kWh)	Per Litre cost of Lube (INR)	Total Lube Consumption (Litre)
Own Generation (HSD)	53.24	288.54	104.66	15360649.36	0.98	214.19	52171.06
HPP -1 (5 MW)	9.02	269.00	104.66	2425659.08	0.00	0.00	0.00
HPP-2 (10MW)	23.01	269.00	104.66	6188999.48	0.00	0.00	0.00
Other HPPs	57.18	269.00	104.66	15382719.54	0.00	0.00	0.00
NTPC DG 5MW	51.57	269.00	104.66	13871146.40	0.00	0.00	0.00
NTPC DG 10MW	81.01	269.00	104.66	21791071.30	0.00	0.00	0.00
DG P/Plant Niel 1.8 MW	5.14	277.00	104.66	1422558.15	0.00	0.00	0.00
DG P/Plant Havelock 2.84 MW	3.75	269.00	104.66	1008711.53	0.00	0.00	0.00

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

Table 17: 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)	53.24	160.76	1.12	0.00	161.88
2	KHEP (Kalpong Hydro)	14.56	0.00	0.00	0.00	0.00
3	Solar (Own)	0.00	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	9.02	25.39	0.00	0.95	26.33
5	HPP-2 (10MW)	23.01	64.77	0.00	2.30	67.07

S. No.	Particulars	Units generated (MU)	Cost of HSD (INR Cr)	Cost of Lube (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
6	NTPC - SPV	5.57	0.00	0.00	5.21	5.21
7	Other HPPs	57.18	160.99	0.00	8.18	169.17
8	NTPC DG (5MW)	51.57	145.17	0.00	5.67	150.84
9	NTPC DG (10MW)	81.01	228.06	0.00	11.18	239.24
10	DG P/Plant Niel (1.8 MW)	5.14	14.89	0.00	0.46	15.35
11	DG P/Plant Havelock (2.84 MW)	3.75	10.56	0.00	0.43	10.99
12	SECI Solar	0.94	0.00	0.00	0.47	0.47
13	M/s. MUNDRA	3.01	0.00	0.00	0.66	0.66
14	NLC	13.38	0.00	0.00	7.56	7.56
15	Secreteriat	0.04	0.00	0.00	0.01	0.01
16	**Total**	**321.41**	**810.59**	**1.12**	**43.08**	**854.79**

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

Table 18: Power Purchase & Fuel Cost approved for FY 2022-23 (INR crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Fuel Cost	109.89	206.30	854.79
2	Power Purchase Cost	602.16	638.45	
3	**Total Cost**	**712.05**	**844.76**	**854.79**

The Commission approves power purchase quantum of 321.41 MU and cost of INR 854.79 Crore in the APR of FY 2022-23.

4.7. Renewable Purchase Obligations (RPOs)

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

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

The Commission notified the JERC (Procurement of Renewable Energy), (Fourth Amendment) Regulations, 2022 on 24 March 2022 and revised the RPO targets, according to which the Petitioner had to purchase 18.35% of its total consumption (including 9.00% from Solar) from renewable sources for the FY 2022-23.

For the FY 2022-23, the Commission approves the RPO target of 49.60 MU comprising of 24.32 MU Solar, 24.32 MU Non-Solar and 0.95 HPO. Out of which, the Petitioner has claimed to purchase the solar energy of around 22.90 MU, non-solar energy of around 14.56 MU and HPO energy of Nil. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2022-23:

Table 19: Cumulative RPO compliance till FY 2022-23

Particulars	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
Solar Target	2.50%	3.60%	4.70%	6.10%	8.00%	9.00%
Non Solar Target	4.20%	5.40%	6.80%	8.00%	9.00%	9.00%
HPO						0.35%
Total Target	**6.70%**	**9.00%**	**11.50%**	**14.10%**	**17.00%**	**18.35%**
Sales Within UT	229.56	239.59	262.52	221.15	265.31	270.27
RPO Target						
Solar	5.74	8.63	12.34	13.49	21.22	24.32
Non Solar	9.64	12.94	17.85	17.69	23.88	24.32
HPO						0.95
Total RPO Target	**15.38**	**21.56**	**30.19**	**31.18**	**45.10**	**49.60**
RPO Compliance (Actual Purchase)						
Solar	6.94	8.00	10.08	18.95	21.02	22.90
Non Solar	12.81	14.79	5.75	11.11	13.15	14.56
HPO						0.00
Total RPO Compliance (Actual Purchase)	**19.75**	**22.79**	**15.84**	**30.06**	**34.17**	**37.46**
RPO Compliance (REC Certificate Purchase)						
Solar	0.00	0.00	0.00	0.00	0.00	0.00
Non Solar	0.00	0.00	0.00	0.00	0.00	0.00
HPO						0.00
Total RPO Compliance (REC Certificate)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
RPO Compliance (REC+ Actual)						
Solar	6.94	8.00	10.08	18.95	21.02	22.90
Non Solar	12.81	14.79	5.75	11.11	13.15	14.56
HPO						0.00
Total RPO Compliance	**19.75**	**22.79**	**15.84**	**30.06**	**34.17**	**37.46**
Net Shortfall/(Surplus) for this year	-4.37	-1.23	14.35	1.12	10.93	12.13
Total	**0.00**	**0.00**	**14.35**	**15.47**	**26.40**	**38.53**

The Commission notes that there is a net shortfall in RPO compliance for FY 2022-23 (12.13 MU) and cumulative shortfall of 38.53 MU till FY 2022-23. The Commission directs the Petitioner to complete the RPO obligation on priority.

4.8. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). Regulation 52 of the MYT Regulation, 2021 states the following:

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

52.2 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.

52.3 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.

52.4 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.

52.5 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.

52.6 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."

Provided that at the time of truing up, the variation in the normative and actual O&M expenses shall be dealt in accordance with Regulation 15.

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

4.8.1. Employee Expenses

Petitioner's submission

The Petitioner has submitted employee expenses of INR 196.37 Crore against the approved expenses of INR 157.49 Crore in the MYT Order.

Commission's analysis

In accordance with the JERC MYT Regulations, 2021, the Commission has determined the Employee expenses for each year of the MYT Control Period in MYT Order. The Regulation 6 of the JERC MYT Regulations, 2021 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.

6.2 The Commission may revisit the performance targets for the Control Period during the Mid-term Review, carried out in accordance with the Regulation 11."

In accordance with JERC MYT Regulations, the Employee expenses shall be revised to the extent of change in inflation and growth rate during the control period. Accordingly, the Commission has considered the base value of employee expenses approved for FY 2021-22 in the MYT Order for computation of revised employee expenses of FY 2022-23. The Commission has considered the employee growth rate for FY 2021-22 and FY 2022-23 as submitted by the Petitioner along with the average CPI of previous three years to arrive at the employee expenses for FY 2022-23.

The CPI Inflation has been computed as follows:

Table 20: Computation of CPI Inflation (%)

FY	CPI Index	Percentage Increase in CPI Index	Average increase in CPI Index over 3 years
2018-19	299.92		
2019-20	322.50	7.53%	5.89%
2020-21	338.96	5.10%	
2021-22	356.07	5.05%	

Table 21: Employee recruitment plan as submitted by the Petitioner

S. No	Particulars	FY 2021-22 (Base Year)	FY 2022-23	FY 2023-24
1	Opening Employee	1921	2222	2321
4	Closing Employee	2222	2321	2293
5	Growth rate	15.67%	4.46%	-1.21%

Table 22: Employee Expenses approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	EMPn-1 (INR Crore)	147.19	**196.37**	147.19
2	Gn (%)	0.94%		4.46%
3	CPIinflation (%)	6.00%		5.89%
4	**Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)**	**157.49**		**162.81**

The Commission now approves employee expenses of INR 162.81 Crore in the APR of the FY 2022-23.

4.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted a revised estimate of A&G expenses of INR 4.42 crore as against the approved value of INR 13.05 crore in the MYT Order.

Commission's analysis

In accordance with JERC MYT Regulations, the A&G expenses shall be revised to the extent of change in inflation during the control period. Accordingly, the Commission has considered the base value of A&G expenses approved for FY 2021-22 in the MYT Order for computation of revised A&G expenses of FY 2022-23. The A&G expenses for FY 2021-22 has been escalated with the average CPI of previous three years as computed above to arrive at the A&G expenses for FY 2022-23.

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 by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	A&Gn-1 (INR Crore)	11.21	**4.42**	12.31
2	CPIinflation (%)	6.00%		5.89%
3	Provision (INR Crore)	0.00		0.00
4	**Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)**	**13.05**		**13.04**

The Commission now approves the Administrative & General (A&G) expenses of INR 13.04 Crore in the APR of the FY 2022-23.

4.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has submitted a revised estimate of R&M expenses of INR 50.64 crore as against the approved value of INR 55.49 crore in the MYT Order dated August 1, 2022.

Commission's analysis

In accordance with JERC MYT Regulations, the R&M expenses shall be revised to the extent of change in inflation during the control period. The Commission has considered the k-Factor as approved in the MYT Order and multiplied the same with the opening GFA of FY 2022-23. The resultant amount is then escalated by average WPI Inflation of previous three years to arrive at the R&M expenses for FY 2022-23.

The WPI Inflation has been computed as follows:

Table 24: Computation of WPI Inflation (%)

FY	WPI Index	Increase in WPI Index	Average increase in WPI index over 3 years
2018-29	119.79		
2019-20	121.80	1.68%	**5.32%**
2020-21	123.38	1.29%	
2021-22	139.41	13.00%	

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

Table 25: R&M Expenses approved by Commission for FY 20222-23 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	FY 2022-23
1	Opening GFA (GFA_{n-1})*	55.49	50.64	546.58
2	K factor approved (K) (%)			9.46%
3	Avg. WPI Inflation (%)			5.32%
4	**R&M Expenses = K x (GFA_{n-1}) x ($1+WPI_{inflation}$)**			**54.46**

**Excluding the unserviceable assets*

The Commission approves the Repair & Maintenance (R&M) expenses of INR 54.46 Crore in the APR of FY 2022-23.

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

The following table provides the O&M expenses approved in the ARR of FY 2022-23, Petitioner's submission and now approved by the Commission.

Table 26: 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	157.49	196.37	162.81
2	Administrative & General Expenses (A&G)	13.05	4.42	13.03
3	Repair & Maintenance Expenses	55.49	50.64	54.46
	Total Operation & Maintenance Expenses	**226.03**	**251.43**	**230.30**

The Commission approves the Operation & Maintenance (O&M) Expenses of INR 230.30 Crore in the APR of FY 2022-23.

4.9. Capital Expenditure & Capitalisation

Petitioner's submission

The Petitioner has submitted revised capitalisation of INR 7.33 Crore as against the approved capitalisation of INR 13.83 Crore in the Tariff Order dated August 1, 2022.

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 Capitalisation approved in MYT Order, the Commission approves the capitalisation for the year as shown in the following table:

Table 27: Capitalisation approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Capitalisation	7.33	13.83	13.83

The Commission approves capitalisation of INR 13.83 Crore in the APR of FY 2022-23. The same shall be trued up at the time of True-up.

4.10. Capital Structure

Petitioner's Submission

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

Commission's analysis

Regulation 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."

The Petitioner has submitted that they have finalized the Fixed Asset Register up-to 31.03.2021. The Petitioner has taken the closing balance of GFA as per audited Accounts for the FY 2020-21 as opening balance for FY 2021-22 and considered the asset addition during FY 2021-22 & estimated addition during the FY 2022-23 to arrive at the closing GFA for the FY 2022-23.

In accordance with the JERC MYT Regulations, 2021, the Commission has determined the Capital Structure for FY 2022-23 as follows:

Table 28: GFA addition approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	572.47	508.11	508.11
2	Addition During the FY	7.33	13.83	13.83
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	579.80	521.94	521.94

For the purpose of calculating the opening value of normative loan in FY 2022-23, the Commission has considered the closing value of normative loan for FY 2020-21 as approved in the true-up Tariff Order and loan addition corresponding to capitalisation for FY 2021-22 as submitted by the Petitioner as shown in following table:

Table 29: Normative Loan addition approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	127.40	109.71	109.28
2	Add: Normative Loan During the year	5.23	9.68	9.68
3	Less: Normative Repayment equivalent to Depreciation	19.10	18.29	18.29*
4	Closing Normative Loan	113.44	101.11	100.67

**Depreciation calculated in next section*

For the purpose of calculating the opening value of equity in FY 2022-23, the Commission has considered the closing value of equity for FY 2020-21 as approved in the true-up Tariff Order and equity addition corresponding to capitalisation for FY 2021-22 as submitted by the Petitioner as shown in following table:

Table 30: Normative Equity addition approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	171.74	152.43	163.97
2	Additions on account of new capitalisation	2.20	4.15	4.15
3	Closing Equity	173.94	156.58	168.12

4.11. Depreciation

Petitioner's submission

The Petitioner has submitted the depreciation of INR 18.29 crore as per JERC MYT Regulations 2021 as against the approved depreciation of INR 19.10 crores in the MYT Order dated August 1, 2022.

Commission's analysis

Regulation 31 of the JERC 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.

Provided further that the salvage value of Information Technology equipment and computer software shall be considered at zero (0) per cent of the allowable capital cost.

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, 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.

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.

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.

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 derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in JERC MYT Regulations, 2021, provided in the following table:

Table 31: Depreciation Rate (%)

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

However, in absence of audited accounts for FY 2021-22 and provisional accounts for FY 2022-23, the Commission has considered the weighted average depreciation rate as approved in the MYT Order. The opening and closing GFA has been considered as approved in the *Section 4.10: Capital Structure* of this Order. Further, depreciation has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during each year.

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

Table 32: Depreciation approved by the Commission for FY 2022-23 (In INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening GFA	572.47		568.57
2	Less: Unserviceable assets			21.99
3	Less: Assets depreciated upto 90% till FY 2020-21	38.47		38.47
4	Modified Opening GFA	534.00	508.11	508.11
5	Additions during the FY	7.33	13.83	13.83
6	Closing GFA	541.33	521.94	521.94
7	Average Gross Fixed Assets	537.66	515.03	515.03
8	Rate of Depreciation (%)	3.55%	3.55%	3.55%
9	**Depreciation**	**19.10**	**18.29**	**18.29**

The Commission now approves depreciation of INR 18.29 Crore in the APR of the FY 2022-23.

4.12. Interest and Finance Charges

Petitioner's submission

The Petitioner has estimated the Interest and Finance charges as per the JERC MYT Regulations, 2021 for the year FY 2022-23. The rate of interest considered is SBI MCLR as on 1 April of that relevant year plus 100 basis points. Further, the Petitioner considered the closing normative loan for the FY 2020-21 approved in the True-up order for the year as the opening normative loan for the FY 2021-22. Thereafter, 70% of the actual asset capitalization/addition during FY 2021-22 & estimated addition during the FY 2022-23 has been considered as debt addition for the respective years. Further, Normative repayment of loan for the FY 2021-22 & FY 2022-23 has been considered equivalent to depreciation for the respective years. Accordingly, closing loan balance for the FY 2022-23 has been arrived.

Commission's analysis

Regulation 29 of the JERC 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 30.

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.”

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 (7.00%) rate plus 100 basis points as Rate of Interest, in accordance with the JERC MYT Regulations, 2021. The opening loan balances for FY 2022-23 has been considered as the closing loan balances for FY 2021-22 as per Section 4.10.

As per the JERC MYT Regulations, 2021, if the equity deployed is more than 30% of the capital cost, then equity in excess of 30% is considered as normative loan.

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

Table 33: Interest and Finance Charges approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	127.40	109.71	109.28
2	Add: Normative Loan During the year	5.13	9.68	9.68
3	Less: Normative Repayment equivalent to Depreciation	19.10	18.29	18.29
4	Closing Normative Loan	113.43	101.10	100.67
5	Average Normative Loan	120.42	105.41	104.97
6	Rate of Interest (%)	**8.00%**	**8.00%**	**8.00%**
7	**Interest on Loan**	**9.63**	**8.43**	**8.40**

The Commission approves Interest and Finance Charges of INR 8.40 Crore in the APR of the FY 2022-23.

4.13. Return on Equity (RoE)

Petitioner’s submission

Return on Equity (RoE) is computed in accordance with the JERC MYT Regulations 2021, RoE is computed on 30% of the capital base. Based on the reconciliation of assets in the fixed asset register and the closing equity for FY 2020-21 as per Tariff order dated May 10, 2022, the Petitioner has claimed the opening equity of INR 152.43 crore considering the 30% of the additional assets recognised as the equity addition. Accordingly, RoE is computed at 16% post-tax.

Commission’s analysis

RoE has been calculated on normative basis on the average of opening and closing of equity during the year at the rate of 16% (on post-tax basis) with an opening equity considered equivalent to the closing equity of FY 2021-22 as derived in Section 4.10: Capital Structure above. Income Tax payable shall be considered on actual basis at the time of True-up.

The following table provides the RoE approved in the ARR of FY 2022-23, the Petitioner’s submission and RoE now approved by the Commission.

Table 34: RoE approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	171.74	152.43	163.97
2	Additions on account of new capitalisation	2.20	4.15	4.15
3	Closing Equity	173.94	156.58	168.12
4	Average Equity	172.84	154.50	166.05
5	Rate of Return	16.00%	16.00%	16.00%
6	**Return on Equity**	**27.65**	**24.72**	**26.57**

The Commission approves the Return on Equity of INR 26.57 Crore in the APR of the FY 2022-23.

4.14. Interest on Security Deposits

Petitioner's submission

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

Commission's analysis

Regulation 29.11 of the MYT Tariff Regulations, 2021 stipulates as follows:

"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 in the APR of the FY 2022-23.

4.15. Interest on Working Capital

Petitioner's submission

Interest on Working Capital has been calculated based on the normative principles outlined in the JERC MYT Regulations, 2021.

The Petitioner has computed the Interest on Working Capital at rate of 9.00% as INR 4.74 crores.

Commission's analysis

The Commission has considered the receivables as proportionate revenue for 2 months as gap funding is done month on month basis from the Andaman & Nicobar Administration. Similarly, one month of the revised power purchase cost of FY 2022-23 as determined above has been considered keeping in view that the required fuel generation of the electricity is supplied by the Andaman & Nicobar Administration 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 1 April 2022 for calculation of interest, as stipulated in the JERC MYT Regulations, 2021.

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

Table 35: Interest on Working Capital approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	O&M Expense for 1 month	18.84	20.95	19.19
2	Maintenance spares at 40% of R&M expenses for one (1) month;	1.85	1.69	1.82
3	Receivables equivalent to two (2) months of the expected revenue at the prevailing tariff	36.04	40.26	40.50
4	Less: Power purchase cost for 1 month	4.07	3.59	3.59
5	Net Working Capital	52.66	59.31	57.92
6	Rate of Interest (%)	9.00%	9.00%	9.00%
7	**Interest on Working Capital**	**4.74**	**5.34**	**5.21**

The Commission approves the Interest on Working Capital as INR 5.21 Crore in the APR of the FY 2022-23.

4.16. Provision for Bad & Doubtful Debts

Petitioner's submission

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

Commission's analysis

The Commission also has not considered any provision towards Bad & Doubtful Debts. The same shall be accounted for as per actuals in the True-up of FY 2022-23.

4.17. Non-Tariff Income

Petitioner's submission

The Petitioner has submitted the Non-Tariff Income of INR 3.49 Crore as approved by the Commission in the MYT Order.

Commission's analysis

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

Table 36: Non-Tariff Income approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	**Non-Tariff Income**	**3.49**	**3.49**	**3.49**

The Commission approves Non-Tariff Income of INR 3.49 crore in the APR of FY 2022-23. The same shall be considered at actuals at the time of True-up of FY 2022-23.

4.18. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the Petitioner has submitted the net aggregate revenue requirement of INR 801.89 Crore after adjusting the Non -Tariff Income for FY 2022-23.

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 2022-23 as provided in the table below:

Table 37: Aggregate Revenue Requirement approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost	602.16	638.45	854.79
2	Fuel Cost	109.89	206.30	
3	O&M Expenses	226.03	251.43	230.30
4	Depreciation	19.10	18.29	18.29
5	Interest and Finance charges	9.63	8.43	8.40
6	Interest on Working Capital	4.74	5.34	5.21
7	Return on Equity	27.65	24.72	26.57
8	Interest on Security Deposit	0.00	0.00	0.00
9	Income Tax	0.00	0.00	0.00
10	**Total Revenue Requirement**	**999.21**	**1152.96**	**1143.56**
11	Less: Non-Tariff Income	3.49	3.49	3.49
12	**Net Revenue Requirement**	**995.72**	**1149.47**	**1140.07**

The Commission now approves the net ARR of INR 1140.07 crore in the APR of FY 2022-23.

4.19. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the revenue from the sale of power at existing tariff as INR 241.58 crore determined on the basis of energy sales in the territory for FY 2022-23.

Commission analysis

The category wise revenue at existing retail tariff is calculated as per the tariff rates applicable for FY 2022-23 as per tariff order dated March 31, 2022. 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 2022-23. The revenue from category/ sub-category/ slab-wise revenue as computed by the Commission for FY 2022-23 has been shown in the following table:

Table 38: Revenue at existing tariff computed by the Commission for FY 2022-23 (INR Crore)

S. No.	Category	Sales (MUs)	Revenue from Fixed Charges	Revenue from Energy charges	Total	ABR (INR/unit)
1	Life Line Connection	-	-	-	-	
2	Domestic	152.34	4.40	87.72	92.11	6.05
3	Commercial	43.84	1.95	53.82	55.77	12.72
4	Hotels/Restaurants/Resorts	7.57	0.88	10.87	11.75	15.53
5	Government Connection	19.76	1.10	25.79	26.89	13.61
6	Industry	12.24	0.99	12.37	13.25	10.83
7	Bulk	25.15	2.66	32.70	35.36	14.06
8	Public Lighting	4.39	0.60	3.52	4.12	9.37
9	Irrigation, Pumps & Agriculture	1.53	0.09	0.27	0.36	2.34
10	EV Charging	2.23	-	1.74	1.74	7.80
11	Temporary Supply	1.22	-	1.64	1.64	13.49
12	**Total Revenue**	**270.27**	**12.57**	**230.43**	**243.00**	**8.99**

The Commission has determined revenue from the sale of power at existing tariff as INR 243.00 Crore in the APR of FY 2022-23.

4.20. Standalone Revenue Gap/Surplus

Petitioner's submission

Based on the ARR and the revenue from Retail tariff, the standalone revenue gap of INR 907.89 Crore is arrived at in the APR of FY 2022-23.

Commission analysis

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

Table 39: Standalone Revenue Gap/ Surplus at existing tariff for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Net Revenue Requirement	995.72	1149.47	1140.07
2	Revenue from Retail Sales at Existing Tariff	195.35	241.58	243.00
3	**Net Gap /(Surplus)**	**800.37**	**907.89**	**897.07**

The Commission approves the standalone gap at INR 897.07 Crore in the APR of FY 2022-23 which will be met through the budgetary support from the Andaman & Nicobar Administration as confirmed by the Petitioner vide Letter Reference No. 2-4/Tariff/2021-Accts/Electricity dated July 25, 2022.

5. Chapter 5: Determination of Aggregate Revenue Requirement for the FY 2023-24

5.1. Background

In this Chapter, the Commission has determined the Aggregate Revenue Requirement (ARR) for the FY 2023-24. The determination of Aggregate Revenue Requirement has been done in accordance with the JERC MYT Regulations, 2021.

5.2. Approach for determination of ARR for FY 2023-24

The Commission has computed the individual elements constituting the Aggregate Revenue Requirement for FY 2023-24 based on figures approved in the Business Plan and MYT Order, the actual information available of various parameters for the FY 2021-2022 and FY 2022-23. The ARR and revenue at existing tariff has been determined for FY 2023-24 to arrive at the revenue gap/surplus for the FY 2023-24.

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

Petitioner's Submission

The Petitioner has revised the number of consumers and energy sales considering the actual figures of FY 2021-22 and the first half of FY 2022-23. The table below provides the number of consumers, energy sales and connected load as submitted by the Petitioner for FY 2023-24:

Table 40: Number of consumers, Energy Sales and Connected Load submitted by the Petitioner for the FY 2023-24

S. No.	Particulars	No. of Consumers	Energy Sales (MU)	Connected Load (kW)
1	Domestic	127386	177.28	239983
2	Commercial	22592	62.50	115996
3	Industry	459	10.97	15547
4	Bulk	71	35.33	19006
5	Public Lighting	774	7.77	3394
6	Irrigation, Pumps & Agriculture	576	1.33	1540
7	**Total Sales**	**151858**	**295.19**	**395,465**

Commission's Analysis

The Commission has considered the category wise sales data, connected load and number of consumers as approved for FY 2022-23 in APR and CAGR for various categories as approved in Business Plan order dated August 1, 2022 for calculating the category wise sales, connected load and number of consumers respectively for FY 2023-24.

5.3.1. Energy Sales

The Commission has extrapolated the approved sales data from the category wise sales figure of FY 2023-24 using the approved CAGR for each category of sales as shown in the following table:

Table 41: Sales projected for FY 2023-24 (MU)

S. No.	Category	Approved Sales for FY 2022-23	CAGR as approved in MYT Order	Projected Sales for FY 2023-24
1	Domestic	155.79	4.35%	162.56
2	Commercial	71.17	7.11%	76.23
3	Industry	12.24	5.00%	12.85
4	Bulk	25.15	33.00%	33.45
5	Public Lighting	4.39	0.15%	4.40
6	Irrigation, Pumps & Agriculture	1.53	5.18%	1.61
7	**Total Sales**	**270.27**		**291.11**

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

Table 42: Energy Sales (MU) approved by the Commission for FY 2023-24

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	170.31	177.28	162.56
2	Commercial	70	62.50	76.23
3	Industry	12.11	10.97	12.85
4	Bulk	29.82	35.33	33.45
5	Public Lighting	5.55	7.77	4.40
6	Irrigation, Pumps & Agriculture	1.91	1.33	1.61
7	**Total Sales**	**289.71**	**295.19**	**291.11**

5.3.2. Number of Consumers

Similarly, the Commission has extrapolated the category wise number of consumers for FY 2023-24 using the approved CAGR for each category for number of consumers as shown in table below:

Table 43: Number of Consumers projected for FY 2023-24 (MU)

S. No.	Category	Approved Number of consumers for FY 2022-23	CAGR as approved in MYT Order	Projected Number of Consumers for FY 2023-24
1	Domestic	117,587	2.83%	120,915
2	Commercial	20,379	2.38%	20,864
3	Industry	390	0.35%	391
4	Bulk	57	1.55%	58
5	Public Lighting	663	3.41%	686
6	Irrigation, Pumps & Agriculture	604	8.83%	657
7	**Total Consumers**	**139,680**		**143,571**

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

Table 44: Number of Consumers approved by the Commission for FY 2023-24

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	128172	127386	120,915
2	Commercial	22757	22592	20,864
3	Industry	444	459	391
4	Bulk	71	71	58
5	Public Lighting	805	774	686
6	Irrigation, Pumps & Agriculture	629	576	657
7	**Total Consumers**	**152878**	**151858**	**143,571**

5.3.3. Connected Load

Similarly, the Commission has extrapolated the approved category wise connected load for FY 2023-24 using the approved CAGR for each category for connected load as shown in table below:

Table 45: Connected Load projected for FY 2023-24 (kW)

S. No.	Category	Connected Load for FY 2022-23	CAGR as approved in MYT Order	Projected Connected Load for FY 2023-24
1	Domestic	228555	7.04%	266,544
2	Commercial	110472	9.09%	117,932
3	Industry	14807	0.72%	13,337
4	Bulk	18101	4.40%	20,854
5	Public Lighting	3232	3.19%	3,111
6	Irrigation, Pumps & Agriculture	1467	5.36%	1,428
7	**Total Connected Load**	**376,634**		**423,207**

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

Table 46: Connected Load approved by the Commission for FY 2023-24 (kW)

S. No.	Category	Approved in MYT Order	Petitioner’s Submission	Now Approved by Commission
1	Domestic	253,511	239983	266,544
2	Commercial	120,918	115996	117,932
3	Industry	14,723	15547	13,337
4	Bulk	17,224	19006	20,854
5	Public Lighting	3,179	3394	3,111
6	Irrigation, Pumps & Agriculture	1,350	1540	1,428
7	**Total Connected Load**	**410,904**	**395,465**	**423,207**

The Commission approves energy sales of 291.11 MU, connected load of 423,207 kW and number of consumers as 143,571 in the ARR of FY 2023-24.

5.4. Intra-State Distribution Loss

Petitioner's submission

The Petitioner has proposed Intra-State T&D loss level at 16.67% against an approved loss of 13.91% in the Business Plan Order.

Commission's analysis

The Commission, in the Business Plan Order dated August 1, 2022, had set the loss trajectory for the 3rd Control Period. The Petitioner has not provided any justification for the revision distribution losses for FY 2023-24. The Commission approves the T&D loss for FY 2023-24 as approved in the Business Plan Order. The table below provides the T&D loss approved by the Commission in the MYT Order, the Petitioner's submission and as now approved by the Commission

Table 47: Intra-State Distribution Loss approved by the Commission for FY 2023-24 (%)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Intra-State Distribution Loss	13.91%	16.67%	13.91%

The Commission approves the Intra-State Distribution Loss of 13.91% for the FY 2023-24.

5.5. Energy Balance

Petitioner's submission

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

Table 48: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	295.19
2	Distribution losses (%)	16.67%
	Distribution losses (MU)	59.05
3	**Energy Requirement @ periphery**	**354.24**
B	**Energy Availability**	
1	Power Purchase	268.66
2	Own Generation	85.58
3	**Total Energy Availability**	**354.24**
C	**Total shortfall/(Surplus)**	**0.00**

Commission's analysis

The Commission has determined the Energy Balance based on the revised estimates of energy sales. The table below provides the Energy Balance as approved by the Commission in the MYT Order. There was an energy surplus of 14.71 MU and the same has been adjusted with the own generation. The Petitioner's submission and the Energy Balance now approved by the Commission.

Table 49: Energy Balance (MU) approved by the Commission for FY 2023-24

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**			
1	Total Sales within the UT	289.71	295.19	291.11
2	Distribution losses (%)	13.91%	16.67%	13.91%
	Distribution losses (MU)	46.81	59.05	47.04
3	**Energy Requirement @ periphery**	**336.52**	**354.24**	**338.14**
B	**Energy Availability**			
1	Renewable Generation			22.90
2	Power purchase generation			245.76
3	**Total Power Purchase**	**283.77**	**268.66**	**268.66**
4	Renewable Generation			14.71
5	Diesel Generation			54.78
6	**Total Own Generation**	**52.75**	**85.58**	69.49
7	**Total Energy Availability**	**336.52**	**354.24**	**338.15**
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**0.00**

In the ARR of FY 2023-24, the Commission has estimated a shortfall/(surplus) quantum of 0.00 MU.

5.6. Power Purchase Quantum & Cost

Petitioner's submission

The energy requirement is met mainly from own generation apart from procurement of power from the IPPs and other generators. However, there is no availability of power from Central Generating Stations (CGS) or from other sources/ open market/ power exchanges, etc. Accordingly, the Petitioner has claimed the fuel cost of INR 212.74 crore as against the approved cost of INR 101.28 crore and the power purchase cost of INR 675.71 crore as against the approved cost of INR 658.56 crore in the MYT Order dated August 1, 2023. The Petitioner has submitted the IPP and HPPs wise power generation, fuel consumption and power purchase cost including own generation for FY 2023-24 as presented in the following tables:

Table 50: Power Purchase Quantum and Cost from IPPs and Fuel Cost for Own Generation for FY 2021-22

S. No.	Particulars	Units generated (MU)	Variable Charges (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
1	Own Generation (HSD)	74.37	212.74	0.00	212.74
2	KHEP (Kalpong Hydro)	14.71	0.00	0.00	0.00
3	Solar(Own)	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	29.20	74.59	2.69	77.28
5	HPP-2 (10MW)	58.40	149.19	5.90	155.09
6	NTPC - SPV	5.57	0.00	5.21	5.21
7	Other HPPs	69.90	184.57	9.25	193.83
8	NTPC DG 5MW	29.20	74.59	2.98	77.57
9	NTPC DG 10MW	50.13	128.06	5.51	133.58
10	DG P/Plant Niel 0.4 MW	5.14	13.82	0.46	14.27
11	DG P/Plant Havelock 1 MW	3.75	9.83	0.35	10.18
12	SECI Solar	0.94	0.00	0.47	0.47
13	M/s. MUNDRA	3.01	0.00	0.66	0.66
14	NLC SPV Plant	13.38	0.00	7.56	7.56
15	Secretariat	0.04	0.00	0.01	0.01

S. No.	Particulars	Units generated (MU)	Variable Charges (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
16	**Total**	**357.74**	**847.40**	**41.05**	**888.45**

Commission's Analysis

As per Regulation 13.1 of the JERC MYT Regulations, 2021, power purchase and fuel cost are uncontrollable parameters. Thus, the power purchase and fuel cost must be revisited every year by the Commission based on the audited accounts. The Commission has considered that the power requirement shall be met mainly from own generation apart from procurement of power from the IPPs and other generators. The Petitioner has considered the power purchase quantum and own generation units as proposed in energy balance. Accordingly, the Commission approves the power purchase quantum and own generation units as determined in the energy balance.

The Commission has decided to allow the power purchase cost in the APR on provisional basis and directs the Petitioner to get the PPAs approved on the priority basis failing which the Power Purchase Cost in respect to new PPAs signed shall be disallowed in the true-up of FY 2023-24. The Commission further directs the Petitioner to get PPA approved by the Commission before procuring power from any generating station.

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 August 1, 2022. Further, the Commission has determined the per unit cost for HSD as per the invoices submitted by the Petitioner for FY 2022-23 and per unit cost for lube oil equal to the value approved in the MYT order. 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 51: Fuel Requirement for various IPPs, HPPs & Own generations as approved by the Commission

Particulars	Units generated	SFC of HSD (ml/kWh)	Per Litre cost of HSD (INR)	Total Consumption of HSD (Litre)	SFC of Lube (ml/kWh)	Per Litre cost of Lube (INR)	Total Lube Consumption (Litre)
Own Generation (HSD)	54.78	288.54	104.66	15806734.51	0.98	224.90	53686.14
HPP -1 (5 MW)	29.20	269.00	104.66	7854800.00	0.00	0.00	0.00
HPP-2 (10MW)	58.40	269.00	104.66	15709600.00	0.00	0.00	0.00
Other HPPs	69.90	269.00	104.66	18803533.90	0.00	0.00	0.00
NTPC DG 5MW	29.20	269.00	104.66	7854800.00	0.00	0.00	0.00
NTPC DG 10MW	50.13	269.00	104.66	13484970.00	0.00	0.00	0.00
DG P/Plant Niel 0.4 MW	5.14	277.00	104.66	1422558.15	0.00	0.00	0.00
DG P/Plant Havelock 1 MW	3.75	269.00	104.66	1008711.53	0.00	0.00	0.00

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

Table 52: 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)	54.78	165.43	1.21	0.00	166.64
2	KHEP (Kalpong Hydro)	14.71	0.00	0.00	0.00	0.00

S. No.	Particulars	Units generated (MU)	Cost of HSD (INR Cr)	Cost of Lube (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
3	Solar(Own)	0.00	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	29.20	82.21	0.00	2.69	84.89
5	HPP-2 (10MW)	58.40	164.41	0.00	5.90	170.31
6	NTPC - SPV	5.57	0.00	0.00	5.21	5.21
7	Other HPPs	69.90	196.79	0.00	9.25	206.05
8	NTPC DG 5MW	29.20	82.21	0.00	2.98	85.19
9	NTPC DG 10MW	50.13	141.13	0.00	5.51	146.65
10	DG P/Plant Niel 0.4 MW	5.14	14.89	0.00	0.46	15.35
11	DG P/Plant Havelock 1 MW	3.75	10.56	0.00	0.35	10.91
12	SECI Solar	0.94	0.00	0.00	0.47	0.47
13	M/s. MUNDRA	3.01	0.00	0.00	0.66	0.66
14	NLC SPV Plant	13.38	0.00	0.00	7.56	7.56
15	Secretariat	0.04	0.00	0.00	0.01	0.01
16	**Total**	**338.15**	**857.63**	**1.21**	**41.05**	**899.88**

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 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 53: Power Purchase & Fuel Cost approved for FY 2023-24 (INR crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Fuel Cost	101.28	212.74	899.88
2	Power Purchase Cost	658.56	675.71	
3	**Total Cost**	**759.84**	**888.45**	**899.88**

The Commission approves power purchase quantum of 338.15 MU and cost of INR 899.88 Crore in the ARR of FY 2023-24.

5.7. Renewable Purchase Obligation (RPO)

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

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

The Commission notified the JERC (Procurement of Renewable Energy), (Fourth Amendment) Regulations, 2022 on 24 March 2022 and revised the RPO targets, according to which the Petitioner had to purchase 19.91% of its total consumption (including 10.00% from Solar) from renewable sources for the FY 2023-24.

For the FY 2023-24, the Commission approves the RPO target of 57.96 MU comprising of 29.11 MU Solar, 26.93 MU Non-Solar and 1.92 HPO. Out of which, the Petitioner has claimed to purchase the solar energy of around

22.90 MU, non-solar energy of around 14.71 MU and HPO energy of Nil. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2022-23:

Table 54: Cumulative RPO compliance till FY 2022-23

Particulars	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Solar Target	2.50%	3.60%	4.70%	6.10%	8.00%	9.00%	10.00%
Non Solar Target	4.20%	5.40%	6.80%	8.00%	9.00%	9.00%	9.25%
HPO						0.35%	0.66%
Total Target	**6.70%**	**9.00%**	**11.50 %**	**14.10 %**	**17.00 %**	**18.35 %**	**19.91 %**
Sales Within UT	229.56	239.59	262.52	221.15	265.31	270.27	291.11
RPO Target							
Solar	5.74	8.63	12.34	13.49	21.22	24.32	29.11
Non Solar	9.64	12.94	17.85	17.69	23.88	24.32	26.93
HPO						0.95	1.92
Total RPO Target	**15.38**	**21.56**	**30.19**	**31.18**	**45.10**	**49.60**	**57.96**
RPO Compliance (Actual Purchase)							
Solar	6.94	8.00	10.08	18.95	21.02	22.90	22.90
Non Solar	12.81	14.79	5.75	11.11	13.15	14.56	14.71
HPO						0.00	0.00
Total RPO Compliance (Actual Purchase)	**19.75**	**22.79**	**15.84**	**30.06**	**34.17**	**37.46**	**37.61**
RPO Compliance (REC Certificate Purchase)							
Solar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non Solar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HPO							
Total RPO Compliance (REC Certificate)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
RPO Compliance (REC+ Actual)							
Solar	6.94	8.00	10.08	18.95	21.02	22.90	22.90
Non Solar	12.81	14.79	5.75	11.11	13.15	14.56	14.71
HPO						0.00	0.00
Total RPO Compliance	**19.75**	**22.79**	**15.84**	**30.06**	**34.17**	**37.46**	**37.61**
Net Shortfall/(Surplus) for this year	-4.37	-1.23	14.35	1.12	10.93	12.13	20.35
Total	**0.00**	**0.00**	**14.35**	**15.47**	**26.40**	**38.53**	**58.88**

The Commission notes that there is a net shortfall of 20.35 MU in RPO compliance for FY 2023-24 and cumulative shortfall of 58.88 MU till FY 2023-24.

The Commission has continuously directed the Petitioner to complete the RPO obligation on priority, but there has been no improvement therefore the Commission directs the Petitioner to procure the shortfall through REC. The Commission accordingly has allowed the REC cost based on the average per kWh price from December 2022 to February 2023. The cost approved is as follows:

Table 55: REC cost approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	Average per kWh price from December 2022 to February (INR/kWh)	Shortfall (MU)	Now Approved by Commission
1	REC cost	1.00	58.88	5.89

5.8. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). Regulation 52 of the MYT Regulation, 2021 states the following:

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

52.2 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.

52.3 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.

52.4 O&M expenses for the nthYear of the Control Period shall be approved based on the formula given below:

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

Where,

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

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

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

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

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

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

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

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

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

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

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

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

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

52.5 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.

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

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

5.8.1. Employee Expenses

Petitioner's submission

The Petitioner has determined the revised estimates of the employee cost for the FY 2023-24 based on the actual expenses for the FY 2021-22 & estimated expenses of the FY 2022-23. Accordingly, the Petitioner has claimed the employee expenses of INR 205.43 crore as against the approved employee expenses of INR 156.85 crore.

Commission's analysis

In accordance with the JERC MYT Regulations, 2021, the Commission has determined the Employee expenses for each year of the MYT Control Period. The Regulation 6 of the JERC 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.

6.2 The Commission may revisit the performance targets for the Control Period during the Mid-term Review, carried out in accordance with the Regulation 11."

In accordance with JERC MYT Regulations, the Employee expenses shall be revised to the extent of change in inflation and growth rate during the control period. Accordingly, the Commission has considered the approved value of employee expenses for FY 2022-23 for computation of revised employee expenses of FY 2023-24. The approved employee expenses for FY 2022-23 has been escalated with the average CPI of previous three years and employee growth rate to arrive at the employee expenses for FY 2023-24. The growth rate in employee has been considered for FY 2023-24 as derived in *Table **21***.

The CPI Inflation has been computed as follows:

Table 56: Computation of CPI Inflation (%)

FY	CPI Index	Percentage Increase in CPI Index	Average increase in CPI Index over 3 years
2018-19	299.92		
2019-20	322.50	7.53%	5.89%
2020-21	338.96	5.10%	
2021-22	356.07	5.05%	

Table 57: Employee Expenses approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	EMPn-1 (INR Crore)	157.49	**205.43**	162.81
2	Gn (%)	-6.04%		-1.21%
3	CPIinflation (%)	6.00%		5.89%
4	**Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)**	**156.85**		**170.33**

The Commission approves Employee Expenses of INR 170.33 Cr for FY 2023-24.

5.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted the Administrative & General Expenses of INR 4.68 Crore as against the approved figure of INR 13.84 crore in the MYT Order.

Commission's analysis

In accordance with JERC MYT Regulations, the A&G expenses shall be revised to the extent of change in inflation during the control period. Accordingly, the Commission has considered the approved value of A&G expenses for FY 2022-23 for computation of revised A&G expenses of FY 2023-24. The A&G expenses for FY 2022-23 has been escalated with the average CPI of previous three years to arrive at the A&G expenses for FY 2023-24.

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

Table 58: A&G Expenses approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	A&Gn-1 (INR Crore)	13.05	**4.68**	13.04
2	CPIinflation (%)	6.00%		5.89%
3	**Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)**	**13.84**		**13.80**

The Commission approves the Administrative & General (A&G) expenses of INR 13.80 Crore for FY 2023-24.

5.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has submitted the Repair & Maintenance Expenses of INR 52.00 Crore as against the approved figure of INR 56.20 crore in the MYT Order.

Commission's analysis

In accordance with JERC MYT Regulations, the R&M expenses shall be revised to the extent of change in inflation during the control period. The Commission has considered the k-Factor as approved in the MYT Order and multiplied the same with the opening GFA of FY 2023-24. The resultant amount is then escalated by average WPI Inflation of previous three years to arrive at the R&M expenses for FY 2023-24.

The WPI Inflation has been computed as follows:

Table 59: Computation of WPI Inflation (%)

FY	WPI Index	Increase in WPI Index	Average increase in WPI index over 3 years
2018-29	119.79		
2019-20	121.80	1.68%	**5.32%**
2020-21	123.38	1.29%	
2021-22	139.41	13.00%	

The R&M expenses approved by the Commission for FY 2023-24 have been provided in the following table:

Table 60: R&M Expenses approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	FY 2023-24
1	Opening GFA (GFA_{n-1})*	56.20	52.00	560.41
2	K factor approved (K) (%)			9.46%
3	Avg. WPI Inflation (%)			5.32%
4	**R&M Expenses = K x (GFA_{n-1}) x ($1+WPI_{inflation}$)**			**55.84**

**Excluding the unserviceable assets*

The Commission approves the Repair & Maintenance (R&M) expenses of INR 55.84 Crore for the FY 2023-24.

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

The following table provides the total O&M expenses approved by the Commission for the FY 2023-24:

Table 61: O&M Expenses approved by the Commission for FY 2023-24 (In INR Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	156.85	205.43	170.33
2	Administrative & General Expenses (A&G)	13.84	4.68	13.80
3	Repair & Maintenance Expenses	56.20	52.00	55.84
	Total Operation & Maintenance Expenses	**217.79**	**262.11**	**239.97**

The Commission approves Operation & Maintenance (O&M) expenses of INR 239.97 Crore in FY 2023-24.

5.9. Gross Fixed Assets (GFA) and Capitalization

Petitioner's submission

The Petitioner has claimed the capitalisation of INR 60.40 crore for FY 2023-24. The opening value of GFA has been considered as the closing value of FY 2022-23.

Commission's analysis

The Commission has considered the approved closing value of the GFA for FY 2022-23 as the opening value of GFA for FY 2023-24. In absence of details pertaining to higher claim of capitalisation for FY 2023-24, the Commission has considered the capitalisation for FY 2023-24 as approved in the MYT order dated 1st August 2022. Accordingly, the Commission has arrived at the closing value of GFA for FY 2023-24. The following table provides the summary of capitalization now approved by the Commission vis-à-vis the capitalisation approved by the Commission in the MYT Order:

Table 62: Capitalisation now approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	**Capitalisation**	**37.73**	**60.40**	**37.73**

The Commission approves the capitalisation of INR 37.73 crore for FY 2023-24.

5.10. Capital Structure

Petitioner's Submission

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

Commission's analysis

Regulation 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."

For the purpose of calculating the opening value of GFA in FY 2023-24, the Commission has considered the closing value of GFA for FY 2022-23 as approved in previous chapter.

Therefore, in accordance with the JERC MYT Regulations, 2021, the Commission has determined the Capital Structure for the FY 2023-24 as follows:

Table 63: GFA addition approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	FY 2023-24
1	Opening Gross Fixed Assets	521.94
2	Addition During the FY	37.73
3	Adjustment/Retirement During the FY	0.00
4	Closing Gross Fixed Assets	559.67

For the purpose of calculating the opening value of loan in FY 2023-24, the Commission has considered the closing value of loan for FY 2022-23 as approved in previous chapter.

Table 64: Loan addition approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	FY 2023-24
1	Opening Loan	100.6=
2	Additions during the year	26.41
3	Less: Normative Repayment equivalent to Depreciation	19.21
4	Closing Loan	107.87

For the purpose of calculating the opening value of equity in FY 2023-24, the Commission has considered the closing value of equity for FY 2022-23 as approved in previous chapter.

Table 65: Normative Equity addition approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	FY 2023-24
1	Opening Equity	168.12
2	Additions during the year	11.32
3	Closing Equity	179.44

5.11. Depreciation

Petitioner's submission

The Petitioner has submitted the depreciation of INR 19.37 crore as per JERC MYT Regulations 2021 as against the approved depreciation of INR 19.90 crores in MYT Order.

Commission's analysis

Regulation 31 of the JERC 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.

Provided further that the salvage value of Information Technology equipment and computer software shall be considered at zero (0) per cent of the allowable capital cost.

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, 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.

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.

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.

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 derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in JERC MYT Regulations, 2021, provided in the following table:

Table 66: Depreciation Rate (%)

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

However, in absence of audited accounts for FY 2021-22 and provisional accounts for FY 2022-23, the Commission has considered the weighted average depreciation rate as approved in the MYT Order. The closing GFA of the FY 2022-23 as approved in the APR has been considered as opening GFA of the FY 2023-24. Further, depreciation has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during each year. The following table provides the calculation of depreciation as approved in the MYT order, Petitioner's submission and now approved by the Commission.

Table 67: Depreciation approved by the Commission for FY 2023-24 (In INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening GFA	579.80		582.40
2	Less: Unserviceable assets			21.99
3	Less: Assets depreciated upto 90% till FY 2020-21	38.47		38.47
4	Modified Opening GFA	541.33	521.94	521.94
5	Additions during the FY	37.73	60.40	37.73
6	Adjustment/Retirement During the FY	0.00	0.00	0.00
7	Closing GFA	579.06	582.34	559.67
8	Average Gross Fixed Assets	560.20	552.14	540.81
9	Rate of Depreciation (%)	3.55%	3.51%	3.55%
10	**Depreciation**	**19.90**	**19.37**	**19.21**

The Commission approves a depreciation of INR 19.21 Crore for the FY 2023-24.

5.12. Interest on Loan

Petitioner's submission

The petitioner has estimated the Interest and Finance charges as per the JERC MYT Regulations, 2021 for the year FY 2023-24. 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 1April of the relevant year plus 100 basis points.

Commission's analysis

Regulation 29 of the JERC 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 30.

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."

Hence, the rate of interest to be considered while determining the ARR shall be the weighted average interest rate of the actual loan portfolio. However, in absence of detailed data with respect to the actual loan portfolio, the Commission has considered the SBI 1 Year MCLR rate[1] plus 100 basis points as Rate of Interest, in accordance with the JERC MYT Regulations, 2021. The opening loan balances for FY 2023-24 has been considered as the closing loan balances for FY 2022-23 as per Section 4.12.

As per the JERC MYT Regulations, 2021, if the equity deployed is more than 30% of the capital cost, then equity in excess of 30% is considered as normative loan. The Interest on Loan has been calculated on the average loan during the year with the opening loan for the FY 2023-24 considered equivalent to the closing loan approved in the APR for the FY 2022-23.

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

Table 68: Interest on loan approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	113.44	101.11	100.67
2	Add: Normative Loan During the year	26.41	42.28	26.41
3	Less: Normative Repayment equal to Depreciation	19.90	19.37	19.21
4	Closing Normative Loan	119.95	124.01	107.87
5	Average Normative Loan	116.70	112.56	104.27
6	Rate of Interest (%)	8.00%	8.00%	**8.00%**
7	**Interest on Loan**	**9.34**	**9.00**	**8.34**

The Commission approves Interest on Loan as INR 8.34 Crore for the FY 2023-24.

5.13. Return on Equity (RoE)

Petitioner’s submission

The Return on Equity (RoE) is computed in accordance with the JERC MYT Regulations, 2021, wherein RoE is computed on 30% of the capital base if the actual equity deployed is more than 30% and the actual equity base if the equity deployed is less than 30%. Accordingly, the Petitioner has computed the Return on Equity at 16% on post-tax basis. The following table summarizes Petitioner’s submission:

Table 69: Return on equity as submitted by the Petitioner (INR Crore)

S. No.	Particulars	FY 2023-24
1	Opening Equity Amount	156.58
2	Equity Addition during year (30% of Capitalization)	18.12
3	Closing Equity Amount	174.70
4	Average Equity Amount	165.64
5	Return on Equity (%)	16.00%
6	**Total Return on Equity**	**26.50**

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.”

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 2022-23 as approved in the APR. Income Tax payable shall be considered taken on actual basis at the time of True-up. The following table provides the RoE approved in the ARR of FY 2023-24, the Petitioner’s submission and RoE now approved by the Commission.

Table 70: RoE approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	173.94	156.58	168.12
2	Additions on account of new capitalisation	11.32	18.12	11.32
3	Closing Equity	185.26	174.70	179.44
4	Average Equity	179.60	165.64	173.78
5	Rate of Return	16.00%	16.00%	16.00%
6	**Return on Equity**	**28.74**	**26.50**	**27.80**

The Commission approves Return on Equity of INR 27.80 Crore for the FY 2023-24.

5.14. Interest on Security Deposits

Petitioner's submission

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

Commission's analysis

Regulation 29.11 of the JERC MYT Tariff Regulations, 2021 stipulates as follows:

"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."

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

Accordingly, the Commission approves Interest on Security Deposit as NIL for the FY 2023-24.

5.15. Interest on Working Capital

Petitioner's submission

The interest on working capital has been calculated based on the normative principles outlined in the JERC MYT Regulations, 2021.

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

- Operation and maintenance expenses for one (1) month; plus
- Maintenance spares at 40% of R&M expenses for one (1) month; plus
- Receivables equivalent to two (2) months of the expected revenue from Consumers at the prevailing tariffs;

  Less

- Power Purchase cost for one (1) month; plus
- Amount, if any, held as security deposits

The SBI 1 year MCLR as on 1 April 2022 plus 200 basis points i.e. 9.75% (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 2023-24.

Table 71: Interest on Working Capital submitted by the Petitioner (INR Crore)

S. No.	Particulars	FY 2023-24
1	O&M Expense - 1 month	21.84
2	Maintenance Spare @ 40% of R&M Exp - one month	1.73
3	Two Months Receivables	42.37
4	Less : Power purchase cost for one (1) month	3.42
5	Total Working Capital	62.53
6	Interest Rate	9.00%
7	**Interest on Working Capital**	**5.63**

Commission's analysis

Regulation 53 of the JERC MYT Regulations, 2021 stipulates the following:

"53. Norms of Working Capital for Distribution Wires Business

53.1 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 32.3 of the JERC MYT Regulations, 2021 stipulates the following:

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

The Commission has computed the Interest on Working Capital for FY 2023-24 in accordance with the MYT Regulation, 2021. The interest rate has been considered as 9.00% (1 year MCLR as on 1 April 2022 i.e. 7.00% + 200 basis points). The computation of interest on working capital is shown in the following table:

Table 72: Interest on Working Capital approved by the Commission for FY 2023-24 (INR Cr)

S. No	Particulars	Approved in MYT order	Petitioner's submission	FY 2023-24
1	O&M Expense for 1 month	18.91	21.84	20.00
2	Maintenance spares at 40% of R&M expenses for one (1) month;	1.87	1.73	1.86
3	Receivables equivalent to two (2) months of the expected revenue from charges for use of distribution wires at the prevailing tariff	37.72	42.37	49.65
4	Less: Amount held as security deposits	0.00	0.00	0.00
5	Less: Power purchase cost for one (1) month	4.26	3.42	3.42
6	Net Working Capital	54.24	62.53	68.09
7	Rate of Interest (%)	9.00%	9.00%	9.00%
8	**Interest on Working Capital**	**4.88**	**5.63**	**6.13**

The Commission approves the Interest on Working Capital as INR 6.13 Crore for the FY 2023-24.

5.16. 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."

Since the Petitioner has not projected any payment towards income tax paid no Income tax for FY 2023-24. Hence, NIL amount is being considered for the same subject to trued-up based on the actual income tax paid by the Petitioner.

Table 73: Income Tax approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	Value
1	Income Tax	0.00

5.17. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner has not proposed any provision for bad and doubtful debts during the FY 2023-24.

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."

The Commission also has not considered any Provision for Bad & Doubtful Debts for the FY 2023-24. The same shall be accounted for as per actuals during the True-up of respective years.

5.18. Non-Tariff Income

Petitioner's submission

The Petitioner has estimated the non-tariff income of INR 3.66 crore for FY 2023-24 as approved by the Commission in MYT Order.

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;

(c) Income from statutory investments;

(d) Interest on advances to suppliers/contractors;

(e) Rental from staff quarters;

(f) Rental from contractors;

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

(h) Income from advertisements, etc.;

(i) Meter/metering equipment/service line rentals;

(j) Service charges;

(k) Consumer charges;

(l) Recovery for theft and pilferage of energy;

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

(n) Miscellaneous receipts;

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

(p) Prior period income, etc.:

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

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

The Commission approves the NTI in line with the approved figures of MYT Order. The same shall be Trued-up on actual basis at the time of true-up. The NTI approved for FY 2023-24 has been shown in the following table:

Table 74: Non -tariff Income approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	**Non- Tariff Income**	**3.66**	**3.66**	**3.66**

The Commission approves Non-Tariff Income of INR 3.66 Crore for the FY 2023-24.

5.19. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the Petitioner has submitted the net aggregate revenue requirement of INR 1207.41 crore as against the approved net aggregate revenue requirement of INR 1045.91 crore in MYT Order.

Commission's analysis

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

Table 75: Aggregate Revenue Requirement approved by the Commission for FY 2023-24 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	REC Cost	-	-	905.77
2	Power Purchase Cost	658.56	675.71	
3	Fuel Cost	101.28	212.74	
4	O&M Expenses	226.89	262.11	239.97
5	Depreciation	19.90	19.37	19.21
6	Interest and Finance charges	9.34	9.00	8.34
7	Interest on Working Capital	4.88	5.63	6.13
8	Return on Equity	28.74	26.50	27.80
9	Interest on Security Deposit	0.00	0.00	0.00
10	Income Tax	0.00	0.00	0.00
11	**Total Revenue Requirement**	**1049.57**	**1211.07**	**1207.22**
12	Less: Non-Tariff Income	3.66	3.66	3.66
13	**Net Revenue Requirement**	**1045.91**	**1207.41**	**1203.56**

The Commission approves net ARR of INR 1203.56 Crore for the FY 2023-24.

5.20. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has estimated revenue from sale of power at existing tariff as INR 254.23 Crore for the FY 2023-24 based on the projected energy sales, connected load and number of consumers.

Commission's analysis

The category wise revenue at existing retail tariff is calculated as per the applicable tariff rates. The revenue from demand charges and the energy charges have been projected for each category. The Commission has also considered the power factor of 0.9 for kVA billing (Fixed Charges). The revenue from category tariff as computed by the Commission for the FY 2023-24 has been shown in the following table:

Table 76: Revenue at existing tariff computed by the Commission for the FY 2023-24

S. No.	Category	Sales (MUs)	Revenue from Fixed Charges	Revenue from Energy charges	Total	ABR (INR/unit)
1	Life Line Connection	-	-	-	-	
2	Domestic	158.97	4.71	91.53	96.24	6.05
3	Commercial	46.96	2.13	57.65	59.78	12.73
4	Hotels/Restaurants/Resorts	8.11	0.96	11.64	12.61	15.55
5	Government Connection	21.17	1.20	27.62	28.83	13.62
6	Industry	12.85	0.89	12.99	13.87	10.80
7	Bulk	33.45	2.78	43.49	46.27	13.83
8	Public Lighting	4.40	0.62	3.52	4.14	9.41
9	Irrigation, Pumps & Agriculture	1.61	0.10	0.28	0.38	2.34
10	EV Charging	2.32	-	1.81	1.81	7.80
11	Temporary Supply	1.27	-	1.74	1.74	13.69
12	**Total Revenue**	**291.11**	**13.38**	**252.28**	**265.67**	**9.13**

The Commission has determined revenue from sale of power at existing tariff as INR 265.67 Crore in FY 2023-24.

5.21. Standalone Revenue Gap/ Surplus

Petitioner's submission

Based on the ARR and the revenue from retail tariff projected by the Petitioner, the Petitioner has submitted a standalone revenue gap of INR 953.19 Crore for the FY 2023-24.

Commission's analysis

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

Table 77: Standalone Revenue Gap/ Surplus approved at existing tariff for the FY 2023-24 (INR Crore)

S. No	Particulars	Petitioners submission	Now Approved
1	Annual Revenue Requirement	1207.41	1203.56
2	Revenue from sale of power	254.23	265.67
	Revenue Gap/(Surplus)	**953.19**	**937.89**

The standalone revenue gap at existing retail tariff is INR 937.89 Crore for the FY 2023-24 which will be met through the budgetary support from the Andaman & Nicobar Administration as confirmed by the Petitioner vide Letter Reference No. M/3/2022-Plg-ELE-ELE dated March 24, 2023.

6. Chapter 6: Tariff Principles and Design

6.1. Overall Approach

The Commission while designing retail tariffs for the FY 2023-24 has kept in view the principles of determination of tariff set out in the Electricity Act, 2003 (EA 2003), Tariff Policy, 2016 and the JERC MYT Regulations, 2021.

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

The provision of supply of electricity to all the people is an essential driver for development, and also influences social and economic change. Since the majority of the energy sales within EDA&N's jurisdiction is to tourism related businesses, the Commission has attempted to ensure that, tourism is promoted, but not at the cost of other segments of society.

6.2. Applicable Regulations

Regulation 20 of 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 MYT Tariff Regulations, 2021 stipulates as follows:

"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.

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

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

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

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

Petitioner's Submission

The Petitioner has proposed revenue gap of INR 953.19 Crore for FY 2023-24 at existing tariff. The revenue gap submitted by the Petitioner for FY 2023-24 is as follows:

Table 78: Revenue Gap at existing tariff submitted by the Petitioner for FY 2023-24 (INR Crore)

Sr. No.	Particulars	FY 2023-24
1	Net Revenue Requirement	1207.41
2	Revenue from Sale of Power at existing Tariff	254.23
3	**Net Gap during the year**	**953.19**

Commission's View

The Commission based on the ARR and Revenue from sale of power computed above, has derived revenue gap for the FY 2023-24 at existing tariff as shown in table below:

Table 79: Revenue Gap determined by the Commission at existing tariff for FY 2023-24 (INR Crore)

Sr. No.	Particulars	FY 2023-24
1	Net Revenue Requirement	1203.56
2	Revenue from Sale of Power at existing Tariff	265.67
3	**Net Gap during the year**	**937.89**

Accordingly, the Commission determined the revenue gap of INR 937.89 Crore for FY 2023-24 at existing tariff.

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

From above, it can be seen that at existing tariff, there is revenue gap of INR 937.89 Crore for FY 2023-24. However, the Commission has approved a marginal increase in the tariff of FY 2023-24 over the FY 2022-23 considering the socio-economic conditions of the people in Andaman & Nicobar and in view of the budgetary support by the Government to meet the balance revenue gap.

6.4.1. Tariff Proposal

Petitioner Submission

1. The Petitioner has proposed a tariff hike of 43.91% for FY 2023-24.

Accordingly, the tariff proposal submitted by the Petitioner for FY 2023-24 for individual category is as follows:

Table 80: Tariff proposal submitted by the Petitioner for FY 2023-24

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 15 per connection per month or part thereof	2.10	0 to 100 units	INR 45 per connection per month or part thereof	2.90
Domestic Connection			**Domestic Connection**		
0 to 100 units	INR 15/kW/Month or part thereof	2.50	0 to 100 units	INR 45/kW/Month or part thereof	3.50
101 to 200 units		5.45	101 to 200 units		7.60
201 to 500 units		7.80	201 to 500 units		10.90
501 units & above		9.20	501 to 1000 units		12.90
Commercial			**Commercial**		
0-200 Units	INR 25/kVA/Month or part thereof	8.20	0-200 Units	INR 55/kVA/Month or part thereof	11.50
201 to 500 Units		10.20	201 to 500 Units		14.30
501 units & above		13.50	501 to 1000 units		18.90
1001 units & above		15.00	1001 units & above		21.00
Govt. Connection			**Govt. Connection**		

Existing			**Proposed**		
Category	**Fixed Charge**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
0-500 Units	INR 30/kVA/Month or part thereof	10.50	0-500 Units	INR 60/kVA/Month or part thereof	14.70
501 units & above		13.50	501 units & above		18.90
Hotels/Resturants/Resorts			**Hotels/Resturants/Resorts**		
0-200 Units	INR 30/kVA/Month or part thereof	8.00	0-200 Units	INR 60/kVA/Month or part thereof	11.20
201 to 500 Units		10.20	201 to 500 Units		14.00
501 units & above		13.00	501 units & above		18.20
1001 units & above		14.50	1001 units & above		20.30
Industrial LT			**Industrial LT**		
0-500 Units	INR 50/kVA/Month or part thereof	6.85	0-500 Units	INR 80/kVA/Month or part thereof	9.60
501 to 1000 Units		9.60	501 to 1000 Units		13.40
1001 units & above		11.00	1001 units & above		15.40
Bulk Supply	INR 100/kVA/Month or part thereof	13.00	**Bulk Supply**	INR 130/kVA/Month or part thereof	18.20
Public Lighting	INR 150/kVA/Month or part thereof	8.00	**Public Lighting**	INR 180/kVA/Month or part thereof	11.20
Irrigation Pumps & Agriculture	INR 50/kVA/Month or part thereof	1.75	**Irrigation Pumps & Agriculture**	INR 80/kVA/Month or part thereof	2.50

Existing			**Proposed**		
Category	**Fixed Charge**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
EV Charging Stations		7.80	**EV Charging Stations**		10.90
Temporary Supply	1.5 times the rate applicable to the relevant category of consumers		**Temporary Supply**	1.5 times the rate applicable to the relevant category of consumers	

Accordingly, the computation of impact of proposed tariff on revenue for FY 2023-24 is as follows:

Table 81: Average Tariff Hike for FY 2023-24 as submitted by the Petitioner

Sr. No.	**Particulars**	**Units**	**FY 2023-24**	
			Existing	**Proposed**
1	Net ARR for FY 2020-21	INR Crore	1207.41	1207.41
2	Revenue for FY 2020-21	INR Crore	254.23	365.86
3	Gap (1-2)	INR Crore	953.19	841.55
4	Total Sales	MU	295.19	295.19
5	Average Cost of Supply	INR/kWh	40.90	40.90
6	Average Revenue	INR/kWh	8.61	12.39
7	Pure Gap	INR/kWh	32.29	28.51
8	Average Tariff Hike	INR/kWh		3.78
9	Tariff Hike in %	%		43.91%

Commission View

As discussed above, the Commission has determined the retail tariff for the FY 2023-24 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 two fold – 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

a) Context

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, considering the revised tariff proposal submitted by the Petitioner for FY 2023-24 and the net ARR approved by the Commission for FY 2023-24, the Commission has approved the tariffs for FY 2023-24. The Commission has also given due consideration to the guiding principles as stated in the Electricity Act 2003, the Tariff Policy, MYT Tariff Regulations 2021, the suggestions/observations of the stakeholders in this regard and the Petition submitted by EDA&N, while deciding the tariff for FY 2023-24. Accordingly, the Commission has considered a marginal increase in tariff for FY 2023-24.

The approved tariff for FY 2023-24 is as follows:

Table 82: Existing vs. Tariff approved by the Commission for FY 2023-24

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 15 per connection per month or part thereof	2.10	0 to 100 units	INR 20/kW/Month or part thereof	2.25
Domestic Connection			**Domestic Connection**		
0 to 100 units	INR 15/kW/Month or part thereof	2.50	0 to 100 units	INR 20/kW/Month or part thereof	2.75
101 to 200 units		5.45	101 to 200 units		6.00
201 to 500 units		7.80	201 to 500 units		8.50
501 units & above		9.20	501 to 1000 units		10.25
Commercial			**Commercial**		
0-200 Units	INR 25/kVA/Month or part thereof	8.20	0-200 Units	INR 35/kVA/Month or part thereof	9.25
201 to 500 Units		10.20	201 to 500 Units		11.50
501 units & above		13.50	501 to 1000 units		15.00
1001 units & above		15.00	1001 units & above		16.50
Govt. Connection			**Govt. Connection**		
0-500 Units	INR 30/kVA/Month or part thereof	10.50	0-500 Units	INR 35/kVA/Month or part thereof	11.75
501 units & above		13.50	501 units & above		15.50
Hotels/Resturants/Resorts			**Hotels/Resturants/Resorts**		
0-200 Units	INR 30/kVA/Month or part thereof	8.00	0-200 Units	INR 35/kVA/Month or	8.75
201 to 500 Units		10.20	201 to 500 Units		11.00

Existing			Approved		
Category	**Fixed Charge**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charge**	**Energy Charge (INR/kWh)**
501 units & above		13.00	501 units & above	part thereof	14.00
1001 units & above		14.50	1001 units & above		15.50
Industrial LT			**Industrial LT**		
0-500 Units	INR 50/kVA/Month or part thereof	6.85	0-500 Units	INR 55/kVA/Month or part thereof	7.75
501 to 1000 Units		9.60	501 to 1000 Units		11.00
1001 units & above		11.00	1001 units & above		12.25
Industrial HT			**Industrial HT**		
0-500 Units	INR 50/kVA/Month or part thereof	6.60	0-500 Units	INR 55/kVA/Month or part thereof	7.50
501 to 1000 Units		9.40	501 to 1000 Units		10.75
1001 units & above		10.50	1001 units & above		11.75
Bulk Supply	INR 100/kVA/Month or part thereof	13.00	**Bulk Supply**	INR 110/kVA/ Month or part thereof	14.75
Public Lighting	INR 150/kVA/Month or part thereof	8.00	**Public Lighting**	INR 160/kVA/ Month or part thereof	9.25
Irrigation Pumps & Agriculture	INR 50/kVA/Month or part thereof	1.75	**Irrigation Pumps & Agriculture**	INR 50/kVA/Month or part thereof	1.75
EV Charging Stations		7.80	**EV Charging Stations**		10.00

Existing			Approved		
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	

6.4.2. Revenue from Approved Retail Tariff for FY 2023-24

Based on the retail tariff approved above, the revenue at revised tariff approved by the Commission for FY 2023-24 is given in the following Table:

Table 83: Revenue at tariff approved by the Commission for FY 2023-24

S. No.	Category	Sales (MUs)	Revenue from Fixed Charges	Revenue from Energy charges	Total	ABR (INR/unit)
1	Life Line Connection	-	-	-	-	
2	Domestic	158.97	6.27	100.44	106.71	6.71
3	Commercial	46.96	2.98	64.16	67.14	14.30
4	Hotels/Restaurants/Resorts	8.11	1.12	12.45	13.58	16.75
5	Government Connection	21.17	1.40	31.62	33.02	15.60
6	Industry	12.85	0.98	14.69	15.67	12.19
7	Bulk	33.45	3.06	49.35	52.40	15.66
8	Public Lighting	4.40	0.66	4.07	4.73	10.76
9	Irrigation, Pumps & Agriculture	1.61	0.10	0.28	0.38	2.34
10	EV Charging	2.32	-	2.32	2.32	10.00
11	Temporary Supply	1.27	-	1.95	1.95	15.35
12	**Total Revenue**	**291.11**	**16.57**	**281.33**	**297.91**	**10.23**

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

Table 84: Revenue gap at tariff approved by the Commission for FY 2023-24 (INR crore)

S. No.	Particulars	FY 2023-24	
		Claimed	Approved
1	Net Revenue Requirement	1207.41	1203.56
2	Revenue from Sale of Power at Revised Tariff	365.86	297.91
3	**Net Gap during the year**	**841.55**	**905.65**
4	Add: Previous Year Gap	0.00	0.00
5	**Total Gap**	**841.55**	**905.65**

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

Table 85: Percentage recovery of ACOS at tariff approved by the Commission for FY 2023-24

S. No.	Category	Average Cost of Supply (INR/unit)	Average Billing Rate (INR/unit)	% of AcoS
1	Life Line Connection	41.34	-	-
2	Domestic	41.34	6.71	16.24%
3	Commercial	41.34	14.30	34.58%
4	Hotels/Restaurants/Resorts	41.34	16.75	40.51%
5	Government Connection	41.34	15.60	37.73%
6	Industry	41.34	12.19	29.49%
7	Bulk	41.34	15.66	37.89%
8	Public Lighting	41.34	10.76	26.02%
9	Irrigation, Pumps & Agriculture	41.34	2.34	5.66%
10	EV Charging	41.34	10.00	24.19%
11	Temporary Supply	41.34	15.35	37.13%
12	**Total Revenue**	**41.34**	**10.23**	**24.75%**

Further, the Commission has computed the category wise cost coverage through the budgetary support at the existing and approved tariffs for FY 2023-24 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 86: Category wise cost coverage through the budgetary support at the existing and approved tariffs for FY 2023-24

S. No.	Category	Average Cost of Supply (INR/unit)	Average Billing Rate (INR/unit)	Budgetary Support at approved tariffs (INR/unit)
1	Life Line Connection	41.34	-	-
2	Domestic	41.34	6.71	34.63
3	Commercial	41.34	14.30	27.04
4	Hotels/Restaurants/Resorts	41.34	16.75	24.59
5	Government Connection	41.34	15.60	25.74
6	Industry	41.34	12.19	29.15
7	Bulk	41.34	15.66	25.68
8	Public Lighting	41.34	10.76	30.58
9	Irrigation, Pumps & Agriculture	41.34	2.34	39.00
10	EV Charging	41.34	10.00	31.34
11	Temporary Supply	41.34	15.35	25.99
12	**Total Revenue**	**41.34**	**10.23**	**31.11**

The following table provides the ACoS and ABR at the tariff approved by the Commission:

Table 87: Approved ACoS and ABR by the Commission at approved tariff for FY 2023-24

Sr. No.	Particulars	FY 2023-24
1	Net Revenue Requirement (INR Crore)	1203.56
2	Revenue from Revised Tariff (INR Crore)	297.91
3	Energy Sales (MU's)	291.11
4	Average cost of supply/unit (INR/kWh)	41.34
5	Average Billing Rate (INR/kWh)	10.23
6	**Gap (INR/kWh)**	**31.11**
7	**Gap (INR Crore)**	**905.65**

The highlights of the tariff structure approved by the Commission for FY 2023-24 is as follows:

1. The Commission has approved a tariff hike of 12.14% for FY 2023-24 over the tariff for FY 2022-23.
2. The Commission has approved the ABR for FY 2023-24 as INR 10.23/kWh as against the approved Average Cost of Supply of INR 41.34/kWh.

The Petitioner has submitted a letter vide Reference No. M/3/2022-Plg-ELE-ELE dated March 24, 2023 confirming that the Revenue Gap will be borne by the administration of Andaman & Nicobar Islands, with budgetary support from the Government of India.

7. Chapter 7: Tariff Schedule

7.1. Tariff Schedule

Category	Fixed Charge	Energy Charge (INR/kWh)
Life Line Connection		
0 to 100 units	INR 20/kW/Month or part thereof	2.25
Domestic Connection		
0 to 100 units	INR 20/kW/Month or part thereof	2.75
101 to 200 units		6.00
201 to 500 units		8.50
501 to 1000 units		10.25
Commercial		
0-200 Units	INR 35/kVA/Month or part thereof	9.25
201 to 500 Units		11.50
501 to 1000 units		15.00
1001 units & above		16.50
Govt. Connection		
0-500 Units	INR 35/kVA/Month or part thereof	11.75
501 units & above		15.50
Hotels/Resturants/Resorts		
0-200 Units	INR 35/kVA/Month or part thereof	8.75
201 to 500 Units		11.00
501 units & above		14.00
1001 units & above		15.50

Category	Fixed Charge	Energy Charge (INR/kWh)
Industrial LT		
0-500 Units	INR 55/kVA/Month or part thereof	7.75
501 to 1000 Units		11.00
1001 units & above		12.25
Industrial HT		
0-500 Units	INR 55/kVA/Month or part thereof	7.50
501 to 1000 Units		10.75
1001 units & above		11.75
Bulk Supply	INR 110/kVA/Month or part thereof	14.75
Public Lighting	INR 160/kVA/Month or part thereof	9.25
Irrigation Pumps & Agriculture	INR 50/kVA/Month or part thereof	1.75
EV Charging Stations		10.00
Temporary Supply	1.5 times the rate applicable to the relevant category of consumers	

7.2. Applicability

Sr. No.	Category	Applicability	Point of Supply news
1	Life Line	Applicable to domestic consumers with monthly consumption of upto 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.	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

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Sr. No.	Category	Applicability	Point of Supply news
		c) Housing colonies and multi-storeyed flats/buildings as defined in the Electricity Supply Code Regulations notified by the JERC	
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 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	The supply will be given through a single delivery and metering point and at a single voltage.

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

7.3. General conditions of HT and LT Supply

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

1) The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.

2) Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.

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

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

5) If the connected load of a domestic category is found to be at variance from the sanctioned/contracted

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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 (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**

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

7.4. Schedule of Miscellaneous Charges

S. No.	PARTICULARS	Rate (INR)
A	Charges for Re-fixing/ Changing of meter/ Meter Board in the same premise on consumer request when no additional material is required. (When the cause leading to subsequent change/ replacement of meter is either manufacturing defect or Department's fault then, it shall be free of cost and further, if shifting of meter is done in the interest of department work then it is free of cost.)	
I	Single phase meter	385
Ii	Three phase meter without CT	570
B	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	
C	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
D	Reconnection Charges	
I	Single Phase	25
ii	Three Phase	50
iii	Meter Reading Cards/ Passbook (New/ Replacement)	Free
E	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.
F	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
G	Special Meter reading charges in case of change in occupancy/ vacation of premises for domestic consumers	NIL
H	Supply of Duplicate copies of Electricity Bills	Free
I	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

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8. Chapter 8: Directives

Over the years, the Commission has issued various directives to the Petitioner for necessary action at its end. It has been observed that the Petitioner is not fully complying with many of the directives issued by the Commission. In order to strengthen the effective monitoring and ensure timely implementation of all the directives in true spirit, the Commission hereby directs that the Petitioner shall now compulsorily submit:

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

8.1. Directives continued in this Tariff Order

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

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

8.1.1. Bill Payment

Originally issued in Tariff Order dated 04 June 2012
Commission's latest directive in Tariff Order dated 20 May 2019 *The Commission appreciates the efforts taken by the Petitioner for implementation of the Web based billing / payment software. However, the Commission directs the Petitioner to expedite the process of initiation of bill payments through web services, which will not only ease out the problems faced by the consumers in bill payment, but also improve collection efficiency of the Petitioner. Accordingly, the Petitioner is directed to submit the quarterly report on the island wise status of the implementation of the web billing / payment software within 3 months of the completion of each quarter.* **Commission's latest directive in Tariff Order dated 18 May 2020** *The Commission directs the Petitioner to submit the status report within a month of issuance of this order.* **Commission's latest directive in Tariff Order dated 31 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.* **Commission's latest directive in Tariff Order dated 1 August 2022** *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.*
Petitioner's response in the present Tariff Petition *The Petitioner has submitted that as informed earlier online bill payment is facilitated to all the consumers of almost South, North and Middle Andaman. Further, under Nicobar Division, BSNL has provided leased line connection at Car Nicobar, Campbell Bay & Kamorta and web based billing have started at Car Nicobar. The work for providing connection at Teressa, Chowra & Katchal is under progress.*

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.

8.1.2. Energy Audit

Originally issued in Tariff Order dated 04 June 2012
Commission's latest directive in Tariff Order dated 1 August 2022 *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.*
Petitioner's response in the present Tariff Petition *The department had floated an RFP from 05 BEE Accredited Energy Auditors who have carried Energy Audit in DISCOMS for carrying out Energy Auditing for FY 2021-22 and FY 2022-23 in line to Standard Bidding Document (SBD) of BEE. However, none of the Energy Auditors responded and participated. Thus department is exploring to engage Energy Auditor through GEM/CPP portal, though problem still exist here as instant procurement is covered under Service Category and this service is presently not available in GeM under carted services, whereas, there is no provision available in GeM for publishing Limited Bid/tender enquiry.* *Further, Department had apprised BEE the above matter and the shortcoming faced by the department for conducting of energy audit due to non-availability of certified Energy Manager, IT and Finance Manager with the Electricity Department for conducting periodic energy accounting. The department has also requested BEE for support on the matter. Recently, it is learnt that BEE had issued letter of award for conduct of Annual Energy Audit in DISCOMs of UTs and North Eastern States and it is expected that the selected bidder shall arrive A&N Islands for carrying out energy audit.*
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.

8.1.3. State load Dispatch Centre

Originally issued in Tariff Order dated 26 February 2018
Commission's latest directive in Tariff Order dated 1 August 2022 *The Commission 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.*
Petitioner's response in the present Tariff Petition *The Energy Management Centre (EMC) is operational and is capturing all relevant parameters. A third party evaluation of EMC, South Andaman was conducted by Central Electricity Authority (CEA).*
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.

8.1.4. Slab wise details

Originally issued in Tariff Order dated 26 February 2018

Commission's latest directive in Tariff Order dated 1 August 2022 *The Commission 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.*
Petitioner's response in the present Tariff Petition *The relevant information shall be submitted along with tariff petition.*
Commission's response The Commission has noted the Petitioner's submission and accordingly, drops this directive.

8.1.5. Introduction of Fixed charges

Originally issued in Tariff Order dated 26 February 2018
Commission's latest directive in Tariff Order dated 1 August 2022 *The Commission 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 the consumers under Web based billing system has been submitted.*
Commission's response The Commission has noted the Petitioner's submission and accordingly, drops this directive.

8.1.6. T&D Losses

Originally issued in Tariff Order dated 26 February 2018
Commission's latest directive in Tariff Order dated 1 August 2022 *The Commission directs 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.*
Petitioner's response in the present Tariff Petition *As directed by Commission, following initiatives are taken:* • *76,000 Smart Meters have been installed replacing Mechanical Meters and defective Electronic / Static meters.* • *The replaced working Electronic meters under Smart metering project shall be used to replace remaining Mechanical Meters and defective Electronic / Static meters.* • *A DFR under RDSS Scheme is submitted to Ministry of Power and REC with a focus on metering, DTs and Feeder metering, replacement of HT / LT lines, Conductors, Cables etc.*

Commission's response
Even though many efforts have been made by the Petitioner, the T&D loss is on the higher side as per the 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.

8.1.7. Details of Hotel Industry Consumer

Originally issued in Tariff Order dated 31 May 2021
Commission's latest directive in Tariff Order dated 1 August 2022 *The Commission 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.*
Petitioner's response in the present Tariff Petition *The slab wise sales, number of consumers and connected load for the category "Hotels/ Restaurant/ Resorts" available under Web based billing system has been submitted.*
Commission's response The Commission has noted the Petitioner's submission and accordingly, drops this directive.

8.1.8. Approval for new Power Purchase Agreements

Originally issued in Tariff Order dated 31 May 2021
Commission's latest directive in Tariff Order dated 1 August 2022 *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.

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

Originally issued in Tariff Order dated 31 May 2021
Commission's latest directive in Tariff Order dated 1 August 2022 *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.*

Petitioner's response in the present Tariff Petition *The Connected Load and Fixed Charges for Commercial and Government Connections Categories available under Web based billing system has been submitted.*
Commission's response The Commission has noted the Petitioner's submission and accordingly, drops this directive.

8.1.10. Tariff Determination for own Renewable Generation

Originally issued in Tariff Order dated 31 May 2021
Commission's latest directive in Tariff Order dated 1 August 2022 *The Commission directs the Petitioner 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*
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 FY 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 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

8.1.11. Submission of slab wise category wise data

Originally issued in Tariff Order dated 1 August 2022
Commission's latest directive in Tariff Order dated 1 August 2022 *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.*
Petitioner's response in the present Tariff Petition *The department is under process to shift from manual billing to Web Based billing Software within next 3 months (subject to commission of leased line connection and other associated infrastructure by BSNL at Teressa, Chowra & Katchal). With entire consumers shifted under Web based system it would be easier to provide requisite historical information desired by the Hon'ble Commission with adjustments pertaining to the shifting of hotel industry consumers between the Industrial and Commercial Category. Hon'ble Commission is humbly requested to allow for some more time to provide the desired information.*
Commission's response The Commission has noted the submission of the Petitioner and 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.

8.1.12. Fuel Consumption data for own DG sets

Originally issued in Tariff Order dated 1 August 2022

Commission's latest directive in Tariff Order dated 1 August 2022

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.

Petitioner's response in the present Tariff Petition

The details have been submitted.

Commission's response

The details have not been submitted by the Petitioner and directs the Petitioner 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.

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

Originally issued in Tariff Order dated 1 August 2022

Commission's latest directive in Tariff Order dated 1 August 2022

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.

Petitioner's response in the present Tariff Petition

Following Capital expenditure plan and capitalisation approved by the Commission for the upcoming Control Period and reply are as follows:

S. No.	*Schemes*	*Reply*
1	*Installation of 27,302 Prepaid Smart Meters and remaining 36,000 under RDSS scheme.*	*A DPR for 66,000 smart meter under RDSS scheme is sent to the Ministry of Power and REC.*
2	*New Installation and Repairment & augmentation on the existmg distribution transformers (Total 95 No's of Distribution Transformer) at 33KV/11 KV existing substation including HT/LT Panels.*	*The proposal for procurement of material will be placed before competent authority as on required basis. The details will be submitted before JERC.*
3	*The scheme will provide commissioning of new substations and the replacement of existing 33/11 KV substation including HT/LT Panels, HT/ LT Shunt Capacitors etc, replacement of old and obsolete panels and other allied equipment etc.*	
4	*Laying of HT/LT new cable line and also replacement of old and defective cables in all the Island.*	

Commission's response

The Commission has noted the submission and directs the Petitioner to submit the details such as Detailed Project Reports, cost benefit analysis etc at the time of filing of tariff petitions for Commission's consideration.and accordingly, drops this directive..

8.1.14. Promotion of renewable energy across Andaman & Nicobar Islands

Originally issued in Tariff Order dated 1 August 2022

Commission's latest directive in Tariff Order dated 1 August 2022 *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.*
Petitioner's response in the present Tariff Petition *The status of RPO action Plan for FY 2022-23 has been submitted by the Petitioner.* *The present and future action plan under all the categories viz Solar, Non-Solar & HPO is submitted below:* *a. Solar: The present and future Solar targets is proposed to be met through following plants:* ***Existing Solar Power Plants:*** *i. Ground Mounted Solar (5MWp NTPC Solar Plant at Garacharma with projected annual generation of 5.57 MU and 20 MWp NLC Solar Plant by NLC at Dollygunj with projected annual generation of 13.4 MU (since plant is not able to operate at its maximum capacity of 22-25 MU in view of grid stability issues).* *ii. A small 50KWp Solar Power Plant under Roshni Scheme is established with projected annual generation of 0.022 MU.* *iii. 4.15 MWp Rooftop Solar with projected annual generation of 4 MU.* ***Proposed Solar Projects*** *i. 4 MWp Floating Solar Plant with 1 MWhr BESS expected to be commissioned by the end of FY 2022-23. A petition has already been filed before JERC for approval of PPA.* *b. **Non-Solar:** The present Non-solar target of 24.95 MU (excluding backlog) is met through Kalpong Hydro Power Plant (5.25 MW) with projected annual generation of 13-15 MU and is a lone source for achieving Non-Solar RPO. It is to apprise that there are no further potential for expansion under Non-Solar category due to non-availability of sources like rivers etc. to harness Hydro in these Islands. Whereas feasibility study conducted on few downstreams / nallahs in South and Middle Andaman turns out to be not cost effective as per cost benefit analysis.* *c. **HPO:** MoP Order dated 22.07.2022 states that HPO has to be met only by the energy produced from LHPs (PSPs) commissioned after 8th March 2019. Electricity Department may not able to meet the targets under HPO (Since, none of the projects are under pipeline due to non-availability of perennial sources in A&N Islands).* *In addition to above, as Electricity Department, A&N Administration is also committed towards greening this islands through Green & Clean Source of Energy to preserve this pristine islands. An Expert Group of MoP & MNRE has been constituted for finalization of RE plan with members from MNRE, MoP, CEA, NVVN, EESL, SECI & IREDA.*
Commission's response The Commission has noted the of the submission Petitioner and observed that 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 2023-34 and submit the same along with next tariff petition.

8.2. New Directives issued in this Order

8.2.1. kVAh based tariff

The Petitioner is directed to submit a proposal for implementation of kVA/kVAh tariff for HT consumers in the tariff petition for the next year. The Petitioner is also required to submit whether it possesses the requisite infrastructure to implement the same. The Commission in its efforts of making the tariff more cost reflective is looking to implement kVA/kVAh based tariff for HT consumers for all the utilities under its jurisdiction.

Annexures

Annexure 1: List of Stakeholders who attended the Public hearing on 7 March 2023 and 10 March 2023

Table 88: List of Stakeholders

Sr. No.	Name of Person (Mr/Ms)
1	C Pal Murugan
2	Mohd. Haneef
3	Krishna Rao
4	Bijender Singh
5	Anupam
6	Biswajit Halder
7	Dakshin Bhaskar
8	Shalemtala
9	Alam are bibi
10	V. Mrni
11	Ayush Kando
12	Abdul Shafique
13	M. Basheer
14	S.C. Yadav
15	G. Raaj Kumar
16	Zakir Jnwei
17	Diwakar
18	Abdul Hamid
19	S. Krishna
20	M.A. Shahid
21	A.R. Manickram
22	Abdul Shabir
23	S. Saurabh Kumar
24	Dheeraj Singh
25	Sujal Devi
26	Ziffiat Masood
27	Roma Devi
28	Fathima
29	Anjana Kumari
30	Jayanti Ray
31	Reshma Bibi
32	Poonam
33	Arindam Saha
34	Rakhi Pandey
35	Mariana Kerketta
36	A.Sudha
37	Permeela
38	Sumitra Devi
39	Dhanalakshmi

Sr. No.	Name of Person (Mr/Ms)
40	Nasreen
41	K.B. Vijaya
42	P. Amitha
43	Samina
44	T.V. Rajan
45	Suresh Batru
46	G. Venu
47	P. Narsimha
48	Indrani Halder
49	Panveer Singh
50	A. Siddique
51	Naveen Lal
52	Md. Jadwet
53	B. Laxminarayan
54	E Kodanda Rao
55	Medoleaoan
56	Shovir Das
57	Sanjeev
58	Devnath
59	J Alex
60	Sakir M
61	D Eswar Rao
62	Ramesh
63	K Neelima
64	T. Nishal
65	N. Peddiraju
66	M. Hemant Rao