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. 91/2022

For

Lakshadweep Electricity Department (LED)

28 March 2023

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

THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY

Table of Contents

List of Tables

List of abbreviations

Abbreviation	Full Form
A&G	Administrative and General
Act	The Electricity Act, 2003
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal of Electricity
CAGR	Compound Annualized Growth rate
Capex	Capital Expenditure
CEA	Central Electricity Authority
CGS	Central Generating Stations
Cr	Crores
DG	Diesel Generator
Discom	Distribution Company
FY	Financial Year
GoI	Government of India
HT	High Tension
HSD	High Speed Diesel
JERC	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
kVA	Kilo Volt Ampere
kWh	Kilo Watt Hour
LED	Lakshadweep Electricity Department
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
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. 91/2022

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 2023-24.

And in the matter of

Lakshadweep Electricity Department (LED)..Petitioner

ORDER

1) This Order is passed in respect of a Petition filed by the Lakshadweep Electricity Department (LED) (herein after referred to as "Petitioner" or "LED" or "The Licensee" or "Utility") 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 26th December 2022. The Commission thereafter requisitioned further information/ clarifications on the data gaps observed to take a prudent view of the said Petition. The Commission also held a Technical Validation Session to determine sufficiency of data and the veracity of the information submitted. Further, suggestions/ comments/ views and objections were invited from the Stakeholders and Electricity Consumers. The virtual Public Hearing was held on 28th February 2023, and all the Stakeholders/Electricity Consumers present in the Public Hearing were heard.

3) The Petitioner has not submitted the true-up petition for FY 2019-20, FY 2020-21 and FY 2021-22; therefore, the Commission has not carried out the True-up for FY 2019-20, FY 2020-21 and FY 2021-22. The Commission shall revisit the ARR for the FY 2019-20, FY 2020-21 and 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 submission, 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:

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

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	256.41	245.52
2	Revenue from Retail Sales at Existing Tariff	30.75	27.73
3	**Net Gap /(Surplus)**	**225.65**	**217.80**

(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	262.12	257.50
2	Revenue from Retail Sales at Approved Tariff	39.03	32.71
3	**Net Gap /(Surplus)**	**223.09**	**224.79**

(c) The Petitioner has proposed a hike of 23.15% in the energy charges and the remaining revenue gap shall be met through the budgetary support.

(d) The Commission has approved a hike of 14.15% in the energy charges and the remaining revenue gap shall be met through the budgetary support.

(e) The Commission has approved the average billing rate for FY 2023-24 as INR 6.10/kWh as against the approved Average Cost of Supply of INR 48.04/kWh.

(f) This Order shall come into force with effect from 1st 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 its areas of supply and also upload the Tariff Order on its website.

7) The attached documents giving detailed reasons, grounds and conditions are an integral part of this Order.

8) Ordered accordingly

Sd/-

(Jyoti Prasad)
Member (Law)

Place: Gurugram
Date: 28 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 30th May 2008.

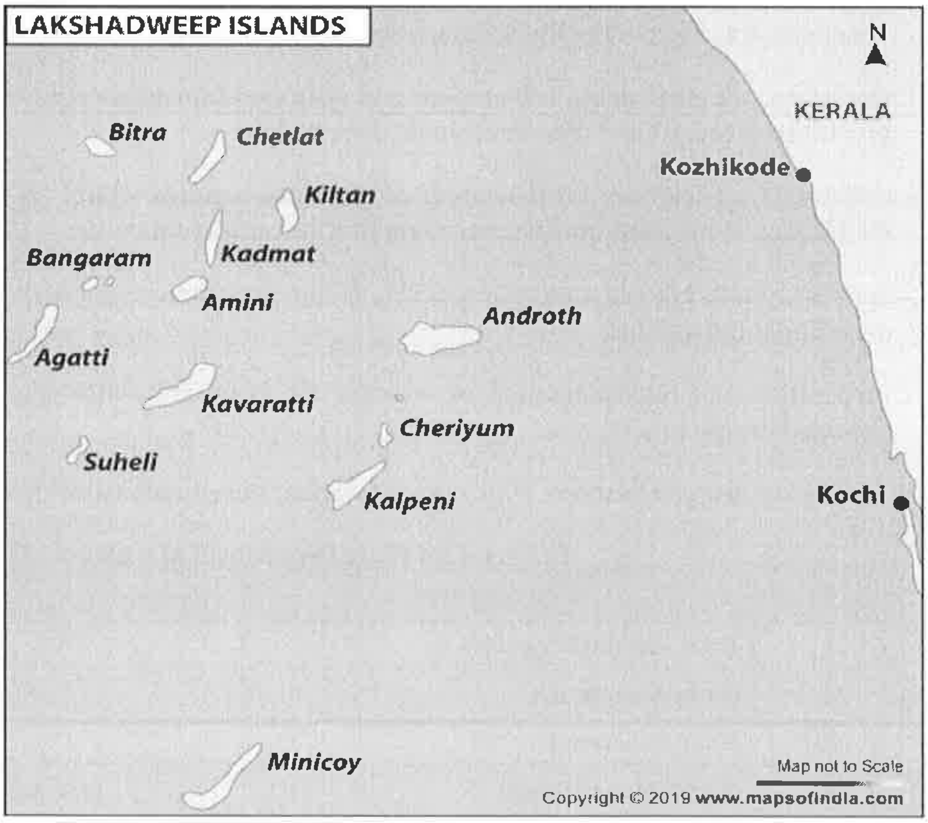
JERC is a statutory body responsible for regulation of the Power Sector in the State of Goa and the Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Dadra & Nagar Haveli and Daman & Diu and Puducherry, consisting of generation, transmission, distribution, trading and use of electricity.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

1.2. Lakshadweep Islands

Lakshadweep Islands is a group of islands in the Laccadive Sea, 200 to 440 km off the southwestern coast of India. The Union Territory (UT) of Lakshadweep is an archipelago consisting of 12 atolls, three reefs and five submerged banks, with a total of about thirty-nine islands and islets. It is a uni-district Union Territory with an area of 32 Sq. Kms and is comprised of ten inhabited islands, 17 uninhabited islands attached islets, four newly formed islets and 5 submerged reefs. The inhabited islands are Kavaratti, Agatti, Amini, Kadmat, Kiltan, Chetlat, Bitra, Andrott, Kalpeni and Minicoy. As per the 2011 Indian census, the population of the Union Territory was 64,473. The main occupation of the people is fishing and coconut cultivation with tuna being the main item of export.

Electrification of Lakshadweep Islands was initiated during the second Five Year Plan. Minicoy was the first island electrified in 1962 followed by Kavaratti Island in 1964, then Amini and Andrott in 1965 and 1966 respectively. Bitra was the last island electrified in 1982. Initially power supply was limited to 6-12 hours till 1982 to 1983 except in Kavaratti where 24 hours power supply was provided from 1964 itself. Round the clock power supply is provided in all islands since 1983.

Lakshadweep islands comprises of an area of 32 sq. kms. For operational purpose the area has been divided into 1 division and 10 sub-divisions.



1.3. About Lakshadweep Electricity Department (LED)

Lakshadweep Electricity Department (hereinafter referred to as "LED" or "Utility" or "Petitioner") is solely responsible for power supply in the Union territory. Power requirement of LED is met by own generating stations only.

Starting with a modest capacity of 51.6 kW in 1962 from two Diesel Generating Sets, the generating capacity of Lakshadweep Electricity Department has grown over the years to meet the demand of the people in the Islands. Since, the diesel generating sets were the only source of power, diesel has to be transported from Calicut (Kerala) in barrels. These barrels are transported in cargo barges to the Islands and stored for use. To alleviate this problem of transportation, oil storage facilities at Kavaratti and Minicoy Islands are under installation.

Due to geographical & topographical peculiarities of these islands including separation by sea over great distances there is no single power grid for the entire electrified Islands and instead separate generating units caters independently to power requirements of individual Islands.

The Petitioner is operating and maintaining power generation, transmission & distribution system network in these islands for providing electric power supply to general public. It implements various Planned & Non-Planned schemes for augmentation of DG Generating Capacity, establishment of new power houses and Transmission & Distribution infrastructure. LED is also functioning as a Nodal Agency for implementing renewable energy program of the Ministry of New & Renewable Energy (MNRE) on these islands. Presently, LED is headed by an Executive Engineer.

The key duties being discharged by LED are:

- Laying and operating of such electric lines and sub-stations that are primarily maintained for the purpose of distributing electricity in the area of Lakshadweep Islands, notwithstanding that such lines and sub-station are high tension cables or overhead lines or associated with such high-tension cables or overhead lines; or used incidentally for the purpose of transmitting electricity for others, in accordance with Electricity Act, 2003 or the Rules framed there under.

- Operating and maintaining sub-stations and dedicated transmission lines connected there with as per the provisions of the Act and the rules framed there under.

- Generation of electricity for the supply of electricity required within the boundary of the UT and for the distribution of the same in the most economical and efficient manner;

- Supplying electricity, as soon as practicable to any person requiring such supply, within its competency to do so under the said Act;

- Preparation and implementation of schemes for distribution and generally for promoting the use of electricity within the UT.

The table below gives an overview of present generation, transmission and distribution infrastructure of LED.

Table 3: Electricity Department at a glance (FY 2021-22)

S. No.	Particulars	Details
1	Total Installed Capacity	27.87 MW
1(a)	Diesel Generation	26.83 MW
1 (b)	Solar Generation	1.04 MW
2	No. of Power Houses	17 Nos (11 Nos of Diesel power plant,

S. No.	Particulars	Details
		6 Nos of solar power plant)
3	Total Staff Strength	332
4	HT Line	113 kms
5	LT Line	408 kms
6	Distribution Transformer	112 Nos.
7	No. of consumers	26,462
8	Units Sold	52.01 MUs

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 December 26, 2022 and marked as Petition No. 91/2022. 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 at the Commission's office in Gurugram, during which the discrepancies in the Petition were conveyed and additional information required by the Commission was sought. Subsequently, the Petitioner submitted replies to the issues raised in this session and provided documentary evidence to substantiate its claims regarding various submissions. The following table provides the list of interactions with the Petitioner along with the dates:

Table 4: 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	20.02.2023
3	Public hearing	28.02.2023
4	Technical Validation Session	02.03.2023
5	Petitioner's reply to the Stakeholders' comments sought by the Commission	03.03.2023

1.7. Notice for Public Hearing

In the absence of suitable publication of regular newspapers in the UT of Lakshadweep, the Commission directed the Petitioner to make public announcements and to advertise in the local cable network giving wide publicity to the Public Hearing mentioning the date and time. The Petitioner uploaded the Petition on its website (http://lakpower.nic.in) for inviting objections and suggestions on the Petitions. 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 February 28, 2023 through Video Conferencing.

1.8. Public Hearing

The Virtual Public Hearing was held on February 28, 2023 from 11:30 AM to discuss the issues, if any, related to the Petition filed by the Petitioner. The issues and concerns raised by the stakeholders in writing and as voiced by them during the Public Hearing have been examined by the Commission. The names of the stakeholders who attended the Public Hearing are provided in Annexure-I. The major issues discussed, the responses of the Petitioner thereon and the views of the Commission have been summarized in Chapter 2 of this Order.

2. Chapter 2: Public Hearing

2.1. Regulatory Process

On admitting the Petition, the Commission directed the Petitioner to make copies of the Petition available to the public, upload the Petition on the website and also publish the same in the newspapers in an abridged form in the given format duly inviting suggestions/ comments from the public as per the provisions of the JERC MYT Regulations, 2021.

The Public Hearing was held on 28th February 2023 through Video Conferencing on the Petition for the APR of the FY 2022-23, Aggregate Revenue Requirement (ARR) and Tariff for the FY 2023-24. 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. Defer Tariff Hike

Stakeholders' Comments

The stakeholders have submitted that the long period of about 2 years of lock down and Covid restrictions has caused irreparable damage to the normal economic activities and income of the people. Therefore, he requested the Commission that there should be no tariff hike for the FY 2023-24.

Petitioner's Response

It is submitted that the tariff petition for the year 2023-24 proposes 23.15% hike in tariff. Enhancement proposed is mainly to cover escalation in cost of supply due to increased cost of fuel, HSD Oil. Diesel which were provided earlier on retail rate is now being supplied at the cost applicable to bulk consumers. Moreover UTL VAT @ 10% has now been introduced since December 2022. Average cost of supply at present is Rs 47.88 with the proposed tariff average revenue collected will be Rs 7.13 i.e a gap of Rs 40.75. Actually only less than 15% of the cost of supply will be realized with the proposed tariff. Hence, Hon'ble Commission may approve the proposed hike.

Commission's View

The Commission understands the difficulties of life in the island of Lakshadweep and the adverse impact of ongoing COVID19 pandemic on the economic activities and accordingly, has appropriately revised the tariff. The Commission has discussed the principles adopted for approving the Tariff in Chapter 6 of the Tariff Order.

2.2.2. *Infrastructure for Solar Energy*

Stakeholders' Comments

The stakeholder submitted that since some years the Central government is giving priority to create more infrastructures to take benefit of Solar Energy source. But the Lakshadweep Administration has not taken necessary steps to use the support provided by the Central govt for this. The proposal to introduce Roof Top solar power units in association with people has not been implemented by the UTL Administration.

Petitioner's Response

It is submitted that the Solar Energy Corporation of India has been entrusted with implementation of New & Renewable Energy projects in UTL and they have been nominated as Nodal Agency for the purpose. Implementation of Solar Power Plants at Kavaratti (1400 K W) and Agatti (300 k W) is in the final stage and expected to be commissioned by April/May 2023. In second phase another 5 MWp capacity is being planned for implementation. SECI will also take up implementation of Rooftop Solar Plant in Govt Buildings in RESCO model.

Solar Rooftop plants for consumers are being planned. Subsidy at the rate of 50% (combines Ministry and UTL) of benchmark cost will be provided to the consumers. Vendors for the implementation of the project are being identified. Project implementation is expected to commence shortly positively by the month of March 2023 itself.

Commission's View

The Commission appreciates the suggestion of the stakeholders and agrees that there is a need to increase the share of the electricity generation from the renewable sources owing to the very high cost of diesel energy generation. The Commission directs the petitioner to explore alternate source of energy generation and submit an action plan for utilizing the renewable generation sources for reducing the dependency on diesel-based generation within 3 months of issuance of this Order.

2.2.3. *Notification and arrangements of public hearing*

Stakeholders' Comments

The stakeholder submitted that the notification for public hearing for tariff petition was published by the Department of Electricity on Notice Boards on 25/02/2023 prior to only 3 days of Hearing. As a result, only few people were come to aware and able to attend the virtual Hearing today. The people from other islands could not participate. The availability of network in all the islands are very poor causing great hindrance for virtual Hearing. As a result, the people of Lakshadweep could not express their views, opinions and suggestions to the Commission. Hence, he requested that the Commission should come and conduct physical hearing in future covering all the islands thus realising the difficulties faced by the people.

Petitioner's Response

It is submitted that the Department has published the public notice and the facilities for attending VC arrangements had been provided in other islands with the support of IT departments. However only one stakeholder from the island of Chetlat Island have participated apart from participants from Kavaratti. Department is facing difficulty in terms of reliable fast internet connectivity.

Commission's View

The Commission appreciates the suggestion of the stakeholders and agrees that the Commission will conduct physical hearings in the future.

2.2.4. Fixed Charges

Stakeholders' Comments

The stakeholder submitted that the Department of Electricity is collecting fixed charge monthly based on watts. So, there should be a minimum formula or regulation with which the watts can be calculated on electrification by the department. A mandate shall be fixed and communicated to the Department of Electricity

Petitioner's Response

It is submitted that the provision for minimum fixed charge shall be spelled out since some consumers with less than one kilowatt is charged with marginal fixed charge due to present fixed charge calculation. A minimum fixed charge shall be spelled out in the case of consumers having very low connected load.

Commission's View

The Commission appreciates the suggestion of the stakeholders. The Commission has discussed the principles computing fixed charges in Chapter 6 and 7 of the Tariff Order.

2.2.5. Transportation charges of fuel

Stakeholders' Comments

The stakeholder submitted that the IOC has installed its plants at Kavaratti and Minicoy islands. Thus the transportation of diesel is done directly from these two islands to other islands instead of transporting it from Beypore. As a result, the transportation expense has reduced considerably.

Petitioner's Response

It is submitted that it is true that IOCL has established plants at Kavaratti and Minicoy. However earlier Department of Electricity was using subsidised rate of ship freight charges for transportation of HSD from mainland, but now IOCL is passing full cost of ship transportation expense to this Department. Moreover, UTL VAT has been charged on the HSD oil sale. Hence their savings in transportation cost is nil or marginal. The Department is exploring all the possible efforts to maximise generation from RE sources.

Commission's View

The stakeholder may note the submission of the Petitioner.

3. Chapter 3: True-up of FY 2019-20, FY 2020-21 and FY 2021-22

3.1. Background

The True-up for the FY 2019-20, FY 2020-21 and 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 2019-20, FY 2020-21 and FY 2021-22

Petitioner's submission:

The Petitioner has not submitted the True-Up Petition for FY 2019-20, FY 2020-21 and FY 2021-22 as the accounts for FY 2019-20 are pending with CAG for audit. Further, the Petitioner has submitted that the preparation of financial statements for FY 2020-21 and FY 2021-22 is under progress post which the audit shall be undertaken.

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 of the tariff petition.

The Commission directs that the audit of FY 2019-20 to be completed on priority. The Commission reiterates its direction to the Petitioner to prepare and submit the audited accounts for FY 2020-21 and 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 2019-20, FY 2020-21 and 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 31 March 2022. Further, the Commission directs the Petitioner to submit the audited accounts for the FY 2019-20, FY 2020-21 and FY 2021-22 along with Petition for ARR determination of tariff for the FY 2024-25.

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

4.1. Background

The MYT Order for the FY 2022-23 was issued by the Commission on March 31, 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 for the 3rd MYT Control Period. 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 for 9 months as provided by the Petitioner for the FY 2022-23 of the Power Purchase Quantum and the Cost, Energy Sales, Capitalisation etc. depending on which the estimates for the remaining months of the financial year have been made. The various cost elements constituting the Aggregate Revenue Requirement have been approved based on the actual information submitted by the Petitioner, the JERC MYT Regulations, 2021 and on the basis of the norms approved in the MYT Order dated March 31, 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 53.35 MU for the FY 2022-23, based on the actual energy sales of FY 2021-22 and CAGR for the past periods. Similarly, the Petitioner has proposed the connected load and consumers of 119,062 kW and 27273 respectively for FY 2022-23.

Commission's Analysis

The Commission has considered the actual category wise sales data for FY 2021-22 and CAGR for various categories as approved in Business Plan order dated March 31, 2022 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 considered the actual category wise sales data, connected load and number of consumers as submitted by the Petitioner for first 9 months of FY 2022-23 for calculating the category wise sales, connected load and number of consumers respectively for FY 2022-23. Hence, the Commission has extrapolated the actual sales data from the category wise sales figure of first 9 months of FY 2022-23 as shown in the following table:

Table 5: Sales projected for FY 2022-23 (MU)

S. No.	Category	Actual Sales for 9 months of FY 2022-23	Projected Sales for FY 2022-23
1	Domestic	28.14	37.52
2	Commercial	2.87	3.83
3	Govt. Connection	5.53	7.37
4	Industrial	0.29	0.39
5	HT Consumers	1.28	1.71
6	Public Lighting	0.58	0.77
7	Temporary Connection	0.09	0.12
8	**Total Sales**	**38.78**	**51.71**

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

Table 6: Energy Sales (MU) approved by the Commission for FY 2022-23

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	43.61	39.53	37.52
2	Commercial	3.64	3.47	3.83
3	Govt. Connection	7.28	7.35	7.37
4	Industrial	0.40	0.41	0.39
5	HT Consumers	1.05	1.64	1.71
6	Public Lighting	0.92	0.87	0.77
7	Temporary Connection	0.09	0.09	0.12
8	**Total Sales**	**57.00**	**53.35**	**51.71**

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 nine months of FY 2022-23 as shown in table below:

Table 7: Number of Consumers projected for FY 2022-23 (MU)

S.No.	Category	Actual Consumers Apr'22 – Dec'22	Projected Number of Consumers for FY 2022-23
1	Domestic	20919	20919
2	Commercial	4374	4374
3	Govt. Connection	1188	1188
4	Industrial	375	375
5	HT Consumers	8	8
6	Public Lighting	72	72
7	Temporary Connection	132	132
8	**Total Consumers**	**27068**	**27068**

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

Table 8: Number of Consumers approved by the Commission for FY 2022-23

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	20925	20970	20919
2	Commercial	4233	4522	4374
3	Govt. Connection	1173	1206	1188
4	Industrial	360	376	375
5	HT Consumers	11	9	8
6	Public Lighting	76	72	72
7	Temporary Connection	136	117	132
8	**Total Consumers**	**26914**	**27273**	**27068**

4.3.3. Connected Load

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

Table 9: Connected Load projected for FY 2022-23 (kW)

S. No.	Category	Actual Connected Load Apr'22 – Dec'22	Projected Connected Load for FY 2022-23
1	Domestic	66262.60	66262.60
2	Commercial	7967.86	7967.86
3	Govt. Connection	8366.97	8366.97
4	Industrial	3078.54	3078.54
5	HT Consumers	665.69	665.69
6	Public Lighting	242.22	242.22
7	Temporary Connection	192.93	192.93
8	**Total Connected Load**	**86777**	**86777**

There is a variation in the approved connected load vis-à-vis the Petitioner's claim and the connected load approved in MYT order. The reason for variation is because the connected load claimed by the Petitioner and approved in the MYT order were in kVA and the connected load now approved is in kW. The table below provides the category wise connected load approved by the Commission in the MYT Order, the Petitioner's submission and now approved by the Commission:

Table 10: Connected Load approved by the Commission for FY 2022-23 (kW)

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	96616	90965	66262.60
2	Commercial	8213	9350	7967.86
3	Govt. Connection	14889	13041	8366.97
4	Industrial	3744	4041	3078.54
5	HT Consumers	1228	927	665.69
6	Public Lighting	284	433	242.22
7	Temporary Connection	273	305	192.93
8	**Total Connected Load**	**125247**	**119062**	**86777**

The Commission approves energy sales of 51.71 MU, connected load of 86,777 kW and number of consumers as 27,068 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 11.25% against an approved loss of 11.25% in the MYT Order. Further, the Petitioner has submitted the actual T&D loss achieved for initial six months as 7.55%.

Commission's analysis

The Commission had approved loss level of 11.25% for FY 2022-23 in the MYT Order dated March 31, 2022 while determining ARR for the FY 2022-23. The Commission in the APR of FY 2022-23 finds it appropriate to consider the loss level of 11.25% as approved in the MYT Order for FY 2022-23. The following table provides the Intra-State distribution loss approved in the MYT Order, the Petitioners submission and now approved by the Commission.

Table 11: Intra-State distribution loss (%)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Intra-State distribution loss	11.25%	11.25%	11.25%

The Commission approves Intra-State T&D loss of 11.25% 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 12: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	53.35
2	Distribution losses (%)	11.25%
	Distribution losses (MU)	6.76
3	**Energy Requirement @ periphery**	**60.12**
B	**Energy Availability**	
1	Renewable Generation	0.20
2	Diesel Generation	59.92
3	**Total Energy Availability**	**60.12**
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, the Petitioner's submission and the Energy Balance now approved by the Commission.

Table 13: Energy Balance (MU) approved by the Commission for FY 2022-23

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**			
1	Total Sales within the UT	57.00	53.35	51.71
2	Distribution losses (%)	11.25%	11.25%	11.25%
	Distribution losses (MU)	7.23	6.76	6.55
3	**Energy Requirement @ periphery**	**64.23**	**60.12**	**58.26**
B	**Energy Availability**			
1	Renewable Generation	10.46	0.20	0.20
2	Diesel Generation	53.77	59.92	58.06
3	**Total Energy Availability**	**64.23**	**60.12**	**58.26**
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 Petitioner has submitted that the energy requirement of LED is met through its own generation with a mix of renewable and diesel generation as there is no availability of power from Central Generating Stations or from other sources/ open market/ power exchanges etc. Accordingly, the Petitioner has claimed the fuel cost of INR 205.33 crore (HSD Cost – INR 204.11 crore and Lube Cost – INR 1.22 crore) as against the approved cost of INR 128.92 crore (HSD Cost – INR 128.16 crore and Lube Cost – INR 0.77 crore) in the MYT Order dated 31 March 2022.

Commission's Analysis

As per Regulation 13.1 of the JERC MYT Regulations, 2021, power purchase and fuel cost are an uncontrollable parameter. Thus, the power purchase and fuel cost need to be revisited every year by the Commission. The Commission has considered the energy required to be generated from the Diesel generation sets based on sales projected for FY 2022-23 as Diesel generation is the main source of power in Lakshadweep Islands and shall be available as per the consumers need. The Petitioner has submitted the fuel bills from April 2022 till 4th March 2023 and based on that the Commission has computed the average cost of HSD per litre and average cost of Lube oil per litre. Accordingly, the Commission has computed the cost of fuel for Diesel generation considering the approved values of specific fuel consumption as shown in table below:

Table 14: Fuel Cost approved by the Commission for FY 2022-23

S. No.	Particulars	Approved in MYT order	Petitioner's Submission	Now Approved by the Commission
1	Total Gross Generation (MUs)	64.23	60.12	58.26
2	Less: Solar Generation (MUs)	10.46	0.20	0.20
3	Total DG Generation (MUs) (1 - 2)	53.77	59.92	58.06
4	Specific HSD Consumption (ml per kWh) as approved in MYT Tariff order	294.02	296.60	294.02

S. No.	Particulars	Approved in MYT order	Petitioner's Submission	Now Approved by the Commission
5	Average Cost of HSD per litre as per bills submitted for Apr' 22 and Mar' 23 (INR)	81.07	114.08	111.83
6	**Cost of HSD [(3 X 4/1000 X 5)/10] (INR crores)**	**128.16**	**204.11**	**190.91**
7	Specific Lube oil consumption (ml per kWh) as approved in MYT Tariff order	0.94	0.95	0.94
8	Average Cost of Lube Oil per as per bills submitted for May 22 and June' 22 (INR)	151.78	213.30	152.22
9	**Cost of Lube Oil [(3 X 7/1000 X 8)/10] (INR crores)**	**0.77**	**1.22**	**0.83**
10	**Total Fuel Cost (6+9) (INR crores)**	**118.92**	**205.33**	**191.74**

The Commission observed that the fuel cost as claimed by the Petitioner is higher than the fuel cost as approved by the Commission in the ARR of FY 2022-23, the Petitioner has submitted the increase is due to the substantial increase in cost of HSD.

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

The Commission approves power purchase quantum of 58.26 MU and cost of INR 191.74 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 9.49 MU comprising of 4.65 MU Solar and 4.83 MU Non-Solar. Out of which, the Petitioner has only claimed to purchase the solar energy of around 0.20 MU, thereby resulting in a shortfall in RPO compliance. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2022-23:

Table 15: Cumulative RPO compliance till FY 2022-23

Particulars	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
Solar Target	0.85%	1.65%	2.50%	3.60%	4.70%	6.10%	8.00%	9.00%
Non-Solar Target	2.70%	3.20%	4.20%	5.40%	6.80%	8.00%	9.00%	9.35%
Total Target	**3.55%**	**4.85%**	**6.70%**	**9.00%**	**11.50%**	14.10%	17.00%	18.35%
Sales Within UT	50.65	50.13	48.50	48.91	48.42	53.10	52.01	51.71
RPO Target								

Particulars	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
Solar	0.43	0.83	1.21	1.76	2.28	3.24	4.16	4.65
Non-Solar	1.37	1.60	2.04	2.64	3.29	4.25	4.68	4.83
Total RPO Target	**1.80**	**2.43**	**3.25**	**4.40**	**5.57**	**7.49**	**8.84**	**9.49**
RPO Compliance (Actual Purchase)								
Solar	1.06	1.59	1.79	1.18	0.64	0.45	0.20	0.20
Non-Solar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance (Actual Purchase)	**1.06**	**1.59**	**1.79**	**1.18**	**0.64**	**0.45**	**0.20**	**0.20**
RPO Compliance (REC Certificate Purchase)								
Solar	0.00	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	0.00
Total RPO Compliance (REC Certificate)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
RPO Compliance (REC+ Actual)								
Solar	1.06	1.59	1.79	1.18	0.64	0.45	0.20	0.20
Non-Solar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance	**1.06**	**1.59**	**1.79**	**1.18**	**0.64**	**0.45**	**0.20**	**0.20**
Net Shortfall/(Surplus) for this year	0.74	0.84	1.46	3.22	4.92	7.04	8.65	9.29
Cumulative Shortfall in RPO Compliance till current year	**0.74**	**1.58**	**3.04**	**6.25**	**11.18**	**18.21**	**26.86**	**36.15**

The Commission notes that there is a net shortfall in RPO compliance for FY 2022-23 (9.29 MU) and cumulative shortfall of 36.15 MU till FY 2022-23. The Commission directs the Petitioner to make its allout efforts 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:

$O\&M_n = (R\&M_n + EMP_n + A\&G_n) \times (1 - X_n)$ + *Terminal Liabilities*

Where,

$R\&M_n = K \times GFA_{n-1} \times (WPI\ inflation)$

$EMP_n = (EMP_{n-1}) \times (1+G_n) \times (CPI\ inflation)$

$A\&G_n = (A\&G_{n-1}) \times (CPI\ inflation)$

'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 23.15 Crore against the approved expenses of INR 28.04 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 actual employee expenses for FY 2021-22 for computation of revised employee expenses of FY 2022-23. The Commission has considered the employee growth rate for 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 16: 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 17: 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	361	332	299
2	Recruitment	-	-	-
3	Retirement	29	33	9
4	Closing Employee	332	299	290
5	Growth rate	**-8.03%**	**-9.94%**	**-3.01%**

Table 18: Employee Expenses approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	EMPn-1 (INR Crore)	28.04	**23.15**	26.46
2	Gn (%)			-9.94%
3	CPIinflation (%)			5.89%
4	**Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)**			**25.23**

The Commission now approves employee expenses of INR 25.23 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 2.82 crore as against the approved value of INR 5.26 crore in 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 actual value of A&G expenses for FY 2021-22 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 MYT Order, Petitioner's Submission and now approved by the Commission:

Table 19: A&G Expenses approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	A&Gn-1 (INR Crore)	5.26	2.82	4.96
2	CPIinflation (%)			5.89%
3	Provision (INR Crore)			0.00
4	**Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)**			**5.25**

The Commission now approves the Administrative & General (A&G) expenses of INR 5.25 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 8.11 crore as against the approved value of INR 8.09 crore in the MYT Order dated March 31, 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 20: 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%	
2020-21	123.38	1.29%	**5.32%**
2021-22	139.41	13.00%	

The R&M expenses as approved by the Commission for FY 2022-23 have been provided in the following table:

Table 21: R&M Expenses approved by Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	FY 2022-23
1	Opening GFA (GFA_{n-1})			192.16
2	K factor approved (K) (%)			4.00%
3	Avg. WPI Inflation (%)	**8.09**	**8.11**	5.32%
4	**R&M Expenses = K x (GFA_{n-1}) x ($1+WPI_{inflation}$)**			**8.10**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 8.10 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 22: O&M Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	28.04	23.15	25.23
2	Administrative & General Expenses (A&G)	5.28	2.82	5.52
3	Repair & Maintenance Expenses	8.09	8.11	8.10
	Total Operation & Maintenance Expenses	**41.39**	**34.08**	**38.58**

The Commission approves the Operation & Maintenance (O&M) Expenses of INR 38.58 Crore in the APR of FY 2022-23.

4.9. Gross Fixed Assets (GFA) & Capitalisation

Petitioner's submission

The Petitioner has submitted revised capitalisation of INR 11.50 Crore as against the approved capitalisation of INR 20.50 Crore in the Tariff Order dated March 31, 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 Capital Expenditure and Capitalisation approved in MYT Order, the Commission approves the capital expenditure and capitalisation for the year as shown in the following table:

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

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Capitalisation	20.50	11.50	11.50

The Commission approves capitalisation of INR 11.50 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 Lakshadweep 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 2022-23, the Commission has considered the closing value of GFA for FY 2018-19 as approved in Tariff Order dated March 31, 2022 and capitalisation for FY 2019-20, FY 2020-21 and FY 2021-22 as submitted by the Petitioner as shown in following tables:

Table 24: Capitalisation for FY 2019-20, FY 2020-21 and FY 2021-22 as submitted by the Petitioner (INR Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Opening GFA	174.41	186.41	188.09
Additions during the FY	12.00	1.68	4.07
Adjustment/Retirement During the FY	-		
Closing GFA	186.41	188.09	192.16

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

Table 25: GFA addition approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	197.59	196.23	192.16
2	Addition During the FY	10.50	11.50	11.50
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	218.09	207.73	203.66

For the purpose of calculating the opening value of normative loan in FY 2022-23, the Commission has considered the closing value of loan for FY 2018-19 as approved in Tariff Order dated March 31, 2022 and normative loan addition for FY 2019-20, FY 2020-21 and FY 2021-22.

Table 26: Normative Loan addition approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	11.75	6.76	8.11
2	Add: Normative Loan During the year	14.35	8.05	8.05
3	Less: Normative Repayment equivalent to Depreciation	6.19	7.77	5.86*
4	Closing Normative Loan	19.91	7.04	10.30

**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 2018-19 as approved in Tariff Order dated March 31, 2022 and the equity addition for FY 2019-20, FY 2020-21 and FY 2021-22.

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

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	59.27	57.65	57.65
2	Additions on account of new capitalisation	6.15	3.45	3.45
3	Closing Equity	65.42	61.10	61.10

4.11. Depreciation

Petitioner's submission

The Petitioner has submitted the depreciation of INR 7.77 crore as per JERC MYT Regulations 2021 as against the approved depreciation of INR 6.19 crores in the Tariff Order dated March 31, 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 considered the weighted average rate of depreciation as approved in the MYT order dated March 31, 2022.

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

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

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	197.59	196.23	192.16
2	Less: Assets depreciated upto 90% till FY 2018-19	22.92	22.92	22.92
3	Net Gross Fixed Assets	174.67	173.31	169.24
4	Addition During the FY	20.50	11.50	11.50
5	Closing Gross Fixed Assets	195.17	184.81	180.74
6	Average Gross Fixed Assets	184.92	179.06	174.99

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
7	Weighted Average Depreciation rate (%)	3.35%	4.34%	3.35%
	Depreciation	**6.19**	7.77	**5.86**

The Commission now approves depreciation of INR 5.86 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 FY 2021-22. The Petitioner has submitted that the majority of capital assets are created out of the equity contribution from Lakshadweep Administration only. The rate of interest considered is SBI MCLR as on 1st April of that 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 31.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Hence, the rate of interest to be considered while determining the ARR shall be the weighted average interest rate of the actual loan portfolio. However, in absence of detailed data with respect to the actual loan portfolio, the Commission has considered the SBI 1 Year MCLR rate plus 100 basis points as Rate of Interest, in accordance with the JERC MYT Regulations, 2021.

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 has considered as the SBI 1 Year MCLR rate plus 100 basis points as Rate of Interest, in accordance with the JERC MYT Regulations, 2021.

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

Table 29: Interest and Finance Charges approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	11.75	6.76	8.11
2	Add: Normative Loan During the year	14.35	8.05	8.05
3	Less: Normative Repayment equivalent to Depreciation	6.19	7.77	5.86
4	Closing Normative Loan	19.91	7.04	10.30
5	Average Normative Loan	15.83	6.90	9.21
6	Rate of Interest (%)	8.00%	8.00%	**8.00%**
7	**Interest on Loan**	**1.27**	**0.55**	**0.74**

The Commission approves Interest and Finance Charges of INR 0.74 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. Opening equity is considered equivalent to closing equity for FY 2021-22 and additional equity to the tune of 30% is proposed to be capitalized during the year. Accordingly, RoE is computed at 16% post-tax.

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 27 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 27 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 2021-22 as derived in Section 4.10: Capital Structure above. Income Tax payable shall be considered taken on actual basis at the time of True-up. 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 30: 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	59.27	57.65	57.65
2	Additions on account of new capitalisation	6.15	3.45	3.45
3	Closing Equity	65.42	61.10	61.10
4	Average Equity	62.35	59.37	59.37
5	Rate of Return	16.00%	16.00%	16.00%

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
6	**Return on Equity**	**9.98**	**9.50**	**9.50**

The Commission approves the Return on Equity of INR 9.50 Crore in the APR of the FY 2022-23.

4.14. Interest on Security Deposits

Petitioner's submission

The Petitioner has claimed an Interest on consumer security of INR 0.23 crore as against the approved Interest on consumer security of INR 0.04 Crore in the Tariff Order dated March 31, 2022.

Commission's analysis

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

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

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

Interest on Security Deposits has been calculated in accordance with the JERC MYT Regulations, 2021 based on the average of opening and closing consumer security deposits during the year.

There was a huge variation in the opening security deposit value as claimed by the Petitioner vis-à-vis the approved value in the MYT order. In response to the Commission's query in this matter the Petitioner submitted that during reconciliation of the accounts of the past years the Petitioner had noted a discrepancy, subsequent to which it corrected the figures and hence the reason for this variation. Since, the annual audited accounts of FY 2019-20, FY 2020-21 and FY 2021-22 are still pending with the Petitioner, the opening security deposit has been considered as submitted by the Petitioner and shall be trued up as per actuals at the time of true-up. The addition during the year has been considered the same as submitted by the Petitioner. The same shall be trued-up as per actuals in the True- up of FY 2022-23. The rate of interest has been considered equivalent to the prevailing RBI Bank rate. The table below provides the calculation of interest on consumer security deposits for the year.

Table 31: Interest on Security Deposits 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 Security Deposit	0.94	5.35	5.35
2	Add: Deposits During the year	0.01	0.33	0.33
3	Less: Deposits refunded	0.00	0.00	0.00
4	Closing Security Deposit	0.95	5.68	5.68
5	Average Security Deposit	0.95	5.52	5.52
6	Rate of Interest (%)	4.25%	4.25%	4.25%
	Interest on Security Deposit (IoSD)	**0.04**	**0.23**	**0.23**

The Commission approves Interest on Security Deposit as INR 0.23 Crore 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%.

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 MYT Regulation, 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 considered the receivables as proportionate revenue for 2 months as gap funding is done month on month basis from the Lakshadweep Administration, the revised power purchase cost of FY 2022-23 as determined above and the closing consumer security deposit amount during the year for computing the Working Capital Requirement for the year. The maintenance spares have been considered @40% of R&M expenses for 1 month.

The Commission has considered the SBI Base rate as on 1st April 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 table below:

Table 32: 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	3.45	3.45	3.22
2	Maintenance spares at 40% of R&M expenses for one (1) month;	0.27	0.27	0.27
3	Receivables equivalent to two (2) months of the expected revenue at the prevailing tariff	5.00	5.13	4.62
4	Less: Amount held as security deposits	0.95	5.68	5.68
5	Less: Power purchase cost for one month			0.00
6	Net Working Capital	7.78	3.16	2.43
7	Rate of Interest (%)	9.00%	9.00%	9.00%
8	**Interest on Working Capital**	**0.70**	**0.28**	**0.22**

The Commission approves the Interest on Working Capital as INR 0.22 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

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

Table 33: Non-Tariff Income approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	**Non-Tariff Income**	**1.34**	**1.34**	**1.34**

The Commission approves Non-Tariff Income of INR 1.34 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 256.41 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 34: Aggregate Revenue Requirement approved by the Commission for FY 2022-23 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost	0.00	0.00	0.00
2	Fuel Cost	128.92	205.33	191.74
3	O&M Expenses	41.39	34.08	38.58
4	Depreciation	6.19	7.77	5.86
5	Interest and Finance charges	1.27	0.55	0.74
6	Interest on Working Capital	0.70	0.28	0.22
7	Return on Equity	9.98	9.50	9.50
8	Interest on Security Deposit	0.04	0.23	0.23
9	Income Tax	0.00	0.00	0.00
10	**Total Revenue Requirement**	**188.49**	**257.75**	**246.87**
11	Less: Non-Tariff Income	1.34	1.34	1.34
12	**Net Revenue Requirement**	**187.14**	**256.41**	**245.53**

The Commission now approves the net ARR of INR 245.53 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 30.75 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 Commission has considered the power factor of 0.9 for computing fixed charges (specified in kVA) linked with connected load as projected load is in kW terms. The revenue from category tariff as computed by the Commission for the FY 2022-23 has been shown in the following table:

Table 35: Revenue at existing tariff computed by the Commission for FY 2022-23 (INR Crore)

S. No.	Category	Sales (MUs)	Revenue from Energy Charges	Revenue from Fixed charges	Total	ABR (INR/unit)
1	Domestic	37.52	11.92	1.59	13.51	3.60
2	Commercial	3.83	3.51	0.29	3.80	9.93
3	Government Connections	7.37	7.31	0.30	7.61	10.33
4	Industrial	0.39	0.25	0.21	0.46	11.78
5	HT Industrial	1.71	1.57	0.13	1.71	9.98
6	Public Lighting	0.77	0.52	0.02	0.55	7.06
7	Temporary	0.12	0.09	0.00	0.09	8.04
	TOTAL	**51.71**	**25.19**	**2.54**	**27.73**	**5.36**

The Commission has determined revenue from the sale of power at existing tariff as INR 27.73 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 157.12 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 36: Standalone Revenue Gap/ Surplus at existing tariff (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Net Revenue Requirement	187.14	256.41	245.52
2	Revenue from Retail Sales at Existing Tariff	30.02	30.75	27.73
3	**Net Gap /(Surplus)**	**157.12**	**225.65**	**217.80**

The Commission approves the standalone gap at INR 217.80 Crore in the APR of FY 2022-23, to be met from the budgetary support by the Government.

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 each year of the FY 2023-24

The Commission has computed the individual elements constituting the Aggregate Revenue Requirement for each year based on figures approved in the Business Plan Order dated March 31, 2022, the actual available information of various parameters for the FY 2019-20, FY 2020-21, FY 2021-22 and the first half of FY 2022-23.

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

Petitioner's Submission

The Petitioner has revised the number of consumers, connected load and energy sales considering the actual figures of FY 2021-22 and first half of FY 2022-23 and the CAGR for past periods .

Table 37: Number of consumers, Connected Load, and Energy Sales submitted by the Petitioner for the FY 2023-24

S. No.	Particulars	No. of Consumers	Connected Load	Energy Sales (MU)
1	Domestic	21259	92245	40.33
2	Commercial	5057	9350	3.61
3	Govt. Connection	1241	14194	7.71
4	Industrial	389	4248	0.44
5	HT Consumers	10	1045	1.64
6	Public Lighting	72	464	0.92
7	Temporary Connection	117	305	0.09
	Total	**28145**	**121851**	**54.74**

Commission's Analysis

The Commission has considered the category wise sales data, connected load and number of consumers as approved above in APR of FY 2022-23 and CAGR for various categories as approved in Business Plan order dated March 31, 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 2022-23 using the CAGR for various categories as approved in Business Plan order dated March 31, 2022 as shown in the following table:

Table 38: 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	37.52	3.97%	39.01
2	Commercial	3.83	4.90%	4.02
3	Govt. Connection	7.37	0.00%	7.37
4	Industrial	0.39	4.25%	0.41
5	HT Consumers	1.71	9.10%	1.87
6	Public Lighting	0.77	6.02%	0.82
7	Temporary Connection	0.12	0.00%	0.12
8	**Total Sales**	**51.71**		**53.60**

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 39: 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	45.35	40.33	39.01
2	Commercial	3.82	3.61	4.02
3	Govt. Connection	7.28	7.71	7.37
4	Industrial	0.42	0.44	0.41
5	HT Consumers	1.15	1.64	1.87
6	Public Lighting	0.97	0.92	0.82
7	Temporary Connection	0.09	0.09	0.12
8	**Total Sales**	**59.08**	**54.74**	**53.60**

5.3.2. Number of Consumers

Similarly, the Commission has extrapolated the category wise number of consumers for FY 2022-23 using the CAGR for various categories as approved in Business Plan order dated March 31, 2022 as shown in table below:

Table 40: 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	20919	1.64%	21262
2	Commercial	4374	11.23%	4865
3	Govt. Connection	1188	0.00%	1188
4	Industrial	375	1.06%	379
5	HT Consumers	8	14.47%	9
6	Public Lighting	72	0.33%	72
7	Temporary Connection	132	0.00%	132
8	**Total Consumers**	**27068**		**27908**

The table below 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 41: 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	21269	21259	21262
2	Commercial	4708	5057	4865
3	Govt. Connection	1173	1241	1188
4	Industrial	364	389	379
5	HT Consumers	13	10	9
6	Public Lighting	76	72	72
7	Temporary Connection	136	117	132
8	**Total Consumers**	**27739**	**28145**	**27908**

5.3.3. Connected Load

Similarly, the Commission has extrapolated the approved category wise connected load for FY 2022-23 using the CAGR for various categories as approved in Business Plan order dated March 31, 2022as shown in table below:

Table 42: 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	66262.60	2.46%	67893
2	Commercial	7967.86	0.00%	7968
3	Govt. Connection	8366.97	11.27%	9310
4	Industrial	3078.54	1.17%	3115
5	HT Consumers	665.69	15.35%	768
6	Public Lighting	242.22	0.00%	242
7	Temporary Connection	192.93	0.00%	193
8	**Total Connected Load**	**86777**		**89488**

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 43: 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	98993	92245	67893
2	Commercial	8213	9350	7968
3	Govt. Connection	16567	14194	9310
4	Industrial	3788	4248	3115
5	HT Consumers	1416	1045	768
6	Public Lighting	284	464	242
7	Temporary Connection	273	305	193
8	**Total Connected Load**	**129534**	**121851**	**89488**

The Commission approves energy sales of 53.60 MU, connected load of 89,488 kW and number of consumers as 27,908 in the ARR of FY 2023-24.

5.4. *Intra-State Distribution Loss*

Petitioner's submission

The Petitioner has proposed the T&D loss as approved by the Commission in the Business Plan Order i.e. at 10.25%.

Commission's analysis

The Commission, in the Business Plan Order, had set the loss trajectory for the 3rd Control Period. 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 44: 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	10.25%	10.25%	10.25%

The Commission approves the Intra-State Distribution Loss of 10.25% 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 45: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	54.74
2	Distribution losses (%)	10.25%
	Distribution losses (MU)	6.25
3	**Energy Requirement @ periphery**	**61.00**
B	**Energy Availability**	
1	Renewable Generation	0.20
2	Diesel Generation	60.80
3	**Total Energy Availability**	**61.00**
C	**Total shortfall/(Surplus)**	**0.00**

Commission's analysis

The Commission has determined the Energy Balance based on the revised estimates of energy sales and considering all the requirement shall be met by the Diesel generation along with Solar generation. The table below provides the Energy Balance as approved by the Commission in the MYT Order, the Petitioner's submission and the Energy Balance now approved by the Commission.

Table 46: 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

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**			
1	Total Sales within the UT	59.08	54.74	53.60
2	Distribution losses (%)	10.25%	10.25%	10.25%
	Distribution losses (MU)	6.75	6.25	6.12
3	**Energy Requirement @ periphery**	**65.83**	**61.00**	**59.72**
B	**Energy Availability**			
1	Power Purchase			
2	Renewable Generation	11.76	0.20	0.20
3	Diesel Generation	54.06	60.80	59.52
4	**Total Energy Availability**	**65.83**	**61.00**	**59.72**
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**0.00**

In the ARR of FY 203-24, the Commission has estimated a shortfall/(surplus) quantum of 0.00 MU considering all the demand net of renewable generation shall be met by the Diesel generation.

5.6. Power Purchase Quantum & Cost

Petitioner's submission

The Petitioner has submitted that the energy requirement of LED is met through its own generation with a mix of renewable and diesel generation as there is no availability of power from Central Generating Stations or from other sources/ open market/ power exchanges etc. Accordingly, the Petitioner has claimed the fuel cost of INR 208.41 crore (HSD Cost – INR 207.11 crore and Lube Cost – INR 1.30 crore) as against the approved cost of INR 139.40 crore (HSD Cost – INR 138.57 crore and Lube Cost – INR 0.83 crore) in the MYT Order.

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 have to be revisited every year by the Commission based on the audited accounts. The Commission has considered the energy demand net of renewable generation shall be met from the Diesel Generation based on sales projected for FY 2023-24 as Diesel generation is the main source of power in Lakshadweep Islands and may vary as per the demand. The Commission observed that the fuel cost per litre has been decreasing from July 2022, therefore the Commission has approved the same fuel cost per litre for FY 2023-24 as approved in the APR of FY 2022-23. Accordingly, the Commission has computed the cost of fuel for Diesel generation considering the approved values of specific fuel consumption in MYT order as shown in table below:

Table 47: Fuel Cost approved by the Commission for FY 2023-24

S. No.	Particulars	Petitioner's Submission	Now Approved by Commission
1	Total Gross Generation (MUs)		59.72
2	Less: Solar Generation (MUs)		0.20
3	Total DG Generation (MUs) (1 - 2)		59.52
4	Specific HSD Consumption (ml per kWh) as approved by JERC MYT Tariff order Dated 31.3.2022		294.02

S. No.	Particulars	Petitioner's Submission	Now Approved by Commission
5	Average Cost of HSD per litre as per bills submitted for Apr' 22 and Mar' 23 (INR)		111.83
6	**Cost of HSD [(3 X 4/1000 X 5)/10] (INR crores)**	**207.11**	**195.72**
7	Specific Lube oil consumption (ml per kWh) as approved by JERC MYT Tariff order Dated 31.3.2022		0.94
8	Average Cost of Lube Oil per litre as per bills submitted for May 22 and Jun' 22 (INR)		152.22
9	**Cost of Lube Oil [(3 X 7/1000 X 10)/8] (INR crores)**	**1.30**	**0.05**
10	**Total Fuel Cost (INR crores)**	**208.41**	**196.57**

The Commission would like to highlight that the approved cost towards diesel-based generation consists of cost incurred towards consumption of HSD oil and Lube oil only as the fixed cost incurred against own generation (i.e. O&M expenses, interest and finance charges, depreciation, interest on working capital etc.) has been considered as part of various components of Annual Revenue Requirement for the department as a whole and has been discussed in the subsequent sections. Similarly, no separate cost has been approved for own renewable based generation, for which the Petitioner needs to file a separate petition for the determination of tariff.

The Commission approves power purchase quantum of 59.72 MU and cost of INR 196.57 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 2022-23, the Commission approves the RPO target of 10.67 MU comprising of 5.36 MU Solar and 5.31 MU Non-Solar. Out of which, the Petitioner has only claimed to purchase the solar energy of around 0.20 MU, thereby resulting in a shortfall in RPO compliance. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2023-24:

Table 48: Cumulative RPO compliance till FY 2023-24

Particulars	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY24
Solar Target	0.85%	1.65%	2.50%	3.60%	4.70%	6.10%	8.00%	9.00%	10.00%
Non-Solar Target	2.70%	3.20%	4.20%	5.40%	6.80%	8.00%	9.00%	9.35%	9.91%
Total Target	**3.55%**	**4.85%**	**6.70%**	**9.00%**	**11.50%**	14.10%	17.00%	18.35%	19.91%
Sales Within UT	50.65	50.13	48.50	48.91	48.42	53.10	52.01	51.71	53.60
RPO Target									
Solar	0.43	0.83	1.21	1.76	2.28	3.24	4.16	4.65	5.36
Non-Solar	1.37	1.60	2.04	2.64	3.29	4.25	4.68	4.83	5.31

Particulars	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY24
Total RPO Target	**1.80**	**2.43**	**3.25**	**4.40**	**5.57**	**7.49**	**8.84**	**9.49**	**10.67**
RPO Compliance (Actual Purchase)									
Solar	1.06	1.59	1.79	1.18	0.64	0.45	0.20	0.20	0.20
Non-Solar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance (Actual Purchase)	**1.06**	**1.59**	**1.79**	**1.18**	**0.64**	**0.45**	**0.20**	**0.20**	**0.20**
RPO Compliance (REC Certificate Purchase)									
Solar	0.00	0.00	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	0.00	0.00
Total RPO Compliance (REC Certificate)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
RPO Compliance (REC+ Actual)									
Solar	1.06	1.59	1.79	1.18	0.64	0.45	0.20	0.20	0.20
Non-Solar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance	**1.06**	**1.59**	**1.79**	**1.18**	**0.64**	**0.45**	**0.20**	**0.20**	**0.20**
Net Shortfall/(Surplus) for this year	0.74	0.84	1.46	3.22	4.92	7.04	8.65	9.29	10.47
Cumulative Shortfall in RPO Compliance till current year	**0.74**	**1.58**	**3.04**	**6.25**	**11.18**	**18.21**	**26.86**	**36.15**	**46.62**

The Commission notes that there is a net shortfall in RPO compliance for FY 2022-23 (10.47 MU) and cumulative shortfall of 46.62 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 49: 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	46.62	4.66

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.

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.

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 & 1st Half (April 22 to September 22) of the FY 2022-23. Accordingly, the Petitioner has claimed the employee expenses of INR 23.78 crore as against the approved employee expenses of INR 30.43 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, 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 may 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 CPI Inflation has been computed as follows:

Table 50: 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 51: 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)	30.43	23.78	25.23
2	Gn (%)			-3.01%
3	CPIinflation (%)			5.89%
4	**Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)**			**25.92**

The Commission approves Employee Expenses of INR 25.92 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 2.99 Crore as against the approved figure of INR 5.57 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 52: 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)	**5.57**	**2.99**	5.25
2	CPIinflation (%)			5.89%
3	**Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)**			**5.56**

The Commission approves the Administrative & General (A&G) expenses of INR 5.56 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 8.58 Crore as against the approved figure of INR 8.92 crore in the MYT Order.

Commission's analysis

In accordance with JERC MYT Regulations, the R&M expenses may 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 53: 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 table below provides the R&M expenses approved in MYT Order, Petitioner's Submission and now approved by the Commission:

Table 54: 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})	**8.92**	**8.58**	203.66
2	K factor approved (K) (%)			4.00%
3	Avg. WPI Inflation (%)			5.32%
4	**R&M Expenses = K x (GFA_{n-1}) x ($1+WPI_{inflation}$)**			**8.58**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 8.58 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 55: 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	30.43	23.78	25.92
2	Administrative & General Expenses (A&G)	5.57	2.99	5.56
3	Repair & Maintenance Expenses	8.92	8.58	8.58
	Total Operation & Maintenance Expenses	**44.93**	**35.34**	**40.06**

The Commission approves Operation & Maintenance (O&M) expenses of INR 40.06 Crore in FY 2023-24.

5.9. Gross Fixed Assets (GFA) and Capitalization

Petitioner's submission

The Petitioner has claimed the capitalisation of INR 16.50 crore as against the capitalisation of INR 11.00 crore approved in MYT order 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. The Commission has considered the capitalisation for FY 2023-24 as approved by the Commission in the MYT order dated 31 March 2022 subject to true-up based on actual capitalisation. 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 56: 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	11.00	16.50	11.00

The Commission approves the capitalisation of INR 11.00 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 Lakshadweep 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."

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

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

S. No	Particulars	FY 2023-24
1	Opening Gross Fixed Assets	203.66
2	Addition During the FY	11.00
3	Adjustment/Retirement During the FY	0
4	Closing Gross Fixed Assets	214.66

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

S. No	Particulars	FY 2023-24
1	Opening Loan	10.30
2	Additions during the year	7.70
3	Less: Normative Repayment equivalent to Depreciation	6.24
4	Closing Loan	11.76

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

S. No	Particulars	FY 2023-24
1	Opening Equity	61.10
2	Additions during the year	3.30
3	Closing Equity	64.40

5.11. Depreciation

Petitioner's submission

The Petitioner has submitted the depreciation of INR 8.38 crore as per JERC MYT Regulations 2021 as against the approved depreciation of INR 6.72 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 considered the weighted average rate of depreciation as approved in the MYT order dated March 31, 2022.

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

Table 60: 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 Gross Fixed Assets	218.09	207.73	203.66
2	Less: Assets depreciated upto 90% till FY 2018-19	22.92	22.92	22.92
3	Net Opening Gross Fixed Assets	195.17	184.81	180.74
4	Addition During the FY	11.00	16.50	11.00
5	Closing Gross Fixed Assets	206.17	210.31	191.74
6	Average Gross Fixed Assets	200.67	193.06	186.24
7	Weighted Average Depreciation rate (%)	3.35%	4.34%	3.35%
8	**Depreciation**	**6.72**	**8.38**	**6.24**

The Commission approves a depreciation of INR 6.24 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 Lakshadweep Administration only. The rate of interest considered is SBI MCLR as on 1st April 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 31.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 SBI 1 year MCLR as on 1 April 2022 plus 100 basis points i.e. 8.00% (7.00% + 1%) has been considered for computation of interest on loan.

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 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 approved by the Commission.

Table 61: 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	19.91	7.04	10.30
2	Add: Normative Loan During the year	7.70	11.55	7.70
3	Less: Normative Repayment equal to Depreciation	6.72	8.38	6.24
4	Closing Normative Loan	20.89	10.22	11.76
5	Average Normative Loan	20.40	8.63	11.03
6	Rate of Interest (%)	**8.00%**	**8.00%**	**8.00%**
7	**Interest on Loan**	**1.63**	**0.69**	**0.88**

The Commission approves Interest on Loan as INR 0.88 Crore for the FY 2023-24.

5.13. Return on Equity (RoE)

Petitioner's submission

[1] SBI 1 Year MCLR rate as on 10th Mar 2020

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

S. No.	Particulars	FY 2023-24
1	Opening Equity Amount	61.10
2	Equity Addition during year (30% of Capitalization)	4.95
3	Closing Equity Amount	66.05
4	Average Equity Amount	63.57
5	Return on Equity (%)	16.00%
6	**Total Return on Equity**	**10.17**

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 27 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 27 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 63: 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	65.42	61.10	61.10
2	Additions on account of new capitalisation	3.30	4.95	3.30
3	Closing Equity	68.72	66.05	64.40
4	Average Equity	67.07	63.57	62.75
5	Rate of Return	16.00%	16.00%	16.00%
6	**Return on Equity**	**10.73**	**10.17**	**10.04**

The Commission approves Return on Equity of INR 10.04 Crore for the FY 2023-24.

5.14. Interest on Security Deposits

Petitioner's submission

The Petitioner has submitted the interest on consumer deposit of INR 0.25 crore as per JERC MYT Regulations 2021 as against the approved interest on consumer deposit of INR 0.04 crores in MYT Order.

Commission's analysis

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

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

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

The Interest on security deposits has been calculated in accordance with the JERC MYT Regulations 2021, based on the average of the opening and closing consumer security deposits during the year. The rate of interest has been considered equivalent to the prevailing RBI Bank rate. The Commission proposes to approve the interest on security deposits in line with the approved figures in the APR of FY 2022-23 and the same shall be trued up at the time of true up of FY 2023-24.

The following table provides the interest on consumer security deposits approved in MYT Order, Petitioner's Submission and now approved by the Commission for FY 2023-24:

Table 64: Interest on Security Deposits 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 Security Deposit	0.95	5.68	5.68
2	Net addition during the year	0.01	0.33	0.33
3	Refund during the year	0.00	0.00	0.00
3	Closing Security Deposit	0.96	6.01	6.01
4	Average Security Deposit	0.96	5.85	5.85
5	Rate of Interest (%)	4.25%	4.25%	4.25%
6	**Interest on Security Deposit**	**0.04**	**0.25**	**0.25**

The Commission approves Interest on Security Deposit as INR 0.25 Crore 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 1st April 2022 plus 200 basis points i.e. 9.00% (7.00% + 2%) has been considered for computation of interest on working capital. The following table provides the Interest on working Capital proposed for each year of the Control Period.

Table 65: Interest on Working Capital submitted by the Petitioner (INR Crore)

S. No.	Particulars	FY 2023-24
1	O&M Expense - 1 month	3.74
2	Maintenance Spare @ 40% of R&M Exp - one month	0.29
3	Two Months Receivables	5.28
4	Less : Amount held as Security Deposit	6.01
5	Total Working Capital	3.29
6	Interest Rate	9.00%
7	**Interest on Working Capital**	**0.30**

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 MYT Regulation, 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 1st April 2022 i.e. 7.00% + 200 basis points). The computation of interest on working capital is shown in the following table:

Table 66: Interest on Working Capital approved by the Commission for FY 2023-24 (INR Cr)

S. No	Particulars	FY 2023-24
1	O&M Expense for 1 month	3.34
2	Maintenance spares at 40% of R&M expenses for one (1) month;	0.29
3	Receivables equivalent to two (2) months of the expected revenue from charges for use of distribution wires at the prevailing tariff	4.78
4	Less: Amount held as security deposits	6.01
5	Less: Power purchase for 1 month	-
6	Net Working Capital	2.39
7	Rate of Interest (%)	9.00%
	Interest on Working Capital	**0.22**

The Commission approves the Interest on Working Capital as INR 0.22 Crore for the FY 2023-24.

5.16. 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."

Accordingly, the Commission 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.

5.17. Non-Tariff Income

Petitioner's submission

The Petitioner has estimated the non-tariff income of INR 1.41 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 67: 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	1.41	1.41	1.41

The Commission approves Non-Tariff Income of INR 1.41 Crore for the FY 2023-24.

5.18. 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 262.12 crore as against the approved net aggregate revenue requirement of INR 202.79 crore in MYT Order dated 31 March 2023.

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 2023-24 is shown in table below:

Table 68: Aggregate Revenue Requirement approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	REC Cost	0.00	0.00	4.66
2	Fuel Cost	139.40	208.41	196.57
3	O&M Expenses	44.93	35.34	40.06
4	Depreciation	6.72	8.38	6.24
5	Interest and Finance charges	1.63	0.69	0.88
6	Interest on Working Capital	0.74	0.30	0.22
7	Return on Equity	10.73	10.17	10.04
8	Interest on Security Deposit	0.04	0.25	0.25
9	**Total Revenue Requirement**	**204.20**	**263.53**	**258.91**
10	Less: Non-Tariff Income	1.41	1.41	1.41
11	**Net Revenue Requirement**	**202.79**	**262.12**	**257.50**

The Commission approves net ARR of INR 257.50 Crore for the FY 2023-24.

5.19. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has estimated revenue from sale of power at existing tariff as INR 31.70 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 considered number of single phase and three phase consumers in the ratio of 70%-30% and has considered the power factor of 0.9 for computing fixed charges (Specified in kVA) linked with connected load as projected load is in kW terms. The revenue from category tariff as computed by the Commission for the FY 2023-24 has been shown in the following table:

Table 69: Revenue at existing tariff computed by the Commission for the FY 2023-24 (INR Crore)

S. No.	Category	Sales (MUs)	Revenue from Energy Charges (INR Crore)	Revenue from Fixed charges (INR Crore.)	Total (INR Cr.)	ABR (INR/ unit)
1	Domestic	39.01	12.39	1.63	14.02	3.60
2	Commercial	4.02	3.69	0.29	3.97	9.89
3	Government Connections	7.37	7.31	0.34	7.65	10.38
4	Industrial	0.41	0.26	0.21	0.47	11.62
5	HT Industrial	1.87	1.72	0.15	1.87	10.02
6	Public Lighting	0.82	0.55	0.02	0.58	7.05
7	Temporary	0.12	0.09	0.00	0.09	8.02
	TOTAL	**53.60**	**26.02**	**2.64**	**28.66**	**5.35**

The Commission has determined revenue from sale of power at existing tariff as INR 28.66 Crore in FY 2023-24.

5.20. 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 230.43 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 70: 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	262.12	257.50
2	Revenue from sale of power	31.70	28.66
	Revenue Gap/(Surplus)	**230.43**	**228.85**

The standalone revenue gap at existing retail tariff is INR 228.85 Crore for the FY 2023-24. The Petitioner has submitted a letter vide Reference No. 67/2/2/2022-Ele/ dated March 20, 2023 towards meeting the gap of FY 2023-24 as approved by the Commission through Budgetary support. The Commission has considered the same while approving the tariffs for FY 2023-24.

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 LED's jurisdiction is to tourism related businesses, the Commission has attempted to ensure that, while tourism is promoted, but not at the cost of other segments of society.

6.2. Applicable Regulations

Regulation 20 of MYT Regulations, 2021 states the following:

"20. Annual determination of tariff

20.1 The Commission shall determine the tariff of a Generating Company, Transmission Licensee and Distribution Licensee covered under a Multi-Year Tariff framework for each Year during the Control Period, in accordance with timelines specified in Regulation 18, having regard to the following:

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

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

Further, Regulation 68 of the JERC MYT 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."

It may be noted that the sole source of power is own generation only with no availability of external generating sources. Further, more than 99% sales are at LT level only.

Accordingly, the Commission is of the view that the functional demarcation of costs will not be of substantial impact on the present tariff structure. Further, due to practical constraints open access is not an option for the consumers of Lakshadweep.

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

Accordingly, the Commission has designed the 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 136.99 Crore for FY 2023-24 at existing tariff. The revenue gap submitted by the Petitioner for FY 2023-24 is as follows:

Table 71: 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	262.12
2	Revenue from Sale of Power at existing Tariff	31.70
3	**Net Gap during the year**	**230.43**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**230.43**

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 72: 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	257.50
2	Revenue from Sale of Power at existing Tariff	28.66

Sr. No.	Particulars	FY 2023-24
3	**Net Gap during the year**	**228.85**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**228.85**

Accordingly, the Commission determined the revenue gap of INR 228.85 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 228.85 Crore for FY 2023-24. However, the Commission has appropriately revised the tariffs for FY 2023-24 as compared to tariffs for FY 2022-23, in view of the budgetary support by the Government to meet the balance revenue gap.

6.4.1. Tariff Proposal

Petitioner Submission

1. The Petitioner has proposed that at existing tariff, the average cost of supply comes to INR 47.88 per unit, whereas Average revenue per unit at existing tariff is INR 5.79 per unit. Thus, there is a gap of INR 42.09 per unit.
2. The Petitioner has submitted that over 99.50% of power is generated from Diesel based generating stations and HSD cost forms major component of cost of supply. Further, there has been a reduction in budgetary support from the government. The above factors, apart from general rise in prices have necessitated the increase in tariff. However, the Petitioner has only proposed partial recovery of cost.
3. The Petitioner has proposed a tariff hike of 23.15%.

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

Table 73: Tariff proposal submitted by the Petitioner for FY 2023-24

Existing			Proposed		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
Lifeline Connection	INR 10/- per kW per month	1.25	**Lifeline Connection**	INR 10/- per service connection per month or part thereof	1.60
Domestic Connection			**Domestic Connection**		
0 to 100 units	INR 20/- per kW per month	1.60	0 to 100 units	INR 20/- per connection per month or part thereof for single phase INR 70/- per connection per month or part thereof for three phase	2.00
101 to 200 units		3.30	101 to 200 units		4.20
201 to 300 units		5.50	201 to 300 units		6.90
301 units & above		7.00	301 units & above		8.00

Existing			Proposed		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
Commercial			**Commercial**		
0-100 Units	INR 30/- per kW per month	7.00	0-100 Units	INR 30/- per connection per month or part thereof for single phase INR 125/- per connection per month or part thereof for three phase	8.80
101 to 200 Units		8.20	101 to 200 Units		10.30
201 units & above		10.00	201 units & above		12.50
Govt. Connection			**Govt. Connection**		
0-200 Units	INR 30/- per kW per month	8.60	0-200 Units	INR 35/- per connection per month or part thereof for single phase INR 125/- per connection per month or part thereof for three phase	10.80
201 units & above		10.00	201 units & above		12.50
Industrial	INR 50.00 per kVA per month	6.50	**Industrial**	INR 50.00 per kVA connected load or part thereof	8.20
HT Industrial	INR 150.00 per kVA per month	9.20	**HT Industrial**	INR 150.00 per kVA connected load or part thereof	11.20
Public Lighting	INR 75.00 per kVA per month	6.75	**Public Lighting**	INR 50.00 per kVA connected load or part thereof	8.20
EV Charging Stations		6.00	**EV Charging Stations**		7.50
	-				
Temporary Connections		6.36	**Temporary Connections**		7.80

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

Table 74: Average Tariff Hike for FY 2023-24 as submitted by the Petitioner (INR Crore)

Sr. No.	Particulars	Units	FY 2023-24	
			Existing	**Proposed**

Sr. No.	Particulars	Units	FY 2023-24	
			Existing	Proposed
1	Net ARR for FY 2023-24	INR Crore	262.12	262.12
2	Revenue for FY 2023-24	INR Crore	31.70	39.03
3	**Gap (1-2)**	**INR Crore**	**230.43**	**223.09**
4	Total Sales	MU	54.74	54.74
5	Average Cost of Supply	INR/kWh	47.88	47.88
6	Average Billing Rate	INR/kWh	5.79	7.13
7	Per Unit Gap	INR/kWh	42.09	40.75
8	Average Tariff Hike	INR/kWh		1.34
9	Tariff Hike in %	%		23.15%

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

establis
hed 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, in this Tariff Order, the Commission has designed tariff for various consumer categories considering the Average Cost of supply in line with the provisions of the Tariff Policy, 2016. However, The Commission, after analysis of the various components of the ARR for FY 2023-24, has come to the conclusion that the utility has to increase the average tariff from the existing level of INR 5.79 per unit to INR 48.11 per unit to recover the full amount of ARR as projected for FY 2023-24. Bringing the tariff to the prevalent Average Cost of Supply will cause the tariff shock to the consumers in the islands of Lakshadweep. Therefore, the Commission has increased the tariff levels for categories with higher subsidy support higher than the average hike and either maintained the tariff levels or increased tariff at lower-than-average tariff hike for categories with comparatively lower subsidy support.

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

Table 75: Existing vs. Tariff approved by the Commission for FY 2023-24

Existing			Approved		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
Lifeline Connection	INR 10/- per kW per month	1.25	**Lifeline Connection**	INR 10/- per kW per month or part thereof	1.40
Domestic Connection			**Domestic Connection**		
0 to 100 units	INR 20/- per kW per month	1.60	0 to 100 units	INR 20/- per kW per month or part thereof	1.75
101 to 200 units		3.30	101 to 200 units		3.75
201 to 300 units		5.50	201 to 300 units		6.25
301 units & above		7.00	301 units & above		7.75
Commercial			**Commercial**		
0-100 Units	INR 30/- per kW per month	7.00	0-100 Units	INR 30/- per kW per month or part thereof	8.00
101 to 200 Units		8.20	101 to 200 Units		9.20
201 units & above		10.00	201 units & above		12.00
Govt. Connection			**Govt. Connection**		
0-200 Units	INR 30/- per kW per month	8.60	0-200 Units	INR 30/- per kW per month or part thereof	10.00
201 units & above		10.00	201 units & above		12.00
Industrial	INR 50.00 per kVA per month	6.50	**Industrial**	INR 50.00 per kVA per month or part thereof	8.00
HT Industrial	INR 150.00 per kVA per month	9.20	**HT Industrial**	INR 150.00 per kVA per month or part thereof	10.50

Existing			Approved		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
Public Lighting	INR 75.00 per kVA per month	6.75	**Public Lighting**	INR 75.00 per kVA per month or part thereof	8.50
EV Charging Stations		6.00	**EV Charging Stations**		7.80
	-			-	
Temporary Connections		6.36	**Temporary Connections**	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 76: Revenue at tariff approved by the Commission for FY 2023-24

S. No.	Category	Sales (MUs)	Revenue from Energy Charges (INR Crore)	Revenue from Fixed charges (INR Crore.)	Total (INR Cr.)	ABR (INR/ unit)
1	Domestic	39.01	13.87	1.63	15.50	3.97
2	Commercial	4.02	4.36	0.29	4.64	11.56
3	Government Connections	7.37	8.76	0.34	9.10	12.35
4	Industrial	0.41	0.32	0.21	0.53	12.12
5	HT Industrial	1.87	1.96	0.15	2.11	11.32
6	Public Lighting	0.82	0.70	0.02	0.72	8.80
7	Temporary	0.12	0.11	0.00	0.11	9.15
	TOTAL	**53.60**	**30.08**	**2.64**	**32.71**	**6.10**

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

Table 77: Revenue gap at tariff approved by the Commission for FY 2023-24 (in INR crore)

S. No.	Particulars	FY 2023-24	
		Claimed	**Approved**
1	Net Revenue Requirement	262.12	257.50
2	Revenue from Sale of Power at Revised Tariff	39.03	32.71
3	**Net Gap during the year**	**223.09**	**224.79**
4	Add: Previous Year Gap	-	-
5	**Total Gap**	**223.09**	**224.79**

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

S. No.	Category	Average Cost of Supply (INR/unit) (with fuel cost)	Average Billing Rate at existing tariff (INR/unit	Average Billing Rate at approved tariff (INR/unit	ABR at existing tariff as % of AcoS	ABR at proposed tariff as % of AcoS
1	Life Line Connection (Upto 100 Units)*	48.04	0.00	0.00	0.00%	0.00%
2	Domestic	48.04	3.60	3.97	7.49%	8.26%
3	Commercial	48.04	9.89	11.56	20.59%	24.06%
4	Government Connection	48.04	10.38	12.35	21.61%	25.71%
5	Industrial	48.04	11.62	13.12	24.19%	27.31%
6	HT Industrial	48.04	10.02	11.32	20.86%	23.56%
7	Public Lighting	48.04	7.05	8.80	14.68%	18.32%
8	EV Charging Station	48.04	0.00	0.00	0.00%	0.00%
9	Temporary	48.04	8.02	9.15	16.69%	19.05%
10	**Overall**	**48.04**	**5.35**	**6.10**	**11.14%**	**12.70%**

**ABR has been considered as Nil due to unavailability of actual sales data with the Petitioner*

Further, the Commission has computed the category wise cost coverage through the budgetary support at the existing and approved tariffs for FY 2022-23 in the following table, thus highlighting that even though the Commission has increased the tariff levels for categories with higher subsidy support higher than the average hike, the subsidy support still remains higher for these categories vis-à-vis the other categories.

Table 79: Category wise cost coverage through the budgetary support at approved tariff for FY 2023-24

S. No.	Category	Average Cost of Supply (INR/unit)	Average Billing Rate at approved tariffs (INR/unit)	Budgetary Support at approved tariffs (INR/unit)
1	Life Line Connection (Upto 100 Units)*	48.04	0.00	48.04
2	Domestic	48.04	3.97	44.07
3	Commercial	48.04	11.56	36.48
4	Government Connection	48.04	12.35	35.69
5	Industrial	48.04	13.12	34.92
6	HT Industrial	48.04	11.32	36.72
7	Public Lighting	48.04	8.80	39.24
8	EV Charging Station	48.04	0.00	48.04
9	Temporary	48.04	9.15	38.89
10	**Overall**	**48.04**	**6.10**	**41.94**

**ABR has been considered as Nil due to unavailability of actual sales data with the Petitioner*

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

Table 80: Approved ACoS and ABR by the Commission at approved tariff for FY 2023-24

Sr. No.	Particulars	FY 2023-24

Sr. No.	Particulars	FY 2023-24
1	Net Revenue Requirement (INR Crore)	257.50
2	Revenue from Revised Tariff (INR Crore)	32.71
3	Energy Sales (MU's)	53.60
4	Average cost of supply/unit (INR/kWh)	48.11
5	Average Billing Rate (INR/kWh)	6.10
6	**Gap (INR/kWh)**	**224.79**

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

1. The Commission has approved tariff hike of 14.15% for FY 2023-24 over FY 2022-23.
2. The Commission has approved the average billing rate for FY 2023-24 as INR 6.10/kWh as against the approved Average Cost of Supply of INR 48.04/kWh.

The Petitioner has submitted a letter vide Reference No. 67/2/2/2022-Ele/ dated March 20, 2023 towards meeting the gap of FY 2023-24 as approved by the Commission through Budgetary support. The Commission has considered the same while approving the tariffs for FY 2023-24.

7. Chapter 7: Tariff Schedule

7.1. Tariff Schedule

Category	Category	Fixed Charges	Energy Charge (INR/kWh)
Lifeline Connection	**Lifeline Connection**	INR 10/- per kW per month or part thereof	1.40
Domestic Connection	**Domestic Connection**		
0 to 100 units	0 to 100 units	INR 20/- per kW per month or part thereof	1.75
101 to 200 units	101 to 200 units		3.75
201 to 300 units	201 to 300 units		6.25
301 units & above	301 units & above		7.75
Commercial	**Commercial**		
0-100 Units	0-100 Units	INR 30/- per kW per month or part thereof	8.00
101 to 200 Units	101 to 200 Units		9.20
201 units & above	201 units & above		12.00
Govt. Connection	**Govt. Connection**		
0-200 Units	0-200 Units	INR 30/- per kW per month or part thereof	10.00
201 units & above	201 units & above		12.00
Industrial	**Industrial**	INR 50.00 per kVA per month or part thereof	8.00
HT Industrial	**HT Industrial**	INR 150.00 per kVA per month or part thereof	10.50

Category	Category	Fixed Charges	Energy Charge (INR/kWh)
Public Lighting	**Public Lighting**	INR 75.00 per kVA per month or part thereof	8.50
EV Charging Stations	**EV Charging Stations**		7.80
		-	
Temporary Connections	**Temporary Connections**	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	Applicable to private houses, bungalows, hostels and hospitals run on non-commercial lines, charitable educational and religious institutions for lights, fans, radios, Government schools along with related facilities, domestic heating and other household appliances	
3	Commercial	This includes all categories which are not covered by other tariff categories i.e. Domestic Category, BPL, Industrial LT, HT Consumers and Public Lighting. Applicable for Shops, Offices, Restaurants, Bus Stations, Photo Studios, Laundries, Cinema Theatres, Industrial Lighting, clubs and other commercial installations.	
4	Government Connection	Applicable to all Government Connections except those connections specifically included in Industrial LT and Public Lighting.	
5	Industrial Supply	Applicable to all LowTension Industrial Connections including water works/pumps.	
6	HT Industrial	Applicable for the consumers connected with 11 KV.	Note: To be read with other Terms and Conditions for HT Supply mentioned separately.
7	Public Lighting	Applicable for lighting on public roads, footpaths, streets and fares in parks & markets.	

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

Sr. No.	Category	Applicability	Point of Supply news
8	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)	
9	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.

   Provided that (a) If a portion of the domestic premises limited to only one room is used for running small household business having connection under domestic category, such connection shall be billed under domestic category provided that the total monthly consumption of the consumer (including consumption for above mentioned small household business) does not exceed 150 kWh.

   If either more than one room or only one room having monthly consumption exceeding 150 kWh for consecutive three months is detected in the domestic premises being used for mixed purposes having domestic connection, such connection shall further be billed under commercial category until a separate connection of appropriate tariff is taken for that portion used for non-domestic purpose.

4) If connected load of a domestic category is found to be at variance from the sanctioned/contracted load as a result of replacement of appliances such as lamps, fans, fuses, switches, low voltage domestic appliances, fittings, etc it shall not fall under Section 126 and Section 135 of the EA 2003.

5) The department shall not commence supply or power to any applicant at low or medium voltage for utilizing induction motor of 3HP or above or welding transformers of 1 kVA capacity or above unless they are provided with the capacitors of adequate rating to comply with power factor conditions as specified in the JERC Supply Code Regulations 2018. The consumer has to provide appropriate capacitors for these installations presently running on without capacitors as per the provisions of JERC Supply Code Regulations, 2018.

6) If the consumer fails to pay the energy bill presented to him by the due date, the Department shall have the right to disconnect the supply after giving 15 days' notice as per the provision of the Act & Supply

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

Code

Regulations. Notice to this effect shall be printed on the bill of the consumer.

7) Fixed charges, wherever applicable, will be charged on pro-rata basis from the date of release of connection. Fixed charges, wherever applicable, will be double as and when bi-monthly billing is carried out; similarly slabs of energy consumption will also be considered accordingly in case of bi-monthly billing.

8) Supply to consumers connected at 11kV will be charged as per the HT Consumer category rate.

9) The billing in case of HT shall be on the maximum demand recorded during the month or 75% of contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal rate. The definition of the maximum demand would be in accordance with the provisions of the JERC Supply Code Regulations, 2018. If such overdrawl is more than 20% of the contract demand then the connections shall be disconnected after due notice to the consumers.

   i. Explanation: Assuming the contract demand as 100 KVA, maximum demand at 120 KVA and total energy consumption as 12,000 kWh, then the consumption corresponding to the contract demand will be 10,000 kWh (12,000*100/120) and consumption corresponding to the excess demand will be 2,000 kWh. This excess demand of 20 kVA and excess consumption of 2,000 kWh will be billed at twice the respective normal rate. Such connections drawing more than 120 kVA, shall be disconnected after due notice.

10) Unless specifically stated to the contrary, the figures of energy charges relates to INR per unit (kWh) charge for energy consumed during the month.

11) **Delayed payment surcharge** shall be applicable to all categories of consumers. Delayed payment surcharge of 1.50% per month shall be levied on all arrears of bills. In case of delay less than a month, the surcharge will be levied at 1.50% per month on proportionate basis considering a month consists of 30 days. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paisa shall be ignored and amount of 50 paisa or more shall be rounded off to next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only upto the month of permanent disconnection.

12) **Advance Payment Rebate**: If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.

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

14) Schedule of other charges would be as approved in this Tariff Order.

15) In case any dispute arises about the applicability of any tariff for any particular class of service or as to the interpretation of any clause of these tariffs, the decision of the Commission shall be final and binding.

7.4. Other Terms and Conditions for HT Supply

(i) Penalty Charges:

Shall be in accordance with SI. No. 9 of the General Terms and Conditions.

(ii) Power Factor Charges

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

a.

The monthly average power factor of the supply shall be maintained by the consumer not less than 0.95 (lagging). If the monthly average power factor of a consumer falls below 0.95 (lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor.

c. In case the monthly average power factor of the consumer is more than 95% (0.95 lagging), a power factor incentive @ 1% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging).

d. If the average power factor falls below 0.90 for HT/EHT consumers consecutively for 60 days, the licensee shall serve 60 days' notice period. Even after 60 days' notice if the power factor has not improved, the Licensee can serve disconnection notice mentioning that if the Power Factor is not improved within 30 days, the Licensee may disconnect the supply.

e. The power factor shall be rounded off to two decimal places. For example, 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95.

(iii) Billing Demand

Billing demand in a billing cycle will be the higher of the following: (a) 75% of the Contract Demand (b) Actual Demand recorded by the meter.

7.5. Schedule of Miscellaneous Charges

S. No.	PARTICULARS	Charges (INR)
RECONNECTION CHARGES AFTER TEMPORARY DISCONNECTION		
1.	Single Phase LT Connection	INR 50
2.	Three Phase LT Connection	INR 100
3.	HT Connection	INR 500
SERVICE CONNECTION CHARGES		
4.	Single Phase LT Connection	INR 250
5.	Three Phase LT Connection	INR 500
6.	HT Connection	INR 1,000
EXTRA LENGTH CHARGES		
7.	Single Phase	INR 50/meter
8.	Three Phase	INR 100/meter
Note: *Extra length chargeable will be beyond permissible 30 meters free length from existing network for new connection for all categories*		
TESTING FEE FOR VARIOUS METERING EQUIPMENT		
9.	Single Phase	INR 100 per meter
10.	Three Phase Meter	INR 300 per meter
11.	Three Phase Tri-vector Meter (0.5 Class) Industrial LT Consumer	INR 500 per meter

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

S. No.	PARTICULARS	Charges (INR)
12.	Three Phase Tri-vector Meter (0.5 Class)11 KV HT Consumer	INR 500 per meter
13.	Combined CT-PT Unit for 11 KV Consumer	INR 500 per unit
14.	Three Phase CT Block	INR 300 per block
15.	CT Coil	INR 100 per coil
FEES (NON-REFUNDABLE) FOR SUBMISSION OF TEST REPORT OF WIRING COMPLETION		
16.	Single Phase Lighting / Domestic Connection	INR 10 per test report
17.	Three Phase Lighting /Domestic Connection	INR 25 per test report
18.	Single Phase Lighting / Commercial Connection	INR 50 per test report
19.	Three Phase Lighting / Commercial Connection	INR 100 per test report
20.	Three Phase LT Industries	INR 250 per test report
21.	Single Phase / Streetlight / Public Lighting & others	INR 50 per test report
OTHER CHARGES		
22.	Meter shifting charges (within the premises on consumer request, if service cable is not required to be changed)	INR 100
23.	Meter shifting charges (within the premises on consumer request, if change in service cable required up to 30 metre)	INR 200
24.	Shifting of poles on consumer request	INR 1,500
25.	Diversion of HT/LT line on consumer request	INR 100/- per meter
26.	Penalty for tampering/damaging of supplier equipment	As per the relevant provisions of the JERC Supply Code Regulations, 2018

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 Order

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

The Commission is of the view that substantial time has already been given to the utility for compliance with these directions. Thus, the Commission hereby directs the utility to comply with the directions mentioned below in the given timeframe, failing which the Commission shall be constrained to initiate necessary action under Section 142 of the Electricity Act 2003 read with other provisions of the Act, and the Regulations made thereunder.

8.1.1. Filing of Review and True up of previous years

Originally issued in Tariff Order dated 31 October 2012
Commission's latest directive in Tariff Order dated 31 March 2022 *The Commission directs the Petitioner to get the accounts audited for FY 2019-20 and file the true up Petition for these years within two months from the issuance of this Tariff Order. Further, the Commission directs the Petitioner to prepare the accounts for FY 2020-21 and get the same audited to file the true up petitions along with the next tariff filing for FY 2023-24..*
Petitioner's response in the present Tariff Petition *The Petitioner has not submitted the True-Up Petition for FY 2019-20, FY 2020-21 and FY 2021-22 as the accounts for FY 2019-20 are pending with CAG for audit. Further, the Petitioner has submitted that the preparation of financial statements for FY 2020-21 and FY 2021-22 is under progress post which the audit shall be undertaken.*
Commission's response The Commission has noted the submission of the Petitioner. The Commission directs the Petitioner to get the accounts audited for FY 2019-20 and file the true up Petition for the years within two months from the issuance of this Tariff Order. Further, the Commission directs the Petitioner to prepare the accounts for FY 2020-21 and FY 2021-22 and get the same audited to file the true up petitions along with the next tariff filing for FY 2024-25.

8.1.2. Capital Expenditure

Originally issued in Tariff Order dated 31 October 2012
Commission's latest directive in Tariff Order dated 31 March 2022 *The Commission directs the Petitioner to submit the progress report of capitalisation on quarterly basis*

strictly in the format already shared.
Petitioner's response in the present Tariff Petition *It is submitted that the Department shall submit the Capital Expenditure on quarterly basis from next FY onwards. Hon'ble Commission may kindly consider and allow the same*
Commission's response The Commission directs the Petitioner to submit the progress report of capitalisation on quarterly basis strictly in the format already shared.

8.1.3. Improvement of specific fuel consumption

Originally issued in Tariff Order dated 31 October 2012
Commission's latest directive in Tariff Order dated 31 March 2022 *The Commission directs the Petitioner to submit the progress report on quarterly basis.*
Petitioner's response in the present Tariff Petition *It is submitted that the Department has installed fuel filteration pump to some of the DG sets since it will supply clean fuel to the DG sets and thereby increasing the efficiency and life. Department shall submit the detailed work undertaken for improvement in specific fuel consumption on time to time.*
Commission's response The Commission has noted the submission of the Petitioner. The Commission has observed that the detailed work undertaken for improvement of specific fuel consumption is not being submitted on quarterly basis and accordingly, directs the Petitioner to submit the progress report on quarterly basis.

8.1.4. Metering of consumer installations/ replacement of non-functional or defective meters

Originally issued in Tariff Order dated 31 October 2012
Commission's latest directive in Tariff Order dated 31 March 2022 *The Commission has noted the Petitioner's submission and directs the Petitioner to submit the progress report on the quarterly basis.*
Petitioner's response in the present Tariff Petition *It is submitted that UT of Lakshadweep Administration is in the process of privatization of Department of Electricity and hence the implementation of Smart Metering project is not under consideration because of high cost of per unit meter cost of around Rs 140/- per month per meter under TOTEX mode. The high cost is basically due to the proposed use of VSAT based technology due to non availability of good mobile internet connectivity (2G/3G). Hence commission may please drop this directive.*
Commission's response The Commission has noted the Petitioner's submission and directs the Petitioner to submit the progress report on the quarterly basis.

8.1.5. State Load Despatch Centre

Originally issued in Tariff Order dated 19 March 2018

Commission's latest directive in Tariff Order dated 31 March 2022
The Commission directs the Petitioner to follow up the matter with POSOCO for the establishment of SLDC.
Petitioner's response in the present Tariff Petition
It is submitted that LED had convened an initial meeting with POSOCO officials and the proposal of setting up of SLDC had been discussed. The information sought by POSOCO officials had been provided from time to time and they are in the process of submission of draft report for the consideration of UTLA. Based on the final report further course of action can be initiated.
Commission's response
The Commission has noted the submission made by the Petitioner. The Commission directs the Petitioner to expedite the matter with POSOCO for the establishment of SLDC.

8.1.6. Slab wise details

Originally issued in Tariff Order dated 19 March 2018
Commission's latest directive in Tariff Order dated 31 March 2022 *The Commission directs the Petitioner to provide the island-wise, month-wise and slab-wise detailed break up of number of consumers, connected load and energy sales under each consumer category for the last five years within three months of the issuance of this order. Further, the Commission also directs the Petitioner to maintain and submit month wise island-wise information for category-wise sales, number of consumers, connected load, T&D losses, plant-wise generation/purchase, fuel cost, etc. on quarterly basis within three months of the issuance of this order.*
Petitioner's response in the present Tariff Petition *The details of island-wise, month-wise and slab-wise details are being compiled and shall be submitted in due course. Commission may kindly allow the same.*
Commission's response The Commission again directs the Petitioner to provide the island-wise, month-wise and slab-wise detailed break up of number of consumers, connected load and energy sales under each consumer category for the last five years within three months of the issuance of this order. Further, the Commission also directs the Petitioner to maintain and submit monthly island-wise information for category-wise sales, number of consumers, connected load, T&D losses, plant-wise generation/purchase, fuel cost, etc. on quarterly basis within three months of the issuance of this order.

8.1.7. Details of upcoming power plants

Originally issued in Tariff Order dated 19 March 2018
Commission's latest directive in Tariff Order dated 31 March 2022 *The Commission directs the petitioner to submit quarterly the status of the upcoming projects.*
Petitioner's response in the present Tariff Petition *LED shall submit the status of upcoming projects on quarterly basis.*
Commission's response The Commission again directs the petitioner to submit quarterly the status of the upcoming projects.

8.1.8. Explore alternate sources of energy generation

Originally issued in Tariff Order dated 19 March 2018

Commission's latest directive in Tariff Order dated 31 March 2022
The Commission directs the petitioner to explore alternate source of energy generation and submit an action plan within 6 months of issuance of this order, for utilizing the renewable generation sources for reducing the dependency on diesel based generation.
Petitioner's response in the present Tariff Petition
It is submitted that the process of privatization of Department of Electricity is under process and as such UTLA is exploring all the possibility of generation from clean energy sources including LNG. UTLA is having discussion with Transaction Advisor for exploring all possible way. Once the tendering process shall be completed, the further course of action in this regard can be initiated. The progress in this regard shall be submitted to the commission.
Commission's response
The Commission is concerned regarding the dependence on costly electricity supply as most of the power is sourced from diesel generation. The Commission directs the petitioner to explore alternate source of energy generation and submit an action plan for utilizing the renewable generation sources for reducing the dependency on diesel based generation.

8.1.9. Reliability Indices proposal for the control period

Originally issued in Tariff Order dated 31 March 2022
Commission's latest directive in Tariff Order dated 31 March 2022
The Commission observes that the Petitioner even after repeated instructions from the Commission during the proceedings of the MYT Petition, has not submitted the trajectory for the Reliability indices for the Third Control Period. The Commission directs the Petitioner to submit the trajectory for the Reliability indices for the Third Control Period within 30 days from the issuance of this order, failing which the Commission will be forced to set the trajectory Reliability indices for the Third Control Period.
Petitioner's response in the present Tariff Petition
It is submitted that the Lakshadweep Electricity Department being an integrated utility having both generation and distribution functions and is not having any grid connectivity and hence having no back up source for continued power supply in case of tripping at Generating plants. Most of the interruptions are happening at Generating plants and affects whole consumers. Department is maintaining Under Ground Cable distribution networks and hence having less failures in distribution networks. Considering the above submission by the department, commission may fix the Reliability Indices values.
Commission's response
The Commission has noted the submission made by the Petitioner. The Commission directs the Petitioner to submit the data of failures for generating plants within 30 days of from the issuance of this order.

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 28th February 2023 through Video Conference

Table 81: List of Stakeholders

S.No.	Name of Person (Mr/Ms)
1	Sajeedcic (Govt.: S.S. School, Kavaratti)
2	Kamaludheen. A (Arakkalakam(H), Ex-member Gram Panchayat, Kavaratti)
3	Achada Ahmed Haji (Ex-President Cum-chief councilor, District Panchayat, Kavaratti)
4	T. Abdul Khader (Ex-Chairperson, Gram Panchayat, Kavaratti)
5	M.I Attakoya
6	Ajas Akber (President, NSUI, Lakshadweep)
7	Aboobacker Koya. P.P (President, Organic Coconut Producer's Society, Kavaratti)
8	T.P. Abdul Razak (President, Nationalist Congress Part, Kavaratti)
9	Misbah Ashiyoda (President, Lakshadweep ST Welfare Association, Kavaratti)
10	M. Abdul Razak (Ex-DP Member)
11	Mohammed Razi PT (Pallithithiyoda (H))
12	A. Misbah (President LSTWA)
13	Asig k. GS (NSUI)
14	Dr. M.S. Syed Ismail Koya