TARIFF ORDER

True-up for the FY 2019-20, Annual Performance Review (APR) for FY 2023-24, Aggregate Revenue Requirement (ARR) and Determination of Retail Tariff for FY 2024-25

Petition No. 118/2023

For

Lakshadweep Electricity Department (LED)

10th June, 2024

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

Abbreviation	Full Form
A&G	Administrative & General
ABR	Average Billing Rate
ACoS	Average Cost of Supply
Act	The Electricity Act, 2003
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
CAGR	Compound Annualized Growth rate
Capex	Capital Expenditure
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievance Redressal Forum
CGS	Central Generating Stations
COD	Commercial Operation Date
Commission/JERC	Joint Electricity Regulatory Commission for the State of Goa and Union Territories
Cr.	Crore
DG	Diesel Generator
Discom	Distribution Company
EA 2003	The Electricity Act, 2003
ED	Electricity Duty
EDF	Electricity Development Fund
FAR	Fixed Asset Register
FY	Financial Year
GFA	Gross Fixed Assets
HSD	High Speed Diesel
HP	Horse Power
HT	High Tension
Rs.	Indian Rupee
IPDS	Integrated Power Development Scheme
IPP	Independent Power Producer
JERC	Joint Electricity Regulatory Commission for the State of Goa and Union Territories
KVA	Kilo Volt Ampere
KWh	Kilo Watt Hour
LNG	Liquefied Natural Gas
LOI	Letter of Intent
LT	Low Tension
MNRE	Ministry of New & Renewable Energy
MU	Million Units
MW	Mega Watt
MYT	Multi-Year Tariff

Abbreviation	Full Form
NIWE	National Institute of Wind Energy
O&M	Operation and Maintenance
PF	Power Factor
PLF	Plant Load Factor
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
REC	Renewable Energy Certificate
RoE	Return on Equity
RPO	Renewable Purchase Obligation
RTC	Round the Clock
SECI	Solar Energy Corporation of India
T&D	Transmission & Distribution
TVS	Technical Validation Session
UT	Union Territory

Before the
Joint Electricity Regulatory Commission
For the State of Goa and Union Territories, Gurugram

CORAM

Shri Alok Tandon, Chairperson
Smt. Jyoti Prasad, Member (Law)
Petition No. 118/2023
Date: 10th June, 2024

In the matter of

Approval for the True-up for FY 2019-20, and Annual Perforance Review (APR) for FY 2023-24, and Aggregate Revenue Requiremnt (ARR) and determination of Retail Tariff for FY 2024-25

And in the matter of

Lakshadweep Electricity Department, (LED) .... Petitioner

ORDER

1. This Order is passed in respect of the Petition filed by the Lakshadweep Electricity Department, (LED) (hereinafter referred to as "The Petitioner" or "LED" or "The Licensee") for the approval of True-up of FY 2019-20, Annual Performance Review (APR) for FY 2023-24 and Aggregate Revenue Requirement (ARR) and determination of Retail Tariff for the FY 2024-25 before the Joint Electricity Regulatory Commission (hereinafter referred to as "The Commission" or "JERC").

2. The Commission scrutinized the said Petition and generally found it in order. The Commission admitted the Petition on 21st December 2023. The Commission thereafter requisitioned further informations/ clarifications on the data gaps observed to take a prudent view of the said Petition. The Commission also held a Technical Validation Session (TVS) to determine the sufficiency of data and the veracity of the informations submitted. Further, suggestions/ comments/ views and objections were invited from the Stakeholders and Electricity Consumers. The Public Hearing was held on 14th May

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2024 via video conference and all the Stakeholders/Electricity Consumers present in the Public Hearing were heard.

3. The Commission based on the Petitioner's submission, relevant JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, facts of the matter, Rules and provisions of the Electricity Act, 2003 and after proper due diligence and prudence check, has approved the True-up for FY 2019-20, Annual Performance Review (APR) for FY 2023-24 and Aggregate Revenue Requirement (ARR) and determination of Retail Tariff for the FY 2024-25.

4. A summary has been provided as follows:

I. True-up of FY 2019-20.

a. The following table provides ARR, Revenue and gap as submitted by the Petitioner and approved by the Commission in the True-up of FY 2019-20:

Table 1: Standalone Revenue Gap/ (Surplus) approved for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Petitioner's Submission	Approved by the Commission
1.	Net Revenue Requirement	153.65	140.67
2.	Revenue from Retail Sales	24.73	24.73
3.	**Net Gap /(Surplus)**	**128.92**	**115.94**

b. The Petitioner has submitted a letter dated 20th May 2024 from the Administration of Lakshadweep wherein the administration had assured that the Gap will be met from budgetary support for the FY 2019-20. Accordingly, no revenue gap is carried forward to the future years.

II. Annual Performance Review (APR) of FY 2023-24

a. The following table provides ARR, Revenue and Standalone Gap/ (Surplus) at the existing tariff as submitted by the Petitioner and approved by the Commission in the APR of the FY 2023-24:

Table 2: Standalone Revenue Gap/ (Surplus) at existing tariff for the FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Petitioner's Submission	Approved by the Commission
1.	Net Revenue Requirement	246.95	234.21
2.	Revenue from Retail Sales at existing Tariff	35.55	34.41
3.	**Net Gap /(Surplus)**	**211.40**	**199.80**

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III. Aggregate Revenue Requirement of FY 2024-25

a. The following table provides ARR, Revenue and Standalone Gap/ (Surplus) at existing tariff as submitted by the Petitioner and approved by the Commission for the FY 2024-25:

Table 3: Standalone Revenue Gap/ (Surplus) at existing tariff for the FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Petitioner's Submission	Approved by the Commission
1.	Net Revenue Requirement	267.92	259.09
2.	Revenue from Retail Sales at existing Tariff	36.52	35.42
3.	**Net Gap /(Surplus)**	**231.40**	**223.67**

b. The following table provides ARR, Revenue and Standalone Gap/ (Surplus) at approved tariff as approved by the Commission for the FY 2024-25:

Table 4: Standalone Revenue Gap/ (Surplus) at approved tariff for the FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Petitioner's Submission	Approved by the Commission
1.	Net Revenue Requirement	267.92	259.09
2.	Revenue from Retail Sales at proposed Tariff	43.82	42.05
3.	Gap / (Surplus) for the year	224.10	217.04
4.	**Net Gap /(Surplus)**	**224.10**	**217.04**

c. The Petitioner has proposed a tariff hike of 19.98% in the tariff schedule of FY 2024-25.

d. The Commission has approved an average tariff hike of 18.71% in order to reduce the reliance of the Petitioner on budgetary support from the Administration of the UT of the Lakshadweep. The Commission has approved the Average Billing Rate (ABR) of Rs. 7.80/kWh against the approved Average Cost of Supply (ACoS) of Rs. 48.05/kWh. The entire revenue gap shall be met through the budgetary support as per assurance letter of the Administration of UT of Lakshadweep dated 13th March 2024. The Commission acknowledges the said letter of assurance from the Administration of Lakshadweep towards budgetary support for FY 2024-25, and hence the revenue gap for FY 2024-25 has been considered as NIL.

5. This Order shall come into force with effect from 16th June 2024 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

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in three daily newspapers in the respective local languages of the region, besides English, having wide circulation in their respective areas of supply and also upload the Tariff Order on its website.

7. The attached documents giving detailed reasons, grounds and conditions are the Integral part of this Order.

Ordered accordingly.

Sd/-
(Jyoti Prasad)
Member (Law)

Sd/-
(Alok Tandon)
Chairperson

Place: Gurugram, Haryana
Date: 10th June, 2024

Certified Copy

(S.D. Sharma)
Secretary (I/c), JERC

Chapter 1 : Introduction

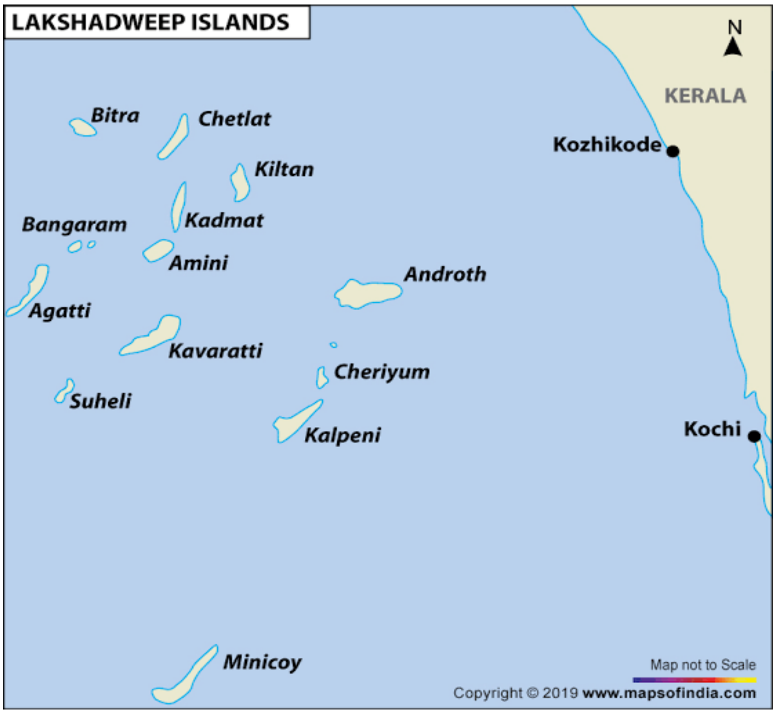
1.1. About Joint Electricity Regulatory Commission (JERC)

In the exercise of powers conferred by the Electricity Act 2003, the Central Government constituted the Joint Electricity Regulatory Commission for all the Union Territories except Delhi to be known as "Joint Electricity Regulatory Commission for the Union Territories" vide notification no. 23/52/2003-R&R dated 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 "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 regulations of the Power Sector in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Dadra and Nagar Haveli & Daman and Diu, and Puducherry, consisting of generation, transmission, distribution, trading and use of electricity etc. Its primary objective includes taking measures conducive to the development of the electricity industry, promoting competition therein, protecting the interests of consumers and ensuring uninterrupted and quality power supply at affordable rates in to all the areas under its jurisdiction.

1.2. About 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 an 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.

Although, 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 Electricity Department, Lakshadweep (LED)

Lakshadweep Electricity Department (hereinafter referred to as “LED” or “Utility” or “Petitioner”) is solely responsible for power supply in the Union territory of Lakshadweep. Power requirement of LED is met by own generating stations as it is not connected to the Central Grid.

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 are the only source of power, diesel has to be transported from Kozhikode (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 cater 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) in 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-stations 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 5: Electricity Department at a glance (FY 2022-23)

Sr. No.	Particulars	Details
1	Total Installed Capacity	28.05 MW
1(a)	Diesel Generation	27.01 MW
1 (b)	Solar Generation	1.04 MW
2	No. of Power Houses	17 Nos. (11 Nos of Diesel power plant, 6 Nos of solar power plant)
3	Total Staff Strength	290 Nos.
4	HT Line	113 kms
5	LT Line	434 kms
6	Distribution Transformer	110 Nos.
7	No. of consumers	26,848
8	Units Sold	51.74 Mus

1.4. Multi-Year Tariff Regulations, 2018

The Commission notified the "Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2018" (hereinafter referred to as JERC MYT Regulations, 2018) on 10th August, 2018. These Regulations are applicable for the 2nd MYT Control Period comprising of three financial years from FY 2019-20 to FY 2021-22. These Regulations are applicable to all the generation companies, transmission and distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Dadra & Nagar Haveli and Daman & Diu, and Puducherry.

1.5. Multi-Year Tariff Regulations, 2021

The Commission notified the, "Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff)

Regulations, 2021" (hereinafter referred to as JERC MYT Regulations, 2021) on 22nd March 2021. These Regulations are applicable for 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, Daman & Diu and Dadra & Nagar Haveli and Puducherry.

1.6. Filing and Admission of the present petition

The Petition was admitted on 21st December 2023 and was marked as Petition No. 118/2023.

1.7. Interaction with the Petitioner

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

The Commission conducted the Technical Validation Session (TVS) via video conferencing with the Petitioner during which the discrepancies in the Petition were discussed and additional informations required by the Commission were asked. Subsequently, the Petitioner submitted replies to the issues raised in the TVS sessions 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 date:

Table 6: Timelines of the interaction with the Petitioner

S. No.	Subject	Date
1.	Issue of First Deficiency Note	25th January 2024
2.	Reply of 1st deficiency note received from Petitioner	28th February 2024
3.	Issue of second deficiency note	8th March 2024
4.	Reply of 2nd deficiency note received from Petitioner	21st March 2024
5.	Technical Validation Session	21st May 2024

1.8. 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 comments 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, and the public at large about the Public Hearing to be conducted by the Commission on 14th May, 2024 via video conferencing.

1.9. Public Hearing

The Public Hearing was held on 14th May 2024 via video conferencing to discuss the issues, if any, related to the Petition filed by the Petitioner. The issues and concerns raised by the public/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.

1.10. Adherence to the Model Code of Conduct

The Commission has noted that in view of the General Elections 2024, the Model Code of Conduct (MCC) was imposed by the Election Commission of India. The MCC was effective from 16th March 2024 to 6th June 2024.

Therefore, in view of enforcement of Model Code of Conduct, the Commission decided to issue the tariff order once the Model Code of Conduct is over.

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 its website and to advertise in the Local Cable network in the given format duly inviting comments/suggestions from the public as per the provisions of the "JERC MYT Regulations, 2018" and "JERC MYT Regulations, 2021".

The Public Hearing was held on 14th May 2024 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 name of the Stakeholders who attended the Public Hearing are provided in Annexure-I.

2.2. Suggestions/ Objections, Response of the Petitioner 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 relevant observations of the stakeholders have been suitably considered by the Commission while finalizing this Tariff Order. The submissions of the Stakeholders, response of the Petitioner and views of the Commission are summarized below:

2.2.1. No Tariff Hike

Stakeholder's Comment:

The stakeholders have submitted that the Commission should not consider the tariff hike proposed in various categories, especially in domestic category. Stakeholders submitted that due to geographical location of Lakshadweep, there are very limited economic activities, the agriculture income of the people has remained at low level and besides that the climate change is adversely affecting fisheries business. So, considering aforesaid reasons it is requested to the Commission that there should be no tariff hike for the FY 2024-25.

Petitioner's Response:

It is submitted that, over 99.50% of power is generated from diesel based generating stations. Major component of cost of supply is cost of HSD and Lubricants. 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, in the tariff proposal only partial recovery of cost is proposed. Average cost of supply based on the Revised ARR & energy sales for the FY 2024-25 is Rs.49.70 /unit. Average revenue per unit at existing tariff is Rs. 6.78. The gap is Rs.42.93. The net revenue requirement for the FY 2024 - 25 is Rs. 267.92 Crores. The revenue from sale of power at existing tariff is Rs. 36.52 Crores. The Net gap during the year is Rs. 231.40 Crores. The department proposed to recover a part of the gap through hike in tariff as recovery of the total gap.

Commission's View:

The Commission understands the difficulties of life in the islands of Lakshadweep and the adverse impact of climate change on the economic activities and accordingly, has appropriately revised the tariff with minimal tariff shock. The Commission has discussed the principles adopted for approving the Tariff in Chapter 6 of this order.

2.2.2. Infrastructure for Renewable Energy

Stakeholder's Comment:

The stakeholder submitted that since some years, the Central government is giving priority to create more infrastructures to take benefit of Solar Energy source. Govt. buildings may be considered for Rooftop solar. As cyclones are frequent during south-west monsoon, so instead of planning big floating solar plants, other suitable alternatives like insertion of appropriate size dynamo in outgoing sea water of desalination plants may be considered.

Petitioner's Response:

- Solar Energy corporation of India (i.e. SECI) vide MNRE letter no.283/24/2021-Grid Solar dated 16th September 2022 and vide LEDA letter no.1/3/2022-LEDA/28 dated 02nd January 2023 is designated as Nodal agency for implementation of Renewable Energy Projects at Lakshadweep. SECI conducted a study to examine the potential of RE-based electrification in Lakshadweep and design optimal hybrid systems with storage to meet the individual electrical load in each of the 11 inhabited islands. Accordingly, they have prepared and submitted DPR to meet 60% of the demand to bring down diesel consumption to 40% with an estimated solar capacity of 25.14 MW & 75.71 MWh BESS in this, 4.3 MW is from Ground mounted Solar Plant, 6.24 MW is from Rooftop Solar and 14.6 MW is proposed to be installed in the form of Floating PV solar projects in the lagoon areas. SECI has already commissioned 1.7 MW capacity plant with 1.4 MWh BESS at Kavaratti and Agatti islands. An area of 5,42,300 Sqm land area is required for installation of ground mounted solar plants to meet 100% of power requirement from Renewable Energy Source. Solar Energy Corporation of India through National Centre for Sustainable Coastal Management (NCSCM) has submitted Environment Impact assessment report (EIA) for FSPV projects at Kavaratti and Agatti. The Department of Science and Technology, Fisheries and Environment and Forest and climatic change has provided suggestions/ comments on the EIA. For implementation of this project approval from Lakshadweep Coastal Zone Management Authority (LCZMA) and National Coastal Zone Management Authority is to be obtained. SECI is in the process of submitting the application for the CRZ/environment clearance through online portal i.e. E-Parivesh Portal.
- SECI carried out survey of all Government buildings in Lakshadweep during 2020 to 2021 for Installation of Rooftop Solar (RTS) Plants and identified 160 buildings suitable for installing 2.76 MW Rooftop solar. Tender has been published on 27th

September 2023 for installing 2.76 MW of Rooftop solar on 160 Government Buildings. SECI invited financial bids among the vendors selected for Lakshadweep. Last date of bid submission was on 20th October 2023. Since no response from the empanelled vendors was received, the tender opening was extended twice. Due to poor response from the vendor, SECI has processed open tender. The tender published on 15th February 2024 and scheduled to open on 22nd March 2024 which is extended up to 30th April 2024. Pre-bid meeting with 15 empanelled vendors was conducted by SECI at Kavaratti, Lakshadweep on 5th April 2024. However, no vendors have participated.

- In the case of implementation of RTS in the private buildings, department requested many vendors at Mainland for the empanelment. Owing to meagre capacity scattered in different islands, vendors were initially hesitant for empanelment. However, with the concerted efforts of Administration, 4 vendors have been empanelled. One of the vendors quoted Rs.98,000 for installation of one kW RTS plant. The subsidy provided by the MNRE is Rs.30,000/kW for up to 2 kW and Rs.18,000/kW for above 2 kW and up to 3 kW and a fixed amount of Rs.78,000 for systems above 3 kW. In addition to MNRE Subsidy, UTLA is providing Rs. 10,000/kW for up to 3 kW RTS plant. As per the above subsidy structure the consumers have to pay nearly Rs.58,000/kW for up to 2 kW and Rs.70,000/kW for above 2kW and up to 3kW. Till now 23 applications have been received. Technical feasibility from the department has been provided. The applicants are hesitant to choose the vendors for installation and this may be due to high installation cost when compared to other states/UT's. The rest of the country has to pay around Rs.20,000 /kW after Subsidy. If the contribution from a consumer of Lakshadweep for one kW rooftop system is also fixed at Rs.20,000/kW as for other states, this investment can be recovered by the consumer within a period of 4 years. Expenditure from Government of India as subsidy would be thus recovered within a period of 8 months/less than a year. In Laksahdweep, electricity is being generated through DG sets and each unit generation costs Rs. 48/- i.e. generation of 1500 units will cost Rs 72000/-. Hence one kW capacity RTS installed will save Rs. 67000/- annually for the Government.
- SECI and National Institute of Wind Energy (NIWE) Chennai is in the process of identifying suitable site for installation of Wind Mast at three islands viz. Kavaratti, Andrott & Minicoy. NIWE prepared and submitted site selection report for Agatti, Kavaratti, Kalpeni, Androth, Kadmath and Minicoy based on previous visits.
- SECI has proposed LiDAR technology for assessing the wind instead of MET Masts. NIWE further informed that funds for the present study through wind mast are being provided by MNRE, hence, going for LiDAR may require additional budget and approval of competent authority. SECI requested NIWE to explore the possibility of installation of LiDAR on existing building structures at Lakshadweep instead of going for MET mast since the ICRZ (Costal Regulation zone) clearance is not necessary for this.

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. Use of LNG as fuel for generators

Stakeholder's Comment:

Stakeholder submitted that in place of diesel, LNG may be used as fuel for generators. It may bring down the cost of power production to 1/3 of present cost.

Petitioner's Response:

The Petitioner submitted that, the replacing of HSD oil with LNG is the matter which requires a detailed technical and financial study to be conducted to understand the economic viability and any future hazard occurrences. Moreover, it is known that LNG may not be encouraged in place of HSD at Lakshadweep since the storage and handling of LNG requires huge safety measures than the HSD oil and also has high risk of explosion than HSD oil. Also, the present Diesel Generator Sets are not designed for LNG fuelling. Hence, it has to be upgraded or replaced with LNG supporting DG Sets and the present power houses has also to be augmented to higher area which will incur high cost and the land availability in the islands are also less. LNG re-fuelling requires separate transfer terminals from the ship terminals to storage tanks. In these small and geographically challenging islands this may lead to diminution of the environment. However, department will look into the possibility of replacing HSD with LNG for fuelling.

Commission's View:

The Commission appreciate the concern of the Stakeholder. Further the stakeholder may note the submission of the Petitioner.

Chapter 3 : True-up of the FY 2019-20

3.1. Background

The MYT Order for 2nd Control Period was issued by the Commission on 20th May 2019 (for FY 2019-20 to FY 2021-22) approving the Aggregate Revenue Requirement (ARR) for 2nd Control Period, and Determining the Retail Supply Tariff for FY 2019-20. Subsequently, the Commission conducted Annual Performance Review (APR) for FY 2019-20 in its order dated 18th May 2020.

The Commission, in this Chapter carries out the True-up of FY 2019-20 in accordance with the principles laid down in the "Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2018", (hereinafter referred to as JERC MYT Regulations, 2018"). The True up for the FY 2019-20 has to be carried out in accordance with Regulation 11 of the "JERC MYT Regulations, 2018", which states as following:

"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;

b) Annual Performance Review: a comparison of the revised performance targets of the Applicant for the current Financial Year with the approved forecast in the Tariff Order corresponding to the Control Period for the current Financial Year subject to prudence check;

c) Tariff determination for the ensuing Year of the Control Period based on the revised forecast of the Aggregate Revenue Requirement for the Year;

d) Review of compliance with directives issued by the Commission from time to time;

e) Other relevant details, if any.

11.4 Upon completion of the exercise, the Commission shall attribute any variations or expected variations in performance for variables specified under Regulation 12 below, to factors within the control of the Applicant (controllable factors) or to factors beyond the control of the Applicant (uncontrollable factors):

Provided that any variations or expected variations in performance, for variables other than those specified under Regulation 12 below shall be attributed entirely to controllable factors.

11.5 Upon completion of the exercise, the Commission shall pass an order recording:

a) Components of approved cost pertaining to the uncontrollable factors, which were not recovered during the previous Year, to be passed through in tariff as per Regulation 13 of these Regulations:

Provided that, for a Generating Company, the above exercise shall be in accordance with prevalent CERC Tariff Regulations.

b) Approved aggregate gain or loss to the Transmission Licensee or Distribution Licensee on account of controllable factors, and the amount of such gains or such losses that may be shared in accordance with Regulation 14 of these Regulations:

Provided that, for a Generating Company, the above exercise shall be in accordance with prevalent CERC Tariff Regulations.

c) Carrying cost shall be allowed for a Generating Company, Transmission Licensee or Distribution Licensee on the amount of revenue gap for the period from the date on which such gap has become due, i.e., from the end of the Year for which true-up has been done, till the end of the Year in which it is addressed, on the basis of actual rate of loan taken by the Licensee to fund the deficit in revenue:

Provided that carrying cost on the amount of revenue gap shall be allowed subject to prudence check and submission of documentary evidence for having incurred the carrying cost in the years prior to the year in which the revenue gap is addressed:

Provided also that if no loan has been taken to fund revenue deficit, the Commission shall allow Carrying Cost on simple interest basis at one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for 1 Year period, as may be, applicable as on 1st April of the relevant Year plus 100 basis points;

Provided further that in case of revenue surplus, the Commission shall charge the Licensee a Carrying Cost from the date on which such surplus has become due, i.e., from the end of the Year for which true up has been done, till the end of the Year in which it is addressed on simple *interest basis at one(1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for 1 Year period, as may be, applicable as on 1st April of the relevant Year plus 100 basis points.*

d) Revision of estimates and tariff for the ensuing Financial Year."

3.2. Approach for True-up for FY 2019-20

The Petitioner has requested approval for True-up of FY 2019-20 on the basis of annual audited accounts for FY 2019-20. The Petitioner has submitted details of the expenditure and the revenue for the year based on its audited accounts along with a comparison of the actual revenue and expenditure against the corresponding figures previously approved by the Commission in the ARR order of FY 2019-20.

The Commission has analysed various elements of the actual revenue and expenses for the FY 2019-20 based on the audited accounts submitted by the Petitioner and has carried out the True-up exercise in accordance with the principles laid down in the JERC MYT Tariff Regulations, 2018 after due prudence check. The Commission has allowed necessary adjustments in cases where variations are for reasonable and justifiable reasons.

3.3. Energy Sales

Petitioner's Submission:

The Petitioner has submitted the total quantum of energy sales for FY 2019-20 as 48.42 MUs as against an approved energy sales quantum of 53.45 MUs in the ARR Order dated 20th May 2019.

Commission's Analysis:

Regulation 12.1 of the JERC MYT Regulations, 2018 provides the following:

"*12.1 For the purpose of these Regulations, the term "uncontrollable factors" for a Transmission or Distribution Licensee shall comprise of the following factors, which were beyond the control of the Licensee, and could not be mitigated by the Licensee:*

a) Force Majeure events;

b) Change in Law, judicial pronouncements and Orders of the Central Government, State Government or Commission;

c) Variation in the number or mix of Consumers or quantities of electricity supplied to Consumers;

d) Transmission loss;

e) Variation in the cost of power purchase due to variation in the rate of power purchase from approved sources, subject to clauses in the power purchase agreement or arrangement approved by the Commission;

f) Variation in fuel cost;

g) Change in power purchase mix;

h) Inflation;

i) Transmission Charges for a Distribution Licensee;

j) Variation in market interest rates for long-term loans;

k) Employee expenses limited to one time payment owing requirements of a pay commission and terminal liability of employees;

l) Taxes and Statutory levies;

m) Taxes on income;

n) Income from the realisation of bad debts written off:

Provided that where the Applicant believes, for any variable not specified above, that there is a material variation or expected variation in performance for any Financial Year on account of uncontrollable factors, such Applicant may apply to the Commission for inclusion of such variable at the Commission's discretion, under this Regulation for such Financial Year:

Provided further that the uncontrollable factors for a Generating Company shall be as specified in the prevalent CERC Tariff Regulations."

The Commission notes that as per above provision, the variation in the number or mix of Consumers as well as quantities of electricity supplied to Consumers is uncontrollable. Hence, the Commission approves the actual number as submitted by the Petitioner. The table given below provides the energy sales approved by the Commission in the Tariff Order dated 20th May 2019, the Petitioner's submission and quantum of energy sales now trued-up by the Commission.

Table 7: Energy Sales (MUs) trued-up by the Commission for FY 2019-20

Sr. No.	Category	Approved in ARR order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
1.	Domestic	40.10	35.59	35.59
2.	Commercial	3.24	3.12	3.12
3.	Govt. Connection	8.26	7.60	7.60
4.	Industrial	0.45	0.36	0.36
5.	HT Consumers	0.64	0.81	0.81
6.	Public Lighting	0.67	0.81	0.81
7.	Other Temporary Connection	0.09	0.14	0.14
Total Sales		53.45	48.42	48.42

The Commission approves 48.42 MUs as energy sales in the True-Up of the FY 2019-20.

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

Petitioner's Submission:

The Petitioner has submitted that it has achieved an Intra-State T&D loss of 14.52% in the FY 2019-20 against the target of 12.75% provided in ARR order dated 20th May 2019 for FY 2019-20.

Commission's analysis:

The Petitioner has not submitted the energy Audit report for FY 2019-20. In reply to 1st & 2nd deficiency note the Petitioner has provided the information of HSD Generation, and Solar Generation. Therefore, the Commission has considered energy available and actual Sales for determining the loss. On the basis of energy available and actual sales, the Commission approves the T&D loss of 14.12%.

Table 8:Intra-State Transmission and Distribution (T&D) loss

Sr. No.	Particulars	Trued-up by the Commission
1.	Energy Sales within the UT (MUs)	48.42
2.	Energy Available at UT Periphery (HSD Generation (55.74 MU) + Solar Generation (0.64 MU)) (MUs)	56.39*
3.	T&D losses (MUs) (2-1)	7.96
4.	T&D Loss (%)	14.12%

**In reply to first deficiency note the Petitioner has submitted the Energy Availability as 56.39 MUs.*

The table below provides the Intra-State T&D loss approved in the ARR of FY 2019-20, Petitioner's submission and as approved by the Commission now.

Table 9: Intra-State transmission and distribution loss (%) for FY 2019-20

Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
T&D Losses (%)	12.75%	14.52%	14.12%

Since, the Petitioner has not been able to achieve the Intra-State T&D loss target (i.e. 12.75%) for the year, the disincentive for the same has to be borne by the Petitioner in accordance with Regulation 14.2 of the "JERC MYT Regulations, 2018", which is reproduced below:

As per Regulation 14.2 of the JERC MYT Regulations 2018,

"*14.2 Approved aggregate loss, if any to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be on account of the Licensee, and shall not be passed to the Consumers*"

The Commission, while truing up for FY 2019-20, has approved the actual Intra-State T&D loss of 14.12% for the FY 2019-20. The applicable dis-incentive in this regard has been considered in Section 3.18.1.

3.5. Energy Balance

Petitioner's Submission:

The information regarding Energy requirement and Energy availability, submitted by the Petitioner are as follows.

Table 10: Energy Balance (MU) submitted by Petitioner

Sr. No.	Particulars	Petitioner's Submission
A.	**Energy Requirement (MUs)**	
1.	Total Sales within UT	48.42
2.	Transmission & Distribution Losses (%)	14.52%
	Transmission & Distribution Losses (MUs)	8.23
3.	**Total Energy Requirement (for sale to retail consumers)**	**56.65**
B.	**Energy Availability at Periphery**	
1.	Power Purchase	-
2.	Own Generation	56.65*
3.	**Total Energy Availability**	**56.65**
C.	**Total shortfall/(Surplus)**	**0.00**

* *In reply to first deficiency note the Petitioner has submitted the Energy Availability as 56.39 MUs.*

Commission's analysis:

The information submitted by the Petitioner on Power Purchase Quantum has been examined and accordingly the energy balance for the FY 2019-20 is derived. The Commission has considered the energy availability as per details submitted by the Petitioner in its reply to deficiency note. The following table provides the energy balance approved in the ARR of the FY 2019-20, the Petitioner's submission and now trued-up by the Commission.

Table 11: Energy Balance (MU) approved by the Commission for FY 2019-20

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
A.	**Energy Requirement (MUs)**			
1.	Total Sales within UT	53.45	48.42	48.42
2.	Transmission & Distribution Losses (%)	12.75%	14.52%	14.12%
	Transmission & Distribution	7.81	8.23	7.96

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
	Losses (MUs)			
3.	**Total Energy Requirement (for sale to retail consumers)**	**61.26**	**56.65**	**56.39**
B.	**Energy Availability at Periphery**			
1.	Power Purchase	-	-	-
2.	Net own HSD Generation	61.26	56.65	55.74
3	Solar Generation			0.64
4.	**Total Energy Availability**	**61.65**	**56.65**	**56.39**
C.	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**0.00**

3.6. Power Purchase Quantum & Cost

Petitioner's Submission:

The Petitioner submitted that the energy requirement is met mainly from own generation and there is no availability of power from Central Generating Stations (CGS) or from other sources/ open market/ power exchanges, etc. The Petitioner in Reply to 1st & 2nd deficiency note has provided plant-wise power generation details, which are as follows:

Table 12: Island wise Power Generation (MUs)

Sr. No.	Islands	Total Diesel Generation	Solar Generation	Total Generation
1	Agatti	6.93	0.01	6.93
2	Amini	5.34	0.00	5.34
3	Androth	8.15	0.13	8.28
4	Bangaram	0.24	0.00	0.24
5	Bitra	0.28	0.01	0.30
6	Chetlath	1.85	0.00	1.85
7	Kadmath	4.19	0.14	4.32
8	Kalpeni	3.92	0.06	3.98
9	Kavaratti	13.60	0.20	13.79
10	Kiltan	3.24	0.00	3.24
11	Minicoy	8.00	0.11	8.11
12	Total	55.74	0.64	56.39

Further, the Petitioner has claimed a fuel cost of Rs. 98.02 crores against Rs 80.68 crores as approved by the Commission in the ARR Order dated 20th May, 2019.

Table 13: Fuel Cost submitted by the Petitioner (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order, dated 20th May 2019	Petitioner's Submission
1.	Total Fuel Cost	80.68	98.02

Commission's analysis:

The JERC MYT Regulations 2018 stipulate that any variation in the cost of power generation and/or power purchase due to variation in the rate of power purchase from approved sources shall be treated as an "uncontrollable factor". Regulation 12.1 of the JERC MYT Regulations, 2018 stipulates the following:

"12.1 For the purpose of these Regulations, the term "uncontrollable factors" for a Transmission or Distribution Licensee shall comprise of the following factors, which were beyond the control of the Licensee, and could not be mitigated by the Licensee:

a) Force Majeure events;
b) Change in Law, judicial pronouncements and Orders of the Central Government, State Government or Commission;
c) Variation in the number or mix of Consumers or quantities of electricity supplied to Consumers;
d) Transmission loss;
e) Variation in the cost of power purchase due to variation in the rate of power purchase from approved sources, subject to clauses in the power purchase agreement or arrangement approved by the Commission;
f) Variation in fuel cost;
g) Change in power purchase mix;
h) Inflation;
i) Transmission Charges for a Distribution Licensee;
j) Variation in market interest rates for long-term loans;
k) Employee expenses limited to one time payment owing requirements of a pay commission and terminal liability of employees;
l) Taxes and Statutory levies;
m) Taxes on income;
n) Income from the realisation of bad debts written off;
……………………………….."

The Commission has observed that the Petitioner has claimed Rs. 94.81 Crores as "Fuel Cost", Rs. 0.87 Crores as "Lube Oil", and Rs. 2.33 Crores as "Station suppliers miscellaneous Containers etc." The Commission based on the information submitted by the Petitioner, has considered the total diesel-based generation as 55.74 MUs, SFC (Specific fuel Consumption) of HSD as 266.12 ml./kWh (as approved in MYT Order for 2nd Control period), SFC of Lube oil as 0.99 ml./kWh (as approved in MYT Order for 2nd Control period), and per litre cost of HSD, Lube oil as Rs 57.29/ Litre, Rs. 147.96/ Litre, respectively, based on information submitted by the Petitioner in reply to 1st & 2nd deficiency note. The Commission approves the following power purchase quantum and cost for True-up of FY 2019-20:

Table 14: Power Purchase cost and Quantum as approved by the Commission for FY 2019-20

Sr. No.	Particulars	Approved in Tariff Order, dated 20th May 2019	Petitioner's Submission	Trued-up by the Commission
1	Total Gross Generation (DG Generation + Solar Generation) (MUs)	61.26		56.39
2	Less: Solar Generation (MUs)	6.15		0.64
3	Gross DG Generation (MUs) (1 - 2)	55.11		55.74
4	Specific HSD Consumption (ml per kWh) as approved in MYT Tariff order	266.12		266.12
5	Average Cost of HSD per litre as per bills submitted (Rs.)	54.34		57.29
6	**Cost of HSD [(3 X 4/1000 X 5)/10] (Rs. crores)**	**79.69**	**94.81**	**84.99**
7	Specific Lube oil consumption (ml per kWh) as approved in MYT Tariff order	0.99		0.99
8	Average Cost of Lube Oil per as per bills submitted	180		147.96
9	**Cost of Lube Oil [(3 X 7/1000 X 8)/10] (Rs. crores)**	**0.98**	0.87	**0.82**
10	**Station suppliers miscellaneous Containers etc.***		**2.33**	**2.33**
11	**Total Fuel Cost (6+9+10) (Rs. crores)**	**80.68**	**98.02**	**88.14**

**In response to the queries from TVS, the Petitioner clarified that the amount of Rs. 2.33 Crores, which is titled as “Station suppliers miscellaneous Containers etc.”, is attributed to the cost of fuel transportation.*

The Commission in the energy balance has approved the power generation quantum of 56.39 MUs from the diesel-based projects and solar projects.

The Commission would like to highlight that the approved fuel cost towards diesel-based generation consists of cost incurred towards consumption of HSD oil and Lube oil only as per the audited accounts as the other cost incurred against own generation (i.e. O&M expenses, interest and finance charges, depreciation, interest on working capital etc.) has been considered and approved for the department as a whole in subsequent sections. Accordingly, no separate cost has been approved for own renewable based generation under power purchase expenses. The Commission approves Total Diesel based Generation as 55.74 MUs and cost of Rs. 88.14 Crores as total fuel cost including transportation cost in the True-up of the FY 2019-20. The Commission has classified the Rs. 2.33 Crores, which is titled as *‘Station suppliers’ miscellaneous expenses’* and so forth, solely under the category of fuel transportation cost within the overall fuel cost.

3.7. Renewable Purchase Obligation (RPO)

Petitioner's Submission:

The Petitioner has not submitted any information in the petition regarding Renewable Purchase obligation (RPO).

Commission's analysis:

As per Regulation 3, Sub-Regulation (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

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

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016, and subsequent amendments thereof and revised the RPO targets, according to which the Petitioner had to purchase 11.50% of its total consumption (including 4.70% from Solar) from renewable sources for the FY 2019-20.

In APR Order dated 18th May 2020, the Commission has taken the following view:

"there is a net shortfall in RPO compliance for FY 2019-20 (4.57 MUs) and cumulative shortfall of 10.83 MUs till FY 2019-20. The Commission also directs the Petitioner to complete the RPO obligation through physical power failing which it should be fulfilled by REC purchase and the cost of same shall be approved at the time of true-up."

For the FY 2019-20, the Petitioner had a standalone target of 5.57 MUs comprising of 2.28 MUs Solar and 3.29 MUs non-Solar. Against the compliance target, the Petitioner has only been able to meet 0.64 MUs of solar power, thereby resulting into a shortfall of 4.92 MUs in achieving overall RPO target for FY 2019-20.

Based on the above, the Commission has computed the standalone RPO compliance for FY 2019-20 as shown in the following table:

Table 15: Cumulative RPO Compliance Trued-up by the Commission for FY 2019-20

Sr. No.	Particulars	FY 2018-19	FY 2019-20
1	Solar Target	3.60%	4.70%
2	Non-Solar Target	5.40%	6.80%
3	**Total Target**	**9.00%**	**11.50%**
4	Sales Within UT (MUs)	48.90	48.42
5	RPO Target (MUs)		
5(a).	Solar ((MUs))	1.76	2.28
5(b).	Non-Solar (MUs)	2.64	3.29
	Total RPO Target (MUs)	**4.40**	**5.57**
6	RPO Compliance, (Actual Purchase), (MUs)		

Sr. No.	Particulars	FY 2018-19	FY 2019-20
6(a).	Solar (MUs)	1.18	0.64
6(b).	Non-Solar (MUs)	0.00	0.00
	Total RPO Compliance (Actual Purchase), (MUs)	**1.18**	**0.64**
7	RPO Compliance (REC Certificate Purchase), (MUs)		
7(a).	Solar (MUs)	0.00	0.00
7(b).	Non-Solar (MUs)	0.00	0.00
	Total RPO Compliance (REC Certificate) (MUs)	**0.00**	**0.00**
8	RPO Compliance (REC+ Actual) (MUs)		
8(a).	Solar (MUs)	1.18	0.64
8(b).	Non-Solar (MUs)	0.00	0.00
	Total RPO Compliance (REC+Actual) (MUs)	**1.18**	**0.64**
9	**Net Shortfall/(Surplus) (MUs) for this year**	**3.22**	**4.92**
10	**Cumulative Shortfall (MUs) in RPO Compliance till current year**	**6.25**	**11.17**

The Commission notes that there is net standalone short fall of 4.92 MUs in FY 2019-20 and cumulative short fall of 11.17 MUs till FY till FY 2019-20 to be complied in upcoming years.

3.8. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). The JERC MYT Regulations, 2018 considers the variation of O&M Expenses except to the extent of inflation to be controllable. Regulation 12.2 of the JERC MYT Regulation, 2018 states the following:

"For the purpose of these Regulations, the term "controllable factors" for a Transmission or Distribution Licensee shall comprise of the factors which were within the control of the Licensee, shall inter-alia include:

a) Variations in capitalisation on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;
b) Variation in Interest and Finance Charges, Return on Equity, and Depreciation on account of variation in capitalisation, as specified in clause (a) above;

c) Variations in technical and commercial losses of Distribution Licensee;
d) Availability of transmission system;
e) Variations in performance parameters;
f) Failure to meet the standards specified in the Joint Electricity Regulatory Commission for the State of Goa & UTs (Standard of Performance for Distribution Licensees) Regulation, 2015, as amended from time to time;
g) Variations in labour productivity;
h) Variation in O&M Expenses, except to the extent of inflation;
i) Bad debts written off, in accordance with the provisions of Regulation 62:

Provided further that the controllable factors for a Generating Company shall be as specified in the prevalent CERC Tariff Regulations."

Therefore, any variation in O&M Expenses being controllable is attributable to the Petitioner is not passed on in the ARR, other than any cost which is beyond the control of the Petitioner. Further Regulations 60.6 provides as follows:

"60. Operation and Maintenance (O&M) expenses for Retail Supply Business
….
60.6 For the purpose of estimation, the same value of factors – $CPI_{inflation}$ and $WPI_{inflation}$ shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors – $CPI_{inflation}$ and $WPI_{inflation}$ 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."
(Emphasis supplied)

Further, Regulation 14 of the JERC MYT Regulations, 2018 stipulates the following:

"14. Mechanism for sharing of gains or losses on account of controllable factors
14.1 Approved aggregate gain to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be shared equally between Licensee and Consumers:

Provided that the mechanism for sharing of gains or losses on account of controllable factors for a Generating Company shall be as specified in the prevalent CERC Tariff Regulations.

14.2 Approved aggregate loss, if any to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be on account of the Licensee, and shall not be passed to the Consumers."

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

3.8.1. Employee Expenses

Petitioner's Submission:

The Petitioner has submitted employee expenses of Rs. 19.99 Crores against the approved expenses of Rs. 24.34 Crores in the Tariff Order dated 20th May, 2019.

Commission's analysis:

The Commission has noted that for calculation of base year expenses following provisions are provided in the JERC MYT Regulations, 2018:

"6. Values for Base Year

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

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

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

In accordance with JERC MYT Regulations, 2018, the Employee expenses shall be revised to the extent of change in inflation and growth rate during the control period.

The CPI Inflation rate, has been computed as follows:

Table 16: Computation of CPI Inflation (%)

FY	Average Value of CPI for FY	Increase in CPI Index	Average increase in CPI Index over 3 years	Applicable CPI
2016-17	276.00			
2017-18	284.60	3.12%	5.34%	
2018-19	299.90	5.38%		
2019-20	322.50	7.54%		5.34%

The employee growth rate has been computed as follows:

Table 17: Employee Growth Rate (Gn) for FY 2019-20

Sr. No.	Particulars	FY 2018-19	FY 2019-20
1.	Opening No. of Employees	340	324
2.	Recruitment during the year	1	31
3.	Retirement during the year	17	16
4.	Closing No. of Employees	324	339

Sr. No.	Particulars	FY 2018-19	FY 2019-20
5.	Gn (Growth factor)		4.63%

Table 18 Computation of employee expenses (Rs. Crores)

Sr. No.	Particulars	Actual Employee Expenses, FY 2018-19	FY 2019-20
1.	Employee Expenses of (n-1) year (i.e. FY 2018-19)		25.96
2.	Growth in number of Employees (Gn)		4.63%
3.	CPI Inflation for FY 2019-20		5.34%
4.	Re-estimated normative Employee Expenses	25.96	28.61

Table 19: Employee Expenses Trued-up by the Commission for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May 2019	Petitioner's Submission	Re-estimated normative Employee Expense	Trued-up by the Commission
1.	Employee Expenses	24.34	19.99	28.61	19.99

As the actual employee expenses submitted by the Petitioner are less than re-estimated normative expenses, the Commission approves the Employee Expenses of Rs. 19.99 Crores in the True-up of FY 2019-20.

3.8.2. Administrative and General (A&G) Expenses

Petitioner's Submission:

The Petitioner has submitted the actual A&G expenses of Rs. 4.73 Crores as reflected in audited accounts against the approved expenses of Rs. 2.79 Crores for FY 2019-20 in the Tariff Order dated 20th May 2019.

Commission's analysis:

A&G expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, etc. As per the audited accounts submitted by the Petitioner, the A&G expenses are reflected as Rs. 4.73 Crores for FY 2019-20.

In its petition, the Petitioner claimed Capitalization of Rs. 0.14 Crores under scheme titled as "Feasibility study for laying of submarine cable from Amini to Kadmath". As the Petitioner submitted the expenses as feasibility study, instead of capitalizing above scheme and considering the nature of expenses, the Commission has decided to consider the aforesaid expenses under A&G Expenses.

Similar to the methodology followed while estimating the employee expenses, the Commission has determined the normative A&G expenses for the FY 2019-20 using the CPI Inflation for preceding three years to determine the normative A&G expenses for FY 2019-20.

The A&G expenses approved by the Commission in FY 2019-20 have been provided in the following table:

Table 20: Computation of CPI Inflation (%)

FY	Average Value of CPI for FY	Increase in CPI Index	Average increase in CPI Index over 3 years	Applicable CPI
2016-17	276.00			
2017-18	284.60	3.12%	5.34%	
2018-19	299.90	5.38%		
2019-20	322.50	7.54%		5.34%

Table 21: A&G Expenses computation for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Actual Employee Expenses, FY 2018-19	FY 2019-20
1.	A&G Expense of (n-1) year (i.e. FY 2018-19)		8.28
2.	CPI Inflation for FY 2019-20		5.34%
3.	Re-estimated normative A&G Expenses	8.28	8.72

Table 22: A&G Expenses Trued-up by the Commission for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May 2019	Petitioner's Submission	Actual A&G Expenses	Re-estimated normative A&G Expense	Trued-up by the Commission for (FY 2019-20)
1.	A&G Expenses	2.79	4.73	4.87*	8.72	4.87

** Rs. 4.87 Crores is inclusive of Rs. 4.73 Crores as actual A&G Expenses and cost of Rs. 0.14 Crores as "Feasibility study for laying of submarine cable from Amini to Kadmath"*

As the actual Administrative & General (A&G) submitted by the Petitioner are less than re-estimated normative A&G expenses, the Commission approves Administrative & General (A&G) Expenses of Rs. 4.87 Crores in the True-up of FY 2019-20.

3.8.3. Repair and Maintenance (R&M) Expenses

Petitioner's Submission:

The Petitioner has incurred R&M expenses of Rs. 12.70 Crores against the approved expenses of Rs. 7.90 Crores for FY 2019-20 in the Tariff Order dated 20th May 2019.

Commission's analysis:

The Commission has reviewed the actual R&M expenses submitted by the Petitioner. In accordance with the JERC MYT Regulations, 2018, the 'K' factor has been considered same as approved in the MYT Order. The 'K' factor is then multiplied with the closing GFA approved for (n-1)th year (i.e. FY 2018-19). The resultant amount is then escalated by the actual WPI for FY 2019-20 to arrive upon the R&M Expenses for FY 2019-20.

Table 23: Computation of WPI Inflation (%)

FY	Average Value of WPI for FY	Increase in WPI Index	Average increase in WPI Index over 3 years	Applicable WPI
2016-17	111.60			
2017-18	114.90	2.96%	2.96%	
2018-19	119.80	4.26%		
2019-20	121.80	1.67%		2.96%

Table 24: R&M Expenses computation for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	FY 2019-20
1.	Opening GFA for FY 2019-20 (i.e. Closing $GFA_{(n-1)}$ for FY 2018-19)	174.41
2.	K factor approved in MYT Order for 2nd Control period	4.26%
3.	WPI Inflation for FY 2019-20	2.96%
4.	Re-estimated normative R&M Expenses = (K x (GFA_{n-1}) x (1+ $WPI_{inflation}$)	7.65

Table 25: R&M Expenses Trued-up by the Commission for (FY 2019-20) (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Re-estimated normative R&M Expense	Trued-up by the Commission
1.	Repair & Maintenance Expenses (R&M)	7.90	12.70	7.65	7.65

As the re-estimated normative R&M Expense are less than the actual R&M expenses, the Commission approves the normative Repair & Maintenance (R&M) of Rs. 7.65 Crores in the True-up of FY 2019-20.

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

The following table provides the O&M expenses approved in the ARR of FY 2019-20, Petitioner's submission and now approved by the Commission.

Table 26: O&M Expenses Trued-up by Commission for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
1.	Employee Expenses	24.34	19.99	19.99
2.	Administrative & General Expenses (A&G)	2.79	4.73	4.87
3.	Repair & Maintenance Expenses	7.90	12.70	7.65
Total Operation & Maintenance Expenses		35.03	38.14	32.51

The Commission approves the Operation & Maintenance (O&M) Expenses of Rs. 32.51 Crores in the True-up of FY 2019-20.
The gain/loss after comparing the actual values and normative values has been addressed separately in Section 3.18.2.

3.9. Capitalisation

Petitioner's Submission:

The Petitioner has submitted capitalisation of Rs. 12.00 Crores as against the approved capitalisation of Rs. 10.00 Crores in the Tariff Order dated 20th May, 2019.

Commission's analysis:

In 1st deficiency note, the Petitioner was asked to submit the scheme wise details of Capitalization for FY 2019-20. In its reply to 1st deficiency note, the Petitioner submitted the scheme-wise details of Capitalization (worth Rs. 12 Crores) for FY 2019-20.

The Commission has taken into account the nature of work related to following two schemes and decided as following:

(a) **Land Acquisition for Power House building/ office building at Islands (Rs. 0.80 Crores):** The Commission has decided that the scheme will be considered after completion of project. The Petitioner is directed to take prior approval from the Commission.

(b) **Feasibility study for laying of submarine cable from Amini to Kadmath (Rs. 0.14 Crores):** Considering the nature of the work the scheme has been considered under A&G Expenses.

The table below provides the capitalisation approved in the Tariff Order, the Petitioner's submission and the capitalisation approved by the Commission;

Table 27: Capitalization Approved by the Commission for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
1.	Capitalisation	10	12	11.06

The Commission approves the Capitalisation of Rs. 11.06 Crores in the True-up of FY 2019-20.

3.10. 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 26 of the JERC MYT Regulations, 2018 specifies the following:

"26. Debt to Equity Ratio

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

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

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

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

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

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

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

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

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

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

For the purpose of calculating the opening value of GFA in FY 2019-20, the Commission has considered the closing value of GFA for FY 2018-19 as Trued up by the Commission and capitalisation for FY 2019-20 is approved as shown in previous section. The approved GFA, loan and equity for FY 2019-20 are given in following table:

Table 28: GFA addition approved by Commission for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in Tariff order dated 20th May 2019	Petitioner's Submission	Trued-up by the Commission
1.	Opening GFA	184.74	174.41	174.41
2.	Capitalisation during the FY	10.00	12.00	11.06
3.	Adjustment/ Retirement During the FY	0	0	0
4.	Closing GFA	194.74	186.41	185.47

Table 29: Normative Loan addition approved by the Commission for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
1.	Opening Normative Loan	63.86	16.13	16.13
2.	Add: Normative Loan during the year	7.00	8.40	7.74
3.	Less: Normative Repayment equivalent to Depreciation	7.36	7.16	4.89
4.	Closing Normative Loan	63.50	17.37	18.99

Table 30: Normative Equity addition approved by the Commission for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
1.	Opening Equity	41.62	52.32	52.32
2.	Addition on account of new Capitalisation	3.00	3.60	3.32
3.	Closing Equity	44.62	55.92	55.64

3.11. Depreciation

Petitioner's Submission:

The Petitioner has submitted the actual depreciation of assets as per the audited accounts of FY 2019-20. The depreciation as claimed by the Petitioner has been tabulated below:

Table 31: Depreciation submitted by the Petitioner (Rs. Crores)

Sr. No.	Particulars	Petitioner's Submission
1.	Opening GFA	174.41
2.	Capitalisation	12.00
3.	Closing GFA	186.41
4.	Average GFA	180.41
5.	Average rate of depreciation	3.97%
6.	Depreciation	7.16

Commission's analysis:

The Commission notes that Regulation 30 of the JERC MYT Regulations, 2018 stipulates the following with respect to depreciation:

"30. Depreciation

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

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets: In the ARR Order, the Commission approved the following asset wise depreciation rate as per the CERC Tariff Regulations, 2014:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 32: Depreciation Rate (%)

Description	Rate
Plant & Machinery	3.60%
Buildings	1.80%

Description	Rate
Furniture & Fixtures	6.00%
Land	0.00%
Vehicles	18.00%
Office equipment (Computers, etc.)	6.00%

The Petitioner as part of this Petition had not submitted the Fixed Asset Register (FAR) for FY 2019-20 which specifies the value of assets that have achieved 90% depreciation as of FY 2019-20. The Commission asked the Petitioner to submit the Fixed Asset Register for FY 2019-20 in 1st deficiency note and Petitioner has submitted the FAR in reply of 1st deficiency note.

As the JERC MYT Regulations, 2018 stipulates that the depreciation shall be allowed to a maximum of 90% of the original cost of the asset, therefore the total value of assets depreciated up to 90% as reflected in the FAR of FY 2019-20 has been deducted from the opening GFA as approved in the previous section.

The revised GFA has then been considered and the depreciation on average Gross Fixed Assets (GFA) during the year has been determined. The net addition during the year has been calculated after deducting the value of retired assets.

The following table provides the calculation of revised GFA for the year FY 2019-20:

Table 33: Calculation of revised GFA (Rs. Crores)

Description	Opening GFA as per audited accounts	Less: Assets depreciated up to 90% till FY 2019-20	Revised opening GFA	Addition / Deletion during the year	Closing GFA	Depreciation Rate	Depreciation
Plants & Machinery	132.81	20.14	112.67	9.86	122.53	3.60%	4.23
Building	23.20	1.54	21.66	1.20	22.86	1.80%	0.40
Vehicles	0.76	0.76	-	-	-	18%	-
Furniture & Fixtures	0.66	0.49	0.17	-	0.17	6%	0.01
Computers & Others	4.06	-	4.06	-	4.06	6%	0.24
Land	12.93	-	12.93	-	12.93	0.00%	-
Total	174.41	22.92	151.49	11.06	162.55	3.11%	4.89

The following table provides the details of depreciation as approved in the ARR order, Petitioner's submission and now approved by the Commission under true-up.

Table 34: Depreciation approved by Commission for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
1.	Opening Gross Fixed Assets	184.74	174.41	174.41
2.	Less: Assets depreciated up to 90% till FY 2019-20			22.92
3.	Opening Net GFA			151.49
4.	Addition During the FY 2019-20	10.00	12.00	11.06
5.	Adjustment/ Retirement During the year	0.00	0.00	0.00
6.	Closing Gross Fixed Assets	194.74	186.41	162.55
7.	Average Gross Fixed Assets	189.75	180.41	157.02
8.	Average Depreciation rate (%)	3.88%	3.97%	3.11%
	Depreciation	7.36	7.16	4.89

The Commission approves depreciation of Rs. 4.89 Crores in the True up of the FY 2019-20.

3.12. Interest and Finance Charges

Petitioner's Submission:

The Petitioner has calculated the Interest on Loan on normative basis. The closing balance of loans for FY 2018-19 is considered as the Opening value of balance of loans for FY 2019-20. The normative loan addition in FY 2019-20 has been computed as 70% of the actual capitalisation for FY 2019-20. The repayment of loans has been considered equal to the depreciation during the FY 2019-20.

Further, the Petitioner proposes to revise the interest charges based on the State Bank of India (SBI) MCLR – 1 year tenor as on 1st April 2019. The State Bank of India (SBI) MCLR – 1 year tenor as on 1st April 2019 was 8.85%. Accordingly, interest rate of 9.85% (8.85%+1%) has been considered for projecting the interest charges for the FY 2019-20.

The Interest on loan as claimed by the Petitioner has been tabulated below:

Table 35: Interest & Finance charges claimed by Petitioner for the FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission
1	Opening Normative Loan	63.86	16.13
2	Normative additions during the year (70% of Net additions to GFA)	7.00	8.40
3	Less: Normative Repayment for the year	7.36	7.16
4	Closing Normative Loan/GFA	63.50	17.37
5	Average Normative Loan	63.68	16.75
6	Interest Rates – actual	9.15%	9.85%
7	Interest on Loan	5.83	1.65

Commission's analysis:

The Commission has observed that Regulation 28 of the JERC MYT Regulations, 2018 stipulates the following with respect to interest on loan:

"28. Interest on Loan

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

According to the above provision, 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, 2018.

As per the JERC MYT Regulations, 2018, if the equity deployed is more than 30% of the capital cost, then equity in excess of 30% is considered as normative loan.

The Petitioner considered the value of SBI 1-year MCLR rate as 8.85%, and on this basis Interest rate is considered as 9.85% by the Petitioner. The Commission has considered the value of SBI 1-year MCLR rate as 8.55% (as on 1st April 2019), accordingly Interest rate is 9.55%.

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

Table 36: Interest and Finance Charges approved by Commission for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May 2019	Petitioner's Submission	Trued-up by the Commission
1	Opening Normative Loan	63.86	16.13	16.13
2	Add: Normative Loan During the year	7.00	8.40	7.74
3	Less: Normative Repayment equivalent to Depreciation	7.36	7.16	4.89
4	Closing Normative Loan	63.50	17.37	18.99
5	Average Normative Loan	63.68	16.75	17.56
6	Rate of Interest (%)	9.15%	9.85%	9.55%
7	Interest on Loan	5.83	1.65	1.68

The Commission trued-up Interest and Finance Charges of Rs. 1.68 Crores for FY 2019-20.

3.13. Return on Equity (RoE)

Petitioner's Submission:

Return on Equity (RoE) is computed in accordance with the JERC MYT Regulations 2018, RoE is computed on 30% of the capital base. Opening equity is considered equivalent to closing equity for FY 2019-20 and additional equity to the tune of 30% is proposed to be capitalized during the year. Accordingly, RoE is computed at 16% post-tax basis.

The Return on Equity as claimed by the Petitioner has been tabulated below:

Table 37: Return on Equity claimed by the Petitioner for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission
1	Opening Equity	41.62	52.32
2	Additions on account of new Capitalisation	3.00	3.60
3	Closing Equity	44.62	55.92
4	Average Equity	43.12	54.12
5	Rate of Return	16.00%	16.00%
6	Return on Equity	6.90	8.66

Commission's analysis:

The Commission has observed that Regulation 27 of the JERC MYT Regulations, 2018 stipulates the following with respect to Return on Equity:

"……

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

27.4 The return on equity shall be computed on average of equity capital at the beginning and end of Year."

RoE has been calculated on normative basis on the average of opening and closing of equity during the year at the rate of 15.5%/16% (on post-tax basis) with an opening equity considered equivalent to the closing equity of FY 2018-19 as derived in Section 3.10 Capital Structure above. The average equity is considered in the ratio of 90:10 for wheeling and retail supply business. Income Tax payable shall be considered on actual basis at the time of True-up. The following table provides the RoE approved in the ARR of FY 2019-20, the Petitioner's submission and RoE now approved by the Commission under true-up of FY 2019-20.

Table 38: RoE approved by the Commission for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
1	Opening Equity	41.62	52.32	52.32
2	Additions on account of new Capitalisation	3.00	3.60	3.32
3	Closing Equity	44.62	55.92	55.64
4	Average Equity	43.12	54.12	53.98
5	Average Equity (Wires Business)	-	-	48.58

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
	(90%)			
6	Average Equity (Retail supply Business) (10%)	-	-	5.40
7	Return on Equity for Wires Business (%)	16%	16%	15.50%
8	Return on Equity for Retail supply Business (%)			16.00%
9	Return on Equity for Wires Business	-	-	7.53
10	Return on Equity for Retail supply Business	-	-	0.86
11	Return on Equity	6.90	8.66	8.39

The Commission approves the Return on Equity of Rs. 8.39 Crores for FY 2019-20.

3.14. Interest on Security Deposits

Petitioner's Submission:

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

The Petitioner has submitted that Rs. 0.91 Crores are available as security deposit at the end of FY 2019-20. The Petitioner has claimed an Interest on Consumer Security Deposit of Rs. 0.06 Crore against the approved value of Rs. 0.05 Crores in the MYT tariff order dated 20th May 2019.

Commission's analysis:

As per Regulation 28.11 of JERC MYT Regulation 2018; *"28.11 Interest shall be allowed on the amount held as security deposit held in cash from Retail Consumers at the Bank Rate as on 1st April of the Financial Year in which the Petition is filed:*

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

The security deposit of Rs, 0.91 crores is available to the Petitioner as per the annual accounts. But in audit note submitted by the Petitioner, the Auditor mentioned that:

"Though Rs. 4.48 crores was received as Consumer Security Deposit, Department accounted only Rs. 0.91 crores as payable to consumers, Balance amount of Rs. 3.58 crores was not shown as liability towards consumers, Corresponding amount of Rs. 4.48 crores was not reflected on the asset side too".

The Commission noted the same and considers the amount held as Consumers Security Deposit as Rs. 4.48 Crores.

As per Section 47 (5) of the Electricity Act, 2003, the Petitioner has to pay the interest on the security deposits available with it and same shall be claimed in the ARR filed by the Petitioner. The Petitioner shall maintain the registers of security deposits collected from the consumers every year and pay the interest as per the bank rate of interest.

However, while the Petitioner has claimed interest of Rs 0.06 crores, there is no mention of the same in the audited accounts. Accordingly, the Commission observes that the Petitioner has not paid any interest to consumers and hence, no interest is considered for True-Up of FY 2019-20.

Therefore, the Commission has approved 'NIL' interest on security deposits of the consumers in the True-up of FY 2019-20.

3.15. Interest on Working Capital

Petitioner's Submission:

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

Table 39: Interest on Working Capital submitted by Petitioner (Rs. Crores)

Sr. No.	Particulars	Petitioner's Submission
1	Operation & Maintenance Expenses (for One (1) Month)	2.92
2	Maintenance spares at 40% of R&M expenses (For One (1) Month)	0.42
3	Receivables equivalent to two (2) months of the expected revenue from Consumers at the prevailing tariff.	4.12
4	Less: Amount held as security deposit	0.92
5	Net Working Capital	6.75
6	Rate of Interest (%)	10.85%
	Interest on working capital	0.73

Commission's analysis:

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

"52. Norms of Working Capital for Distribution Wires Business

52.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the

Distribution Wires Business for the Financial Year, computed as follows:

(a) O&M Expenses for one (1) month; plus
(b) Maintenance spares at 40% of repair and maintenance expenses for one (1) month; plus
(c) Receivables equivalent to two (2) months of the expected revenue from charges for use of distribution wires at the prevailing tariff;

Less:

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

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

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

"31.3 The interest on working capital shall be a payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures. 31.4 The rate of interest on working capital shall be equal one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the Financial Year in which the Petition is filed plus 200 basis points."

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

Table 40: Interest on Working Capital approved by Commission for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
1	O&M Expense for 1 month	2.92	3.12	2.71
2	Maintenance spares at 40% of R&M expenses for one (1) month;	0.26	0.42	0.25
3	Receivables equivalent to two (2) months of the expected revenue at the prevailing tariff	4.24	4.12	4.12
4	Less: Amount held as security deposits.	0.94	0.92	4.48*
5	Net Working Capital	6.48	6.75	2.61
6	Rate of Interest (%)	10.15%	10.85%	10.55%
7	Interest on Working Capital	0.66	0.73	0.28

**The commission considered amount held as consumer security deposit after considering Auditor comment on the annual accounts of FY 2019-20 of the Petitioner. In audit note submitted by the Petitioner the Auditor mentioned that:*

"Though Rs. 4.48 crores was received as Consumer Security Deposit, Department accounted only Rs. 0.91 crores as payable to consumers, Balance amount of Rs. 3.58 crores was not shown as liability towards consumers, Corresponding amount of Rs. 4.48 crores was not reflected on the asset side too".

The Commission approves the Interest on Working Capital as Rs. 0.28 Crores in the True-up of FY 2019-20.

3.16. 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:

As per Regulation 62 of the MYT Regulations, 2018:

"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 towards Bad & Doubtful debts during the True-up of FY 2019-20.

3.17. Non-Tariff Income

Petitioner's Submission:

The Petitioner has submitted the Non-Tariff Income of Rs. 0.05 Crores as approved by the Commission in the MYT Order.

Commission's analysis:

Regulation 64.2 of JERC MYT Regulation, 2018 states the following:

"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; f Income."

(l) Recovery for theft and pilferage of energy;

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

(n) Miscellaneous receipts;

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

(p) Prior period income, etc.:

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

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

The Commission has considered the same Non-Tariff Income as submitted by the Petitioner and reflected in Annual Account submitted by the Petitioner. The NTI approved in the Tariff Order, the Petitioner's submission and the NTI now approved by the Commission is shown in the table below:

Table 41: Non-Tariff Income approved by Commission for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
1	Non-Tariff Income	1.18	0.05	0.05

The Commission approves the Non-Tariff Income of Rs. 0.05 Crores for FY 2019-20.

3.18. Incentive/Disincentive towards over/under-achievement of norms.

3.18.1. Disincentive towards under- achievement of norms of T&D Losses.

Petitioner's Submission:

No Submission has been in this regard.

Commission's analysis:

In the ARR of the FY 2019-20, the Commission had approved the Intra-state Transmission & distribution loss level of 12.75%. As discussed earlier, the Petitioner has only been able to achieve an Intra-State Transmission & Distribution Loss of 14.12%. Thus, there is an underachievement of the loss target.

The Commission, in accordance with Regulations 13 & 14 of the JERC MYT Regulations, 2018 (reproduced below) has determined the disincentive towards underachievement of the target of Intra-State Transmission distribution loss for FY 2019-20.

"13. Mechanism for pass through of gains or losses on account of uncontrollable factors

13.1 Approved aggregate gain or loss to the Transmission Licensee or Distribution Licensee on account of uncontrollable factors shall be pass-through as an adjustment in the tariff of the Transmission Licensee or Distribution Licensee over such period as may be specified in the Order of the Commission passed under these Regulations:

Provided that the mechanism for pass through of gains or losses on account of uncontrollable factors for a Generating Company shall be as specified in the prevalent CERC Tariff Regulations.

13.2 The Transmission Licensee or Distribution Licensee shall submit such details of the variation between expenses incurred and revenue earned and the figures approved by the Commission, in the specified format to the Commission, along with the detailed computations and supporting documents as may be required for verification by the Commission.

14. Mechanism for sharing of gains or losses on account of controllable factors

14.1 Approved aggregate gain to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be shared equally between Licensee and Consumers:

Provided that the mechanism for sharing of gains or losses on account of controllable factors for a Generating Company shall be as specified in the prevalent CERC Tariff Regulations.

14.2 Approved aggregate loss, if any to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be on account of the Licensee, and shall not be passed to the Consumers."

The disincentive has been derived by calculating the additional cost of power procured due to under achievement of the stipulated Intra-State T&D loss target of 12.75% by the Petitioner, at the Average Power Purchase cost (APPC) of Rs. 15.81/kWh. The APPC has been derived at State/UT Periphery based on the Power Purchase cost approved in the True-up above and the Energy at State/UT Periphery computed after grossing up the retail energy sales (56.39MUs) with the approved Intra-State T&D Loss 14.12%).

The assessment of disincentive for higher Intra-State T&D Loss is shown in the following table:

Table 42: Disincentive towards underachievement of Intra-State T&D Losses for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission for (FY 2019-20)
1.	Retail Sales (MUs)	53.45	48.52	48.42
2.	T&D Loss	12.75%	14.53%	14.12%
3.	Energy Requirement at Periphery (MUs)	55.50	56.65*	56.39
4.	Gain/(Loss) (MUs)			(0.89)
5.	Average Power Purchase Cost (APPC), (Rs. /kWh)			15.81
6.	Loss (Crores)			1.40
7.	Sharing (50% to LED in Case of gain and 100% in case of Loss)			1.40

The Commission approves Rs. 1.40 Crores as disincentive for under-achieving the Intra-State T&D losses target for FY 2019-20.

3.18.2. Sharing of Gain/Loss on account of Operation & Maintenance (O&M) Expenses.

The Regulation 14 of the JERC MYT Regulations, 2018 stipulates the following:

"14. Mechanism for sharing of gains or losses on account of controllable factors
14.1 Approved aggregate gain to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be shared equally between Licensee and Consumers:

Provided that the mechanism for sharing of gains or losses on account of controllable factors for a Generating Company shall be as specified in the prevalent CERC Tariff Regulations.

14.2 Approved aggregate loss, if any to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be on account of the Licensee, and shall not be passed to the Consumers."

The following table provides the O&M expenses, approved by the Commission in the MYT Order, Petitioner's submission and O&M expenses now trued-up by the Commission after sharing of gains or losses.

Table 43: O&M Expenses (After Gain/ Loss) approved by Commission (Rs. Crores)

Sr. No.	Particulars	Approved in MYT order dated 20th May 2019	Petitioner's Submission	Normative Expenses	Actual Expenses considered by the Commission	Gain/ (Loss) [Normative – Actual Considered]	Gain/ (Loss) Sharing	O&M Expenses after Gain/Loss
1.	Employee Expenses	24.34	19.99	28.61	19.99	8.62	4.32	24.30
2.	A&G Expenses	2.79	4.73	8.72	4.87*	3.85	1.93	6.80
3.	R&M Expenses	7.90	12.70	7.65	12.70	(5.05)	-	7.65
4.	**Total O&M**	**35.03**	**37.42**	**44.99**	**37.56**		**6.24**	**38.75**

** Rs. 4.87 Crores is inclusive of Rs. 4.73 Crores as actual A&G Expenses and cost of Rs. 0.14 Crores as "Feasibility study for laying of submarine cable from Amini to Kadmath"*

The Commission approves the incentive of Rs. 6.24 Crores due to over achievement of norms of Operation & Maintenance (O&M) expenses in the True-up of FY 2019-20.

3.19. Aggregate Revenue Requirement (ARR)

Petitioner's Submission:

The Petitioner claimed the net aggregate revenue requirement of Rs. 153.65 Crores and for approval in the True-up of FY 2019-20.

Commission's analysis:

The Commission on the basis of the detailed analysis of the cost parameters of the ARR has considered and approved the revenue requirement in the True-up of FY 2019-20 as given in the following table:

Table 44: Aggregate Revenue Requirement approved by the Commission for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
1.	Power Purchase Cost	0.40	0.00	0.00
2.	Fuel Cost	80.68	98.02	88.14
3.	Operation & Maintenance Expenses	35.03	37.42	32.51
4.	Depreciation	7.36	7.16	4.89
5.	Interest on Loan and Finance charges	5.83	1.65	1.68
6.	Interest on Working Capital	0.66	0.73	0.28
7.	Return on Equity	6.90	8.66	8.39

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
8.	Interest on Security Deposit	0.05	0.06	0.00
9.	Provision for Bad Debt	0.00	0.00	0.00
10.	Income Tax	0.00	0.00	0.00
11.	Disincentive due to under achievement of norms of T&D Losses	0.00	0.00	(1.40)
12.	Sharing of Gain/loss on account of O&M Expenses	0.00	0.00	6.24
13.	Total Revenue Requirement	136.90	153.70	140.72
14.	Less: Non-Tariff Income	1.18	0.05	0.05
15.	Net Revenue Requirement	135.71	153.65	140.67

The Commission approves net Aggregate Revenue Requirement of Rs. 140.67 Crores in the True-up of the FY 2019-20.

3.20. Revenue at existing Retail Tariff

Petitioner's Submission:

The Petitioner has submitted the net actual revenue for the FY 2019-20 as Rs. 24.73 Crores against revenue of Rs. 23.94 Crores. approved by the Commission in the Tariff Order dated 20th May 2019.

Commission's analysis:

The Commission has considered the sales and revenue figures for each consumer category and verified the revenue from audited accounts. The consumer category-wise revenue as submitted by the Petitioner and approved by the Commission is shown in the following table:

Table 45: Revenue at existing tariff approved by the Commission for FY 2019-20 (Rs. Crores)

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Approved in Tariff order dated 20th May, 2019</th><th>Petitioner's Submission</th><th>Trued-up by the Commission</th></tr>
<tr><td>1.</td><td>Domestic</td><td>12.22</td><td>12.30</td><td>12.30</td></tr>
<tr><td>2.</td><td>Commercial</td><td>2.75</td><td>2.99</td><td>2.99</td></tr>
<tr><td>3.</td><td>Govt. Connection</td><td>7.40</td><td>7.17</td><td>7.17</td></tr>
<tr><td>4.</td><td>Industrial</td><td>0.46</td><td rowspan="2">1.37</td><td>0.53</td></tr>
<tr><td>5.</td><td>HT Industrial</td><td>0.64</td><td>0.84</td></tr>
<tr><td>6.</td><td>Public Lighting</td><td>0.37</td><td>0.50</td><td>0.50</td></tr>
<tr><td>7.</td><td>Temporary</td><td>0.10</td><td>0.40</td><td>0.40</td></tr>
<tr><td></td><td>Total</td><td>23.94</td><td>24.73</td><td>24.73</td></tr>
</table>

The Commission approves the revenue from sale of power as Rs. 24.73 Crores in the True-up of the FY 2019-20.

3.21. Standalone Revenue Gap/(Surplus)

Petitioner's Submission:

The Petitioner claimed the standalone revenue gap of Rs. 128.92 Crores in the True-up of FY 2019-20.

Commission's analysis:

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

Table 46: Standalone Revenue Gap/ (Surplus) at existing tariff for FY 2019-20 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff order dated 20th May, 2019	Petitioner's Submission	Trued-up by the Commission
1.	Net Revenue Requirement	135.71	153.65	140.67
2.	Revenue from Retail Sales at existing tariff	23.94	24.73	24.73
3.	Net Gap/(Surplus)	111.77	128.92	115.94

The Commission, in the True-up of FY 2019-20 approves a standalone gap of Rs. 115.94 Crores. Further a Letter dated 20th May 2024, from administration of the UT of Lakshadweep has been submitted to the Commission confirming the budgetary support of the gap. Hence, the Commission approves the standalone gap as 'NIL' for FY 2019-20.

Chapter 4 : Annual Performance Review of the FY 2023-24

4.1. Background

The MYT Order for the present control period (i.e. FY 2022-23 to FY 2024-25) was issued by the Commission on 31st March 2022 including the ARR for the FY 2023-24. Subsequently, in Tariff Order dated 28th March 2023, the Commission revised the Aggregate Revenue requirement for FY 2023-24 and based on the same determined the Retail Tariff for FY 2023-24. This Chapter covers the Annual Performance Review (APR) of the FY 2023-24 vis-à-vis the cost parameters approved by the Commission in the ARR order dated 28th March 2023. The Annual Performance Review for the FY 2023-24 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" (hereinafter referred to as "JERC MYT Regulations, 2021").

4.2. Approach for Review for the FY 2023-24

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/Fuel cost, O&M Expenses, Interest on long-term loans, Interest on working capital loans, Depreciation etc. The Annual Performance Review for the FY 2023-24 has been done based on the provisional information for FY 2022-23 as provided by the Petitioner for the FY 2023-24 of the Power Purchase Quantum and the Cost, Energy Sales, Capitalisation etc. on which the estimates for financial year 2023-24 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 Tariff Order dated 28th March, 2023.

4.3. Energy Sales, Connected Load and Number of Consumers

Petitioner's Submission:

The Petitioner has submitted a revised estimate of energy sales as 52.80 MUs for the FY 2023-24, based on the actual energy sales of FY 2022-23 and CAGR for the past periods. Similarly, the Petitioner has proposed the connected load and consumer number of 1,15,674 kW and 27,772 Nos. respectively for FY 2023-24. Category-wise details of Energy Sales (MUs), No. of Consumers, Connected Load are as follows.

Table 47: Energy Sales (MUs) estimated by the Petitioner for FY 2023-24

Sr. No.	Category	Actual Sales (Apr.2023 to Dec. 2023)	Estimated Sales submitted by Petitioner for FY 2023-24
1	Domestic Consumers	20.51	37.73
2	Commercial Consumers	2.20	4.19
3	Govt. Connection	4.28	7.67
4	Industrial Consumers	0.32	0.45
5	HT Consumers	1.02	1.81
6	Public Lighting	0.38	0.82
7	Temporary Connection	0.04	0.12
8	Total Sales	28.75	52.80

Table 48: Number of Consumers estimated by Petitioner for FY 2023-24

Sr. No.	Category	Actual Consumers Apr. 2023 to Dec. 2023	Estimated Number of Consumers for FY 2023-24
1	Domestic Consumers	21,109	21,260
2	Commercial Consumers	4,432	4,866
3	Govt. Connection	1,084	1,086
4	Industrial	363	364
5	HT Consumers	8	8
6	Public Lighting	69	72
7	Temporary Connection	115	-
8	Total Consumers	27,180	27,772

Table 49: Connected Load estimated by Petitioner for FY 2023-24

Sr. No.	Category	Actual Connected Load (kVA) April 2023 to Dec. 2023	Estimated Connected Load (kVA) for FY 2023-24
1	Domestic Consumers	87,933	87,913
2	Commercial Consumers	10,510	10,838
3	Govt. Connection	11,059	11,735
4	Industrial Consumers	3,865	3,844
5	HT Consumers	832	914
6	Public Lighting	290	295
7	Temporary Connection	134	134
8	Total Consumers	1,12,624	1,15,674

Commission's Analysis:

4.3.1. Energy Sales

The Commission has considered the category wise sales information of past period and has calculated the CAGR for past 5-year period. After applying the said CAGR on actual sales of FY 2022-23 as submitted by the Petitioner, the Commission has arrived at the sales values for FY 2023-24:

Table 50: Computation of Energy Sales (MUs) for FY 2023-24

Actual Energy Sales (MUs)								Estimated
	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	CAGR*	FY 2023-24
Domestic	35.90	35.97	35.59	40.35	38.74	37.19	0.71%	37.45
Commercial	2.87	3.09	3.12	3.31	3.33	3.94	6.53%	4.19
Govt. Connection	8.01	8.00	7.60	7.28	7.00	7.54	0.00%	7.54
Industrial	0.43	0.38	0.36	0.37	0.39	0.45	0.91%	0.45
HT Consumer	0.53	0.69	0.81	0.88	1.64	1.72	26.60%	2.18
Public Lighting	0.64	0.67	0.81	0.82	0.82	0.79	4.23%	0.82
Temporary	0.09	0.11	0.14	0.09	0.09	0.11	4.48%	0.12
Total	48.47	48.91	48.42	53.10	52.01	51.74		52.76

** Negative CAGR is considered as zero*

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

Sr. No.	Category	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission		Now Approved by the Commission
			Actual Sales (Apr.2023 to Dec. 2023)	FY 2023-24	
1	Domestic	39.01	20.51	37.73	37.45
2	Commercial	4.04	2.20	4.19	4.19
3	Govt. Connection	7.37	4.28	7.67	7.54
4	Industrial	0.41	0.32	0.45	0.45
5	HT Consumers	1.87	1.02	1.81	2.18
6	Public Lighting	0.82	0.38	0.82	0.82
7	Temporary Connection	0.12	0.04	0.12	0.12
8	Total Sales	53.60	28.75	52.80	52.76

4.3.2. Number of Consumers

The Commission has considered the actual category wise information of No. of Consumers for FY 2022-23 as submitted by the Petitioner and calculated the CAGR for 5-year period.

After applying the same CAGR on FY 22-23 values, the Commission has arrived at the consumer numbers for FY 2023-24:

Table 52: Computation of No. of Consumers for FY 2023-24

Actual No. of Consumers								Estimated
	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	CAGR	FY 2023-24
Domestic	19,729	19,683	20,003	20,254	20,685	20,997	1.25%	21,259
Commercial	2,402	2,766	2,885	3,422	4,044	4,326	12.49%	4,866
Govt. Connection	1,218	1,178	1,296	1,173	1,172	1,082	0.00%	1,082
Industrial	356	349	345	352	364	363	0.39%	364
HT Consumer	6	6	8	9	8	8	5.92%	8
Public Lighting	76	75	75	76	72	72	0.00%	72
Temporary	160	246	225	136	117	0	0.00%	-
Total	23,947	24,303	24,837	25,422	26,462	26,848		27,653

** Negative CAGR is considered as zero.*

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

Sr. No.	Category	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission		Now Approved by the Commission
			Actual No. of Consumers (Apr.2023 to Dec. 2023)	FY 2023-24	
1	Domestic	21,262	21,109	21,260	21,259
2	Commercial	4,865	4,432	4,866	4,866
3	Govt. Connection	1,188	1,084	1,086	1,082
4	Industrial	379	363	364	364
5	HT Consumers	9	8	8	8
6	Public Lighting	72	69	72	72
7	Temporary Connection	132	115	115	-
8	Total Consumers	27,908	27,180	27,772	27,653

4.3.3. Connected Load

The Petitioner has submitted the information of connected load (in kVA), The Commission has considered the category wise information for FY 2022-23 as provided by the Petitioner and the Commission calculated the CAGR. After applying CAGR, the Commission has arrived at the connected load for FY 2023-24:

Table 54: Computation of Connected Load (kVA) for FY 2023-24

	Actual Connected Load (kVA)							Estimated (kVA)
	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	CAGR	FY 2023-24
Domestic	85,601	87,669	90,294	92,032	89,702	83,952	0.00%	83,952
Commercial	15,817	15,975	12,240	8,213	9,350	10,182	0.00%	10,182
Govt. Connection	8,021	8,101	7,503	12,026	11,982	11,014	6.55%	11,735
Industrial	3,708	3,786	3,723	3,658	3,845	3,821	0.60%	3,844
HT Consumer	520	520	728	923	822	832	9.86%	914
Public Lighting	296	308	277	284	404	290	0.00%	290
Temporary	66	147	275	273	307	-	0.00%	-
Total	1,14,029	1,16,506	1,15,040	1,17,409	1,16,412	1,10,091		1,10,918

As per the provision mentioned in Joint Electricity Regulatory Commission for the State of Goa and UTs (Electricity Supply Code) Regulations, 2018 (as amended from time to time), connected Load expressed in kVA can be converted in kW by multiplying kVA value by power factor of 0.9. In the following table same has been adopted.

Table 55: Connected Load projected for FY 2023-24

Sr. No.	Category	Petitioner's Submission		Estimated by the Commission	
		Actual Connected load (kVA) (Apr.2023 to Dec. 2023)	FY 2023-24	Connected Load (in kVA) for FY 2023-24	Connected Load (in kW= 0.9*kVA) for FY 2023-24
1	Domestic	85,933	87,913	83,952	75,557
2	Commercial	10,510	10,838	10,182	9,164
3	Govt. Connection	11,059	11,735	11,735	10,562
4	Industrial	3,865	3,844	3,844	3,460
5	HT Consumers	832	914	914	823
6	Public Lighting	290	295	290	261
7	Temporary Connection	134	134	-	-
8	Total Connected Load	1,12,624	1,15,674	1,10,918	99,826

Table 56: Connected Load approved by the Commission for FY 2023-24 (kW)

Sr. No.	Category	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by Commission (in kVA)	Now Approved by the Commission (in kW= 0.9*kVA)
1	Domestic	67,893	87,913	83,952	75,557
2	Commercial	7,968	10,838	10,182	9,164
3	Govt. Connection	9,310	11,735	11,735	10,562
4	Industrial	3,115	3,844	3,844	3,460

Sr. No.	Category	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by Commission (in kVA)	Now Approved by the Commission (in kW= 0.9*kVA)
5	HT Consumers	768	914	914	823
6	Public Lighting	242	295	290	261
7	Temporary Connection	193	134	-	-
8	Total Connected Load	89,488	1,15,674	1,10,918	99,826

The Commission approves energy sales of 52.76 MUs, connected load of 1,10,918 kVA (or 99,826 kW) and number of consumers as 27,653 in the APR of FY 2023-24.

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

Petitioner's submission:

The Petitioner has proposed Intra-State T&D loss level at 10.25% against an approved loss of 10.25% in the Tariff Order dated 28th March 2023. Further, the Petitioner has submitted the actual T&D loss achieved for initial six months as 10.73%.

Commission's analysis:

The Commission had approved Intra-State T&D losses level of 10.25% for FY 2023-24 in the Tariff Order dated 28th March, 2023 while determining ARR for the FY 2023-24. The Commission finds it appropriate to consider the T&D losses level of 10.25% as approved in the Tariff Order for FY 2023-24 dated 28th March 2023. The following table provides the Intra-State T&D losses approved in the MYT Order, the Petitioners submission and now approved by the Commission.

Table 57: Intra-State Distribution Losses (%)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Intra-State distribution loss	10.25%	10.25%	10.25%

The Commission approves Intra-State T&D loss of 10.25% in the APR of FY 2023-24.

4.5. Energy Balance

Petitioner's submission:

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

Table 58: Energy Balance (MUs) submitted by Petitioner

Sr. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	52.80
2	Distribution losses (%)	10.25%
	Distribution losses (MUs)	6.03
3	**Energy Requirement at periphery**	**58.83**
B	**Energy Availability**	
1	Renewable Generation	0.31*
2	Diesel Generation	58.52
3	**Total Energy Availability**	**58.83**
C	**Total shortfall/(Surplus)**	**0.00**

**In reply to 2nd deficiency note the Petitioner has re-submitted the details of renewable generation as 1.26 (MUs)*

Commission's analysis:

The Commission has determined the Energy Balance based on the revised estimates of energy sales. The table below provides the Energy Balance as approved by the Commission in the Tariff order dated 28th March 2023, the Petitioner's submission and the Energy Balance now approved by the Commission.

Table 59: Energy Balance (MUs) approved by the Commission for FY 2023-24

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
A	**Energy Requirement**			
1	Total Sales within the UT	53.60	52.80	52.76
2	Distribution losses (%)	10.25%	10.25%	10.25%
	Distribution losses (MU)	6.12	6.03	6.03
3	**Energy Requirement at periphery**	**59.72**	**58.83**	**58.78**
B	**Energy Availability**			
1	Renewable Generation	0.20	0.31	1.26
2	Net Own Diesel Generation	59.52	58.52	57.53
3	**Total Energy Availability**	**59.72**	**58.83**	**58.78**

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**0.00**

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 (CGS) or from other sources/ open market/ power exchanges etc. Accordingly, the Petitioner has claimed the total fuel cost of Rs. 196.08 crores (HSD Cost – Rs. 194.89 crores and Lube Cost – Rs. 1.19 crores) as against the approved cost of Rs. 196.57 crore (HSD Cost – Rs. 195.72 crores and Lube Cost – Rs. 0.85 crore) in the MYT Order dated 28th March 2023.

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 2023-24 as Diesel generation is the main source of power in Lakshadweep Islands and shall be available as per the consumers need.

In its Reply to 1st & 2nd Deficiency note the Petitioner has submitted the sample fuel bills from April 2023 to December 2023 having information on fuel consumption & cost. Based on that the Commission has computed the weighted average cost of HSD per litre and average cost of Lube oil per litre. Further, considering 5% inflation in cost, the per litre cost of HSD, and Lube oil has been determined for FY 2023-24. 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 60: Fuel Cost approved by the Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Total Generation (MUs)	59.72	58.83	58.78
2	**Less:** Solar Generation (MUs)	0.20	0.31	1.26*
3	Total DG Generation (MUs) (1 - 2)	59.52	58.52	57.53
4	Specific HSD Consumption (ml per kWh) as approved in MYT Tariff order	294.02	294.02	294.02

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
5	Average Cost of HSD per litre (Rs.)	111.83		108.17
6	**Cost of HSD [(3 X 4/1000 X 5)/10] (Rs. crores)**	**195.72**	**194.89**	**182.96**
7	Specific Lube oil consumption (ml per kWh) as approved in MYT Tariff order	0.94	0.94	0.94
8	Average Cost of Lube Oil per litre (Rs.)	152.22		223.97
9	**Cost of Lube Oil [(3 X 7/1000 X 8)/10] (Rs. crores)**	**0.05**	**1.19**	**1.21**
10	**Total Fuel Cost (6+9) (Rs. crores)**	**196.57**	**196.08**	**184.17**

**In Reply to 2nd Deficiency note the Petitioner has submitted proposed solar generation as 1.26 MUs.*

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 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 Fuel cost of Rs. 184.17 Crores for Total HSD Generation of 57.53 (MUs) in the APR of FY 2023-24.

4.7. Renewable Purchase Obligations (RPOs)

As per Regulation 3, 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 24th March 2022 and revised the RPO targets, according to which the Petitioner had to purchase 19.91% of its total consumption (including 10.00% from Solar) from renewable sources for the FY 2023-24.

For the FY 2023-24, the Commission approves the RPO target of 10.50 MUs comprising of 5.28 MUs Solar and 5.23 MUs non-Solar. Out of which, the Petitioner has only claimed to purchase the solar energy of around 1.26 MUs. Hence, the Commission approves the solar purchase as 1.26 MUs as proposed, thereby resulting in a shortfall in RPO compliance. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2023-24:

Table 61: Cumulative RPO compliance for FY 2023-24

Sr. No.	Particulars	FY 2022-23	FY 2023-24
1	Solar Target	9.00%	10.00%
2	Non-Solar Target	9.35%	9.91%
3	**Total Target**	**18.35%**	**19.91%**
4	Sales Within UT (MUs)	51.71	52.76
5	RPO Target (MUs)		
5(a).	Solar ((MUs))	4.65	5.28
5(b).	Non-Solar (MUs)	4.83	5.23
	Total RPO Target (MUs)	**9.49**	**10.50**
6	RPO Compliance, (Actual Purchase), (MUs)		
6(a).	Solar (MUs)	0.20	1.26
6(b).	Non-Solar (MUs)	0.00	0.00
	Total RPO Compliance (Actual Purchase), (MUs)	**0.20**	**1.26**
7	RPO Compliance (REC Certificate Purchase), (MUs)		
7(a).	Solar (MUs)	0.00	0.00
7(b).	Non-Solar (MUs)	0.00	0.00
	Total RPO Compliance (REC Certificate) (MUs)	**0.00**	**0.00**
8	RPO Compliance (REC+ Actual) (MUs)		
8(a).	Solar (MUs)	0.20	1.26
8(b).	Non-Solar (MUs)	0.00	0.00
	Total RPO Compliance (REC+Actual) (MUs)	**0.20**	**1.26**
9	**Net Shortfall/(Surplus) for this year**	**9.29**	**9.25**
10	**Cumulative Shortfall in RPO Compliance till current year**	**36.14**	**45.39**

The Commission notes that there is a net shortfall of 9.25 (MUs) in RPO compliance for FY 2023-24 and cumulative shortfall of 45.39 (MUs) till FY 2023-24. The Commission directs the Petitioner to make its all-out efforts to comply with 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 61 of the MYT Regulation, 2021 states the following:

"61.1 The Operation and Maintenance Expenses for the Retail Supply Business shall be computed in accordance with this Regulation.

61.2 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.

61.3 The 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 Distribution Licensee, estimates of the actuals for the Base Year, prudence check and any other factors considered appropriate by the Commission.

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

given below:

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

Where,

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

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

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

'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;*

EMP_n *– Employee expenses of the Distribution Licensee for the nth Year;*

$A\&G_n$ *– Administrative and General expenses of the Distribution Licensee for the nth Year;*

$R\&M_n$ *– Repair and Maintenance expenses of the Distribution Licensee for the nth Year;*

GFA_{n-1} *– Gross Fixed Asset of the Distribution Licensee for the n-1th Year;*

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

Gn is a growth factor for the nth Year. Value of G_n *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 Licensee has been in operation for less than three (3) Years as on the date of effectiveness of these Regulations, the O&M Expenses shall be determined on a case-to-case basis.

61.5 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.

61.6 For the purpose of estimation, the same value of factors – $CPI_{inflation}$ and $WPI_{inflation}$ shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors – $CPI_{inflation}$ and $WPI_{inflation}$ 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 actual 6 months employee expenses of Rs. 13.08 Crores and estimated Rs. 23.63 Crores for FY 2023-24 against the approved expenses of Rs. 25.92 Crores in the Tariff Order dated 28th March 2023.

Commission's analysis:

In accordance with the JERC MYT Regulations, 2021, the Commission has determined the Employee expenses.

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. Initially the Petitioner has submitted the true-up information for FY 2019-20 only. In reply to 2nd deficiency note the Petitioner has submitted the provisional values of employee expense for FY 2020-21, FY 2021-22, FY 2022-23. Accordingly, the Commission has considered the average employee expenses value of aforesaid three years for computation of revised employee expenses of FY 2023-24. The Commission has considered the employee growth rate (Gn) for FY 2023-24 as submitted by the Petitioner in its reply to 1st deficiency note along with the average CPI of previous three years to arrive at the employee expenses for FY 2023-24.

The CPI Inflation has been computed as follows:

Table 62: Computation of CPI Inflation (%)

FY	Average Value of CPI for FY	Increase in CPI Index	Average increase in CPI Index over 3 years	Applicable CPI
2019-20	322.50			
2020-21	338.70	5.02%	5.40%	
2021-22	356.10	5.14%		
2022-23	377.60	6.04%		
2023-24				5.40%

Table 63: Employee Growth rate

Sr. No.	Particulars	FY 2022-23	FY 2023-24
1	Opening Employee	319	290
2	Recruitment	1	0
3	Retirement	30	3
4	Closing Employee	290	287
5	Growth rate		(-)1.03%

The Commission has re-estimated the opening employee expenses for FY 2023-24 by taking the average value of FY 2020-21, FY 2021-22, FY 2022-23 of provisional values submitted by the Petitioner.

Table 64: Re-estimation of Employee Expense for base year

	FY 2020-21	FY 2021-22	FY 2022-23	Average
Employee Expense	22.99	24.28	23.38	23.55

Table 65: Employee Expenses approved by the Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Employee Expense (Base year) (Rs. Crores)			23.55*
2	Gn (%)			(-)1.03%
3	CPI inflation (%)	25.92	23.63	5.40%
4	Employee Expenses = (EMP. (Base Year)) x (1+Gn) x ($CPI_{inflation}$)			24.56

**As Petitioner has submitted the provisional values employee expense, so average of these values has been considered as value for base year.*

The Commission approves the revised normative Employee Expenses of Rs. 24.56 Crores in the APR of the FY 2023-24.

4.8.2. Administrative and General (A&G) Expenses

Petitioner's submission:

The Petitioner has submitted a revised estimate of A&G expenses of Rs. 2.39 Crores as against the approved value of Rs. 5.56 Crores in Tariff Order dated 28th March 2023.

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. Initially the Petitioner has submitted the true-up information for FY 2019-20 only. In reply to 2nd deficiency note the Petitioner has submitted the provisional values of A&G expense for FY 2020-21, FY 2021-22, FY 2022-23. Accordingly, the Commission has considered the average A&G expenses value of aforesaid three years for computation of revised A&G expenses of FY 2023-24. The average A&G expenses has been escalated with the average CPI of previous three years as computed to arrive at the A&G expenses for FY 2023-24.

Table 66: Computation of CPI (%)

FY	Average Value of CPI for FY	Increase in CPI Index	Average increase in CPI Index over 3 years	Applicable CPI
2019-20	322.50			
2020-21	338.70	5.02%		
2021-22	356.10	5.14%	5.40%	
2022-23	377.60	6.04%		
2023-24				5.40%

Table 67: Re-estimation of A&G Expense for base year

	FY 2020-21	FY 2021-22	FY 2022-23	Average
A&G Expense	2.36	2.66	2.26	2.43

The table below provides the A&G expenses approved in Tariff Order dated 28th March 2023, Petitioner's Submission and now approved by the Commission:

Table 68: A&G Expenses approved by the Commission for FY 2023-24 (Rs. Crores)

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Approved in Tariff Order dated 28th March 2023</th><th>Petitioner's Submission</th><th>Now Approved by the Commission</th></tr>
<tr><td>1</td><td>A&G (Base year) (Rs. Crores)</td><td rowspan="3">5.56</td><td rowspan="3">2.39</td><td>2.43*</td></tr>
<tr><td>2</td><td>CPI inflation (%)</td><td>5.40%</td></tr>
<tr><td>3</td><td>Gross A & Gn = A&G (Base year) x $(1+CPI_{inflation})$ (Rs. Crores)</td><td>2.56</td></tr>
</table>

**As Petitioner has submitted the provisional values A&G expense, so average of these values has been considered as value for base year.*

The Commission approves the revised normative Administrative & General (A&G) expenses of Rs. 2.56 Crores in the APR of the FY 2023-24.

4.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission:

The Petitioner has submitted a revised estimate of R&M expenses of Rs. 8.39 Crores as against the approved value of Rs. 8.58 Crores in the Tariff Order dated 28th March, 2023.

Commission's analysis:

In accordance with JERC MYT Regulations, 2021, 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 closing GFA of FY 2022-23 (as determined in Table 74). 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 69: Computation of WPI Inflation (%)

FY	Average Value of WPI for FY	Increase in WPI Index	Average increase in WPI Index over 3 years	Applicable WPI
2019-20	121.80			

FY	Average Value of WPI for FY	Increase in WPI Index	Average increase in WPI Index over 3 years	Applicable WPI
2020-21	123.40	1.31%	7.89%	
2021-22	139.40	12.97%		
2022-23	152.50	9.40%		
2023-24				7.89%

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

Table 70: Re-estimation of normative R&M Expenses for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Normative R&M Expenses for FY 2023-24
1	Opening GFA for FY 2023-24 (i.e. Closing $GFA_{(n-1)}$ for FY 2022-23)	193.22
2	K factor approved (K) (%)	4%
3	Avg. WPI Inflation (%)	7.89%
4	R&M Expenses = K x (GFA n-1) x (1+WPI inflation)	8.34

The table below provides the R&M expenses approved in Tariff Order dated 28th March 2023, Petitioner's Submission and now approved by the Commission:

Table 71: R&M Expenses approved by the Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	R&M Expenses	8.58	8.39	8.34

The Commission approves the revised normative Repair & Maintenance (R&M) expenses of Rs. 8.34 Crores in the APR of FY 2023-24.

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

The following table provides the O&M expenses approved in the ARR of FY 2023-24, Petitioner's submission and now approved by the Commission.

Table 72: O&M Expenses approved by Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Employee Expenses	25.92	23.63	24.56

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
2	Administrative & General Expenses (A & G)	5.56	2.39	2.56
3	Repair & Maintenance Expenses	8.58	8.39	8.34
	Total Operation & Maintenance Expenses	40.06	34.40	35.46

The Commission approves the Operation & Maintenance (O&M) Expenses of Rs. 35.46 Crores in the APR of FY 2023-24.

4.9. Capitalisation

Petitioner's submission:

The Petitioner has submitted revised capitalisation of Rs. 6.91 Crores for FY 2023-24. as against the approved capitalisation of Rs. 11.00 Crores in the Tariff Order dated 28th March, 2023.

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 1st & 2nd deficiency note the Petitioner was asked to submit prior approval from the Commission on new schemes, detailed project report and cost benefit analysis of old & new schemes. The Petitioner was unable to submit the same.

The Commission has taken into account the nature of work related to following three schemes and decided as following:

a) **Construction of office and power house building etc. (Rs. 1.50 Crores):** The Commission has decided the Scheme can be considered only after completion of Project and the Petitioner is directed to take prior approval from the Commission by submitting Detailed Project Report and Cost benefit analysis before the submission of True-up Petition of FY 2023-24.

b) **To meet the amount for supply of RCC Slab in Islands (Rs. 0.25 Crores):** The Commission has decided to consider the scheme in APR of FY 2023-24. As this scheme was not approved in Business Plan, the Petitioner is directed to take prior approval from the Commission by submitting Detailed Project Report and Cost benefit analysis before the submission of True-up Petition of FY 2023-24.

c) **To meet the amount for supply and installation of Solar Plant in islands (Rs. 0.01 Crores):** The Commission has decided to consider the scheme in APR of FY 2023-24. As this scheme was not approved in Business Plan, the Petitioner is directed to take prior approval from the Commission by submitting Detailed Project Report and Cost benefit analysis before the submission of True-up Petition of FY 2023-24.

Table 73: Capitalisation approved by the Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Approved in Business Plan Order	Petitioner's Submission	Now Approved by the Commission
1	Capitalisation	11.00	6.91	5.41

The Commission approves capitalisation of Rs. 5.41 Crores in the APR of FY 2023-24. The same shall be trued up at the time of True-up.

The Commission directs the Petitioner to submit Detailed Project Report (DPR) along with Cost benefit Analysis and take prior approval of schemes, which were not considered in Business Plan order; then at the time of True-up of FY 2023-24 the above schemes only may be considered.

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

The Commission notes that Regulation 27 of the JERC MYT Regulations, 2021 specifies the following about capital structure:

"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 closing value of GFA in FY 2022-23, the Commission has considered the closing value of GFA for FY 2019-20 as Trued-up by the Commission in this Tariff Order and provisional capitalisation for FY 2020-21, FY 2021-22, and FY 2022-23 as submitted by the Petitioner in reply to 1st deficiency note. The details are shown below:

Table 74: Capitalization for FY 2019-20, FY 2020-21, FY 2021-22, and FY 2022-23 (Rs. Crores)

Particulars	FY 2019-20 (approved under true-up)	FY 2020-21 (provisional as per Petitioner)	FY 2021-22 (provisional as per Petitioner)	FY 2022-23 (provisional as per Petitioner)
Opening GFA	174.41	185.47	187.15	191.22
Additions during the FY	11.06	1.68	4.07	1.99
Adjustment/Retirement During the FY	-	-	-	-
Closing GFA	185.47	187.15	191.22	193.22

Table 75: Normative Loan addition for FY 2019-20, FY 2020-21, FY 2021-22, and FY 2022-23 (Rs. Crores)

Particulars	FY 2019-20 (approved under true-up)	FY 2020-21 (provisional as per Petitioner)	FY 2021-22 (provisional as per Petitioner)	FY 2022-23 (provisional as per Petitioner)
Opening Normative Loan	16.13	18.99	15.06	12.70
Add: Normative Loan addition during the year	7.74	1.18	2.85	1.40

Particulars	FY 2019-20 (approved under true-up)	FY 2020-21 (provisional as per Petitioner)	FY 2021-22 (provisional as per Petitioner)	FY 2022-23 (provisional as per Petitioner)
Less: Normative Repayment equivalent to Depreciation	4.89	5.11	5.21	5.32
Closing Normative Loan	18.99	15.06	12.70	8.77

Table 76: Normative Equity addition for FY 2019-20, FY 2020-21, FY 2021-22, and FY 2022-23 (Rs. Crores)

Particulars	FY 2019-20 (approved under true-up)	FY 2020-21 (provisional as per Petitioner)	FY 2021-22 (provisional as per Petitioner)	FY 2022-23 (provisional as per Petitioner)
Opening Equity	52.32	55.64	56.14	57.36
Add: Normative equity addition during the yaer	3.32	0.50	1.22	0.60
Closing GFA	55.64	56.14	57.36	57.96

Further, in previous section the Commission has approved the capitalisation during FY 2023-24, which is Rs 5.41 Crores. Considering closing GFA for FY 2022-23 and addition during FY 2023-24, the Commission has determined the GFA for FY 2023-24 as follows:

Table 77: GFA addition approved by the Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Opening Gross Fixed Assets	203.66	194.15	193.22
2	Addition During the FY	11.00	6.91	5.41
3	Adjustment/Retirement During the FY	-	-	-
4	Closing Gross Fixed Assets	214.66	201.06	198.63

For the purpose of calculating the opening value of normative loan in FY 2023-24, the Commission has considered the closing value of loan for FY 2019-20 as approved by the Commission in this order under true-up and normative loan addition for FY 2020-21, FY 2021-22 and FY 2022-23, based on 70% of provisional GFA addition during the respective year (as given in Table 75), and normative loan repayment equal to depreciation for FY 2020-21, FY 2021-22 and FY 2022-23.

Table 78: Normative Loan addition approved by the Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Opening Normative Loan	10.30	0.15	8.77

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
2	Add: Normative Loan During the year (70% of GFA addition)	7.70	4.84	3.79
3	Less: Normative Repayment equivalent to Depreciation *	6.24	4.99	5.82
4	Closing Normative Loan	11.76	0.01	7.08

**Depreciation calculated in next section.*

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 2019-20 as Approved in this Tariff Order and the equity addition for FY 2020-21, FY 2021-22, and FY 2022-23 based on 30% of actual GFA addition during the year (as given in Table 76), as submitted by the Petitioner in reply to 1st deficiency note.

Table 79: Normative Equity addition approved by the Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Opening Equity	61.10	58.25	57.96
2	Additions on account of new capitalisation	3.30	2.07	1.62
3	Closing Equity	64.40	60.32	59.59

4.11. Depreciation

Petitioner's submission:

The Petitioner has submitted the depreciation of Rs. 7.91 Crores as per JERC MYT Regulations, 2021 as against the approved depreciation of Rs. 6.24 Crores in the Tariff Order dated 28th March, 2023.

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.

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

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

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

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

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

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

As Petitioner has submitted the provisional capitalization for FY 2020-21, FY 2021-22, FY 2022-23 (as in Table 74). For calculating the depreciation for FY 2023-24, the Commission has computed the weighted average rate of depreciation considering the closing value of category wise capitalisation grossed up with category wise provisional capitalization for FY 2020-21, FY 2021-22, FY 2022-23 which comes to 3.17%.

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

Table 80: Depreciation approved by the Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Opening Gross Fixed Assets	203.66	194.15	193.22
2	Less: Assets depreciated up to 90% till FY 2019-20	22.92	22.92	22.92
3	Net Opening Gross Fixed Assets	180.74	171.23	170.30
4	Addition During the FY 2023-24	11.00	6.91	5.41
5	Closing Gross Fixed Assets	191.74	178.14	175.71
6	Average Gross Fixed Assets	186.24	174.69	173.00
7	Weighted Average Depreciation rate (%)	3.35%	4.53%	3.17%
	Depreciation	6.24	7.91	5.48

The Commission now approves depreciation of Rs. 5.48 Crores in the APR of the FY 2023-24.

4.12. Interest on Loan and Finance Charges

Petitioner's submission:

The Petitioner has estimated the Interest on loan and Finance charges as per the JERC MYT Regulations, 2021 for the 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 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."

For the purpose of calculating the opening value of normative loan in FY 2023-24, the Commission has considered the closing value of loan for FY 2019-20 as approved by the Commission in this order under true-up and normative loan addition for FY 2020-21, FY 2021-22 and FY 2022-23, based on 70% of provisional GFA addition during the respective year (as given in Table 76), and normative loan repayment equal to depreciation for FY 2020-21, FY 2021-22 and FY 2022-23.

It is to be noted that, 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.

The Interest on Loan has been has considered as the SBI 1 Year MCLR rate as on 1st April 2023 (8.5%) 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 81: Interest and Finance Charges approved by the Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Opening Normative Loan	10.30	0.15	8.77
2	Add: Normative Loan During the year	7.70	4.84	3.79
3	Less: Normative Repayment equivalent to Depreciation	6.24	4.99	5.48
4	Closing Normative Loan	11.76	-	7.08
5	Average Normative Loan	11.03	0.08	7.93

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
6	Rate of Interest (%)	8.00%	9.50%	9.50%
7	Interest on Loan	0.88	0.01	0.75

The Commission approves Interest and Finance Charges of Rs. 0.75 Crores in the APR of the FY 2023-24.

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 2022-23 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 15.5%/16% (on post-tax basis) with an opening equity considered equivalent to the closing equity of FY 2022-23 as derived in Section 4.10 Capital Structure above. The average equity is considered in the ratio of 90:10 for wheeling and retail supply business. Income Tax payable shall be considered on actual basis at the time of True-up. The following table provides the RoE approved in the ARR of FY 2023-24, the Petitioner's submission and RoE now approved by the Commission under true-up of FY 2023-24.

Table 82: RoE approved by the Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Opening Equity	61.10	58.25	57.96
2	Additions on account of new capitalisation	3.30	2.07	1.62
3	Closing Equity	64.40	60.32	59.59
4	Average Equity	62.75	59.28	58.77

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
5	Average Equity (Wires Business) (90%)			52.90
6	Average Equity (Retail supply Business) (10%)			5.88
7	Return on Equity for Wires Business (%)	16%	16%	15.50%
8	Return on Equity for Retail supply Business (%)			16.00%
9	Return on Equity for Wires Business			7.53
10	Return on Equity for Retail supply Business			0.86
11	Return on Equity	10.04	9.49	9.14

The Commission approves the Return on Equity of Rs. 9.14 Crores in the APR of the FY 2023-24.

4.14. Interest on Security Deposits

Petitioner's submission

The Petitioner has claimed an Interest on consumer security of Rs. 0.23 Crores as against the approved Interest on consumer security of Rs. 0.04 Crores in the Tariff Order dated 31st March 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.

The Commission observed that there was a 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 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 as the same as submitted by the Petitioner. The same shall be trued-up as per actuals in the True- up of FY 2023-24. 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 83: Interest on Security Deposits approved by the Commission for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Opening Security Deposit	5.68	5.73	5.73
2	Add: Deposits During the year	0.33	1.46	1.46
3	Less: Deposits refunded	-	-	-
4	Closing Security Deposit	6.01	7.19	7.19
5	Average Security Deposit	5.845	6.46	6.46
6	Rate of Interest (%)	4.25%	4.25%	6.75%*
	Interest on Security Deposit (IoSD)	0.25	0.27	0.44

**Bank rate on 1st April 2023.*

The Commission approves Interest on Security Deposit as Rs. 0.44 Crores in the APR of the FY 2023-24.

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 as Rs. 0.20 Crores against the amount of Rs. 0.22 Crores in Tariff Order dated 28th March 2023.

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 closing consumer security deposit amount during the year is considered for computing the Working Capital Requirement for the year. The cost of maintenance spares has been considered @40% of R&M expenses for 1 month.

The Commission has considered the SBI Base rate as on 1st April 2023 plus 200 basis point 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 84: Interest on Working Capital approved by the Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	O&M Expense for 1 month	3.34	2.87	2.96
2	Maintenance spares at 40% of R&M expenses for one (1) month;	0.29	0.28	0.28
3	Receivables equivalent to two (2) months of the expected revenue at the prevailing tariff	4.78	5.93	5.73
4	Less: Amount held as security deposits	6.01	7.19	7.19

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
5	Less: Power purchase cost for one month	-	-	-
6	Net Working Capital	2.39	1.88	1.76
7	Rate of Interest (%)	9.00%	10.50%	10.50%
8	Interest on Working Capital	0.22	0.20	0.19

The Commission approves the Interest on Working Capital as Rs. 0.19 Crores in the APR of the FY 2023-24

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 2023-24.

4.17. Non-Tariff Income

Petitioner's submission

The Petitioner has submitted the Non-Tariff Income (NTI) of Rs. 1.41 Crores 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 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 85: Non-Tariff Income approved by the Commission for FY 2023-24 (Rs Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Non-Tariff Income	1.41	1.41	1.41

The Commission approves Non-Tariff Income of Rs. 1.41 crores in the APR of FY 2023-24. The same shall be considered at actuals at the time of True-up of FY 2023-24.

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 Rs. 246.95 Crores after adjusting the Non -Tariff Income for FY 2023-24.

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 2023-24 as provided in the table below:

Table 86: Aggregate Revenue Requirement approved by the Commission for FY 2023-24 (Rs. Crores.)

Sr. No	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	REC Purchase cost	-	-	-
2	Power Purchase Cost	4.66	-	-
3	Fuel Cost	196.57	196.08	184.17
4	O&M Expenses	40.06	34.40	35.46
5	Depreciation	6.24	7.91	5.48
6	Interest and Finance charges	0.88	0.01	0.75
7	Interest on Working Capital	0.22	0.20	0.19
8	Return on Equity	10.04	9.49	9.14
9	Interest on Security Deposit	0.25	0.27	0.44
10	Provision for Bad Debt	-	-	-
11	Income Tax	-	-	-
13	**Total Revenue Requirement**	**258.91**	**248.36**	**235.62**
14	**Less:** Non-Tariff Income	1.41	1.41	1.41
15	**Net Revenue Requirement**	**257.50**	**246.95**	**234.21**

The Commission now approves the net ARR of Rs. 234.21 Crores in the APR of FY 2023-24.

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 Rs. 35.55 crores determined on the basis of energy sales in the territory for FY 2023-24.

Commission analysis:

The category wise revenue at existing retail tariff is calculated as per the tariff rates applicable for FY 2023-24 as per tariff order dated 28th March, 2023. 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 2023-24 has been shown in the following table:

Table 87: Revenue at existing tariff computed by the Commission for FY 2023-24 (Rs. Crores)

Sr. No.	Category	Sales (MUs)	Revenue from Fixed Charges	Revenue from Energy charges	Total Revenue	ABR (Rs. /unit)
1	Domestic	37.45	1.81	15.92	17.74	4.74
2	Commercial	4.19	0.28	3.18	3.46	8.25
3	Government Connections	7.54	0.38	8.94	9.32	12.37
4	Industrial	0.45	0.23	0.36	0.59	13.08
5	HT Industrial	2.18	0.16	2.29	2.46	11.25
6	Public Lighting	0.82	0.03	0.70	0.72	8.82
7	EV Charging	-	-	-	-	-
8	Temporary	0.12	0.00	0.11	0.11	9.78*
	Total	52.76	2.89	31.52	34.41	6.52

**1.5 times of overall ABR.*

The Commission has determined revenue from the sale of power at existing tariff as Rs. 34.41 Crores in the APR of FY 2023-24.

4.20. Standalone Revenue Gap/(Surplus)

Petitioner's submission

Based on the ARR and the revenue from Retail tariff, the standalone revenue gap of Rs. 211.40 Crores is arrived at in the APR of FY 2023-24.

Commission analysis

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

Table 88: Standalone Revenue Gap/ (Surplus) at existing tariff (Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order dated 28th March 2023	Petitioner's Submission	Now Approved by the Commission
1	Net Revenue Requirement	257.50	246.95	234.21
2	Revenue from Retail Sales at Existing Tariff	28.66	35.55	34.41
3	Net Gap /(Surplus)	228.84	211.40	199.80

The Commission approves the standalone gap at Rs. 199.80 Crores in the APR of 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. Hence the gap is calculated as 'NIL' by the Commission.

Chapter 5 : Aggregate Revenue Requirement for FY 2024-25

5.1. Background

In this Chapter, the Commission has determined the Aggregate Revenue Requirement (ARR) for the FY 2024-25. 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 the FY 2024-25

The Commission has computed the individual elements constituting the Aggregate Revenue Requirement for FY 2024-25 based on values approved in Business Plan Order dated 31st March, 2022, the available information of various parameters for the FY 2022-23 and the first half of FY 2023-24, as submitted by the Petitioner.

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 2022-23 and first half of FY 2023-24 and the CAGR for past periods .

Table 89: Number of consumers, Connected Load, and Energy Sales submitted by the Petitioner for the FY 2024-25

Sr. No.	Particulars	No. of Consumers	Connected Load (kVA)	Energy Sales (MUs)
1	Domestic	21,527	92,062	38.29
2	Commercial	5,474	11,537	4.47
3	Govt. Connection	1,090	12,503	7.81
4	Industrial	366	3,868	0.46
5	HT Consumers	9	1,004	1.90
6	Public Lighting	72	299	0.86
7	Temporary Connection	115	134	0.12
	Total	28,652	121,407	53.91

Commission's Analysis

The Commission has considered the category wise sales data, connected load and number of consumers as approved in APR of FY 2023-24 and CAGR for various categories as computed in previous chapter for calculating the category wise sales, connected load and number of consumers respectively for FY 2024-25.

5.3.1. Energy Sales

The Commission has extrapolated the approved sales data from the category wise sales figure of FY 2023-24 using the CAGR for various categories as computed in previous chapter. The following table provides the values of proposed sales in various consumer category for FY 2024-25:

Table 90: Computation of Sales (MUs) for FY 2024-25

Sr. No.	Category	Approved Sales in APR of FY 2023-24	CAGR of 5 year (from FY 2017-18 to FY 2022-23) as computed in APR chapter	Projected Sales for FY 2024-25 approved by the Commission
1	Domestic	37.45	0.71%	37.72
2	Commercial	4.19	6.53%	4.47
3	Govt. Connection	7.54	0.00%	7.54
4	Industrial	0.45	0.91%	0.46
5	HT Consumers	2.18	26.60%	2.76
6	Public Lighting	0.82	4.23%	0.86
7	Temporary Connection	0.12	4.48%	0.12
8	Total Sales	52.76		53.92

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 91: Energy Sales (MUs) approved by the Commission for FY 2024-25

Sr. No.	Category	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	Domestic	47.15	38.29	37.72
2	Commercial	4.01	4.47	4.47
3	Govt. Connection	7.28	7.81	7.54
4	Industrial	0.44	0.46	0.46
5	HT Consumers	1.25	1.90	2.76
6	Public Lighting	1.03	0.86	0.86
7	Temporary Connection	0.09	0.12	0.12
8	Total Sales	61.25	53.91	53.92

5.3.2. Number of Consumers

The Commission has extrapolated the category wise number of consumers for FY 2023-24 using the CAGR for various categories as computed in APR of FY 2023-24. The following table provides the values of projected number of consumers in various consumer category for FY 2024-25:

Table 92: Computation of Number of Consumers for FY 2024-25

Sr. No.	Category	Approved Number of consumers in APR of FY 2023-24	CAGR of 5 year (from FY 2017-18 to FY 2022-23) as computed in APR chapter	Projected Number of Consumers for FY 2024-25
1	Domestic	21,259	1.25%	21,525
2	Commercial	4,866	12.49%	5,474
3	Govt. Connection	1,082	0.00%	1,082
4	Industrial	364	0.39%	366
5	HT Consumers	8	5.92%	9
6	Public Lighting	72	0.00%	72
7	Temporary Connection	-	0.00%	-
8	Total Consumers	27,653		28,528

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 93: Number of Consumers approved by the Commission for FY 2024-25

Sr. No.	Category	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	Domestic	21,618	21,527	21,525
2	Commercial	5,237	5,474	5,474
3	Govt. Connection	1,173	1,090	1,082
4	Industrial	368	366	366
5	HT Consumers	15	9	9
6	Public Lighting	76	72	72
7	Temporary Connection	136	115	-
8	Total Consumers	28,623	28,652	28,528

5.3.3. Connected Load

The Commission has extrapolated the approved category wise connected load for FY 2023-24, and considered the CAGR for various categories as computed in APR of FY 2023-24. The following table provides the values of proposed connected load in various consumer category for FY 2024-25:

Table 94: Connected Load projected for FY 2024-25

Sr. No.	Category	Approved Connected Load in APR of FY 2023-24 (kVA)	CAGR of 5 year (from FY 2017-18 to FY 2022-23) as computed in APR chapter	Projected Connected Load for FY 2024-25 (kVA)	Projected Connected Load for FY 2024-25 (kW= 0.9*kVA)
1	Domestic	83,952	0.00%	83,953	75,557
2	Commercial	10,182	0.00%	10,182	9,164
3	Govt. Connection	11,735	6.55%	12,504	11,253
4	Industrial	3,844	0.60%	3,867	3,481
5	HT Consumers	914	9.86%	1,004	904
6	Public Lighting	290	0.00%	290	261
7	Temporary Connection	-	0.00%	-	-
8	Total Connected Load	1,10,918		1,11,800	1,00,620

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 95: Computation of Connected Load for FY 2024-25 (kW)

Sr. No.	Category	Approved in MYT Order dated 31st March 2022	Petitioner's Submission (kVA)	Now Approved the by Commission (kVA)	Now Approved by the Commission (kW=0.9*kVA)
1	Domestic	1,01,428	92,062	83,953	75,557
2	Commercial	8,213	11,537	10,182	9,164
3	Govt. Connection	18,434	12,503	12,504	11,253
4	Industrial	3,832	3,868	3,867	3,481
5	HT Consumers	1,633	1,004	1,004	904
6	Public Lighting	284	299	290	261
7	Temporary Connection	273	134	-	-
8	Total Connected Load	1,34,097	1,21,407	1,11,800	1,00,620

The Commission approves energy sales of 53.92 (MUs), connected load of 1,11,800 kVA (i.e. 1,00,620 kW) and number of consumers as 28,528 Nos. in the ARR of FY 2024-25.

5.4. Intra-State Transmission & Distribution Losses

Petitioner's submission:

The Petitioner has proposed the T&D loss as approved by the Commission in the Business Plan Order i.e. at 9.25%.

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 2024-25 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 now approved by the Commission.

Table 96: Intra-State Distribution Loss approved by the Commission for FY 2024-25

Sr. No	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	Intra-State Distribution Loss	9.25%	9.25%	9.25%

The Commission approves the Intra-State Distribution Loss of 9.25% for the FY 2024-25.

5.5. Energy Balance

Petitioner's submission:

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

Table 97: Energy Balance (MU) submitted by Petitioner

Sr. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	53.91
2	Distribution losses (%)	9.25%
	Distribution losses (MUs)	5.49
3	**Energy Requirement at periphery**	**59.40**
B	**Energy Availability**	
1	Renewable Generation	0.31*
2	Diesel Generation	59.09
3	**Total Energy Availability**	**59.40**
C	**Total shortfall/(Surplus)**	**0.00**

** In reply to 2nd deficiency note the Petitioner has re-submitted the details of renewable generation as 2.12 (MUs)*

Commission's analysis:

The Commission has determined the Energy Balance based on the revised estimates of energy sales and approved T&D losses. Considering the fact that LED is not connected with Central-Grid, the energy requirement shall be met out by own generation from 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 98: Energy Balance (MUs) approved by the Commission for FY 2024-25

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
A	**Energy Requirement**			
1	Total Sales within the UT (MUs)	61.25	53.91	53.92
2	Distribution losses (%)	9.25%	9.25%	9.25%
	Distribution losses (MUs)	6.24	5.49	5.50
3	**Energy Requirement @ periphery**	**67.49**	**59.40**	**59.42**
B	**Energy Availability**			
1	Power Purchase			
2	Renewable Generation (MUs)	13.22	0.31*	2.12
3	Diesel Generation (MUs)	54.27	59.09	57.30
4	**Total Energy Availability (MUs)**	**67.49**	**59.40**	**59.42**
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**0.00**

**In reply to 2nd deficiency note the Petitioner has re-submitted the details of renewable generation as 2.12 (MUs).*

In the ARR of FY 2024-25, the Commission has estimated no shortfall/(surplus) quantum, 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 Rs. 207.88 crores (HSD Cost – Rs. 206.61 crores and Lube Cost – Rs. 1.26 crores) as against the approved cost of Rs. 147.32 crores (HSD Cost – Rs. 146.44 crores and Lube Cost – Rs. 0.88 crores) 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 estimated fuel cost. The Commission has considered the energy demand net of renewable generation shall be met from the Diesel Generation based on sales projected for FY 2024-25 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 has increased exponentially and has increasing trend; therefore, the Commission has considered 5% inflation in cost. By applying this inflation factor on approved values of APR of FY 2023-24, the Commission has arrived on the per litre cost of HSD and Lube oil for FY 2024-25. Accordingly, the Commission has computed the cost of HSD and Lube oil for Diesel generation considering the approved values of specific fuel consumption in MYT order, as shown in table below:

Table 99: Fuel Cost approved by the Commission for FY 2024-25

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	Total Gross Generation (MUs)	67.49		59.42
2	**Less:** Solar Generation (MUs)	11.76		2.12*
3	Gross DG Generation (MUs) (1 - 2)	55.73		57.30
4	Specific HSD Consumption (ml per kWh) as approved by JERC MYT Tariff order Dated 31.3.2022	294.02		294.02
5	Average Cost of HSD per litre (Rs.)	89.38		113.58
6	**Cost of HSD [(3 X 4/1000 X 5)/10] (Rs. crores)**	**146.44**	**206.61**	**191.36**
7	Specific Lube oil consumption (ml per kWh) as approved by JERC MYT Tariff order Dated 31.3.2022	0.94		0.94
8	Average Cost of Lube Oil per litre (Rs.)	167.33		235.17
9	**Cost of Lube Oil [(3 X 7/1000 X 10)/8] (Rs. crores)**	**0.88**	**1.26**	**1.27**
10	**Total Fuel Cost (Rs. crores)**	**147.32**	**207.88**	**192.62**

**In Reply to 2nd Deficiency note the Petitioner has submitted the Solar Generation for FY 2024-25 as 2.12 (MUs).*

The Commission would like to highlight that no separate cost has been approved for own renewable based generation, as the expenses for renewable based generation will be covered under other expenses of the Utility, as a whole.

The Commission approves Fuel cost of Rs. 192.62 Crores for Total own HSD Generation of 57.30 (MUs) in the ARR of FY 2024-25.

5.7. Renewable Purchase Obligation (RPO)

As per Regulation 3, 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 Joint Electricity Regulatory Commission for the State of Goa & Union Territories (Procurement of Renewable Energy) (Fifth Amendment), Regulations 2024. on 6th June 2024 and revised the RPO targets, according to which the Petitioner has to purchase 29.91 % of its total consumption from renewable sources for the FY 2024-25.

For the FY 2024-25, the Commission approves the RPO target of 16.13 MUs (i.e. 29.91% of Sales) comprising of 0.36 MUs Wind RPO, 0.20 MUs HPO, 0.81 MUs Distributed RPO and

14.75 MUs Other RPO Target. Out of which, the Petitioner has only claimed to purchase the solar energy of around 2.12 MUs, thereby resulting in a shortfall in RPO compliance. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2024-25:

Table 100: Cumulative RPO compliance till FY 2024-25

Sr. No.	Particulars	FY 2024-25
1	Wind RPO Target (%)	0.67%
2	HPO Target (%)	0.38%
3	Distributed RPO Target (%)	1.50%
4	Other RPO Target (%)	27.35%
A	Total Renewable Purchase Obligation (%)	29.91%
B	Sales Within UT (MUs)	53.92
1	Wind RPO Target (MUs)	0.36
2	HPO Target (MUs)	0.20
3	Distributed RPO Target (MUs)	0.81
4	Other RPO Target (MUs)	14.75
C	Total Renewable Purchase Obligation (MUs)	16.13
1	Wind RPO Compliance (Actual & REC)	0.00
2	HPO Target (MUs)	0.00
3	Distributed RPO Target (MUs)	0.00
4	Other RPO Target (MUs)	2.12
D	Total RPO Compliance (Actual Purchase + REC), (MUs)	2.12
1	Wind RPO shortfall (MUs)	0.36
2	HPO shortfall (MUs)	0.20
3	Distributed RPO shortfall (MUs)	0.81
4	Other RPO shortfall (MUs)	12.63
E	Net Shortfall in RPO Compliance for FY 2024-25	14.01
F	Cumulative Shortfall in RPO Compliance till end of FY 2023-24	45.39
G	Cumulative Shortfall in RPO Compliance till end of FY 2024-25	59.40

The Commission notes that there is a net shortfall in RPO compliance for FY 2024-25 (14.01 MUs) and cumulative shortfall of 59.40 MUs till FY 2024-25.

The Commission has continuously directed the Petitioner to complete the RPO obligation on priority through purchase of REC in case of unavailability of physical RE power in the Islands of Lakshadweep, 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 October 2023 to March 2024. The cost approved is as follows:

Table 101: REC cost approved by the Commission for FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	Average per kWh price from October 2023 to March 2024 (Rs. /kWh)	Shortfall (MUs) for FY 2024-25	Now Approved by the Commission
1	REC cost	0.347	14.01	0.49

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 61 of the JERC MYT Regulation, 2021 states the following:

"61.1 The Operation and Maintenance Expenses for the Retail Supply Business shall be computed in accordance with this Regulation.

61.2 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.

61.3 The 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 Distribution Licensee, estimates of the actuals for the Base Year, prudence check and any other factors considered appropriate by the Commission.

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

given below:

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

Where,

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

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

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

'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;

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

$A\&G_n$ – Administrative and General expenses of the Distribution Licensee for the nth Year;

$R\&M_n$ – Repair and Maintenance expenses of the Distribution Licensee for the nth Year;

GFA_{n-1} – Gross Fixed Asset of the Distribution Licensee for the n-1th Year;

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

Gn is a growth factor for the nth Year. Value of G_n 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 Licensee has been in operation for less than three (3) Years as on the date of effectiveness of these Regulations, the O&M Expenses shall be determined on a case-to-case basis.

61.5 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.

61.6 For the purpose of estimation, the same value of factors – $CPI_{inflation}$ and $WPI_{inflation}$ shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors – $CPI_{inflation}$ and $WPI_{inflation}$ 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 2024-25 based on the actual expenses for the FY 2022-23 & 1st Half (April 2023 to September 2023) of the FY 2023-24. Accordingly, the Petitioner has claimed the employee expenses of Rs. 30.46 crores as against the approved employee expenses of Rs. 32.26 crores.

Commission's analysis:

In accordance with the JERC MYT Regulations, 2021, the Commission has determined the Employee expenses. 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 (G_n) during the control period. Accordingly, the Commission has considered the approved value of employee expenses for FY 2023-24 in APR (as given in the previous chapter) for computation of revised employee expenses of FY 2024-25. The Commission has considered the employee growth rate (G_n) for FY 2024-25 as submitted by the Petitioner in Reply to 1st deficiency note along with the average CPI of previous three years to arrive at the employee expenses for FY 2024-25.

The CPI Inflation has been computed as follows:

Table 102: Computation of CPI Inflation (%)

FY	Average Value of CPI for FY	Increase in CPI Index	Average increase in CPI Index over 3 years	Applicable CPI
2019-20	322.50			
2020-21	338.70	5.02%	5.40%	
2021-22	356.10	5.14%		

FY	Average Value of CPI for FY	Increase in CPI Index	Average increase in CPI Index over 3 years	Applicable CPI
2019-20	322.50			
2022-23	377.60	6.04%		
2023-24 and 2024-25				5.40%

Table 103: Employee Growth rate (%)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Employee	319	290	287
2	Recruitment	1	-	-
3	Retirement	30	3	18
4	Closing Employee	290	287	269
5	Growth rate	(-)9.09%	(-)1.03%	(-)6.27%

Table 104: Employee Expenses approved by the Commission for FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	$EMP_{(n-1)}$ (Rs. Crore)	32.26	30.46	24.54
2	Gn (%)			(-)6.27%
3	$CPI_{inflation}$ (%)			5.40%
4	Employee Expenses = $(EMP_{(n-1)})$ x $(1+G_n)$ x $(CPI_{inflation})$			24.27

The Commission approves Employee Expenses of Rs. 24.27 Crores for FY 2024-25.

5.8.2. Administrative and General (A&G) Expenses

Petitioner's submission:

The Petitioner has submitted the Administrative & General Expenses of Rs. 2.51 Crores as against the approved figure of Rs. 5.91 Crores in the MYT Order dated 31st march 2022.

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 APR of FY 2023-24 for computation of revised A&G expenses of FY 2024-25. Approved value of A&G expenses for APR of FY 2023-24 has been escalated by average CPI of previous three years to arrive at the A&G Expenses for FY 2024-25.

Table 105: Computation of CPI Inflation (%)

FY	Average Value of CPI for FY	Increase in CPI Index	Average increase in CPI Index over 3 years	Applicable CPI
2019-20	322.50			
2020-21	338.70	5.02%	5.40%	
2021-22	356.10	5.14%		
2022-23	377.60	6.04%		
2023-24 and 2024-25				5.40%

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

Table 106: A&G Expenses approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	$A\&G_{(n-1)}$ (Rs. Crores)	5.91	2.51	2.56
2	CPI inflation (%)			5.40%
3	Gross $A\&G_n$ = $A\&G_{(n-1)}$ x (1+CPI inflation) (Rs. Crores)			2.70

The Commission approves the Administrative & General (A&G) expenses of Rs. 2.70 Crores for FY 2024-25.

5.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission:

The Petitioner has submitted the Repair & Maintenance Expenses of Rs. 8.68 Crores as against the approved figure of Rs. 9.37 crores in the MYT Order.

Commission's analysis:

In accordance with JERC MYT Regulations, 2021 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 closing $GFA_{(n-1)}$ value (i.e. Closing 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 2024-25.

The WPI Inflation has been computed as follows:

Table 107: Computation of WPI Inflation (%)

FY	Average Value of WPI for FY	Increase in WPI Index	Average increase in WPI Index over 3 years	Applicable WPI
2019-20	121.80			
2020-21	123.40	1.31%	7.89%	
2021-22	139.40	12.97%		
2022-23	152.50	9.40%		
2023-24 and 2024-25				7.89%

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

Table 108: R&M Expenses approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	FY 2024-25
1	Opening GFA for FY 2024-25 (i.e. Closing GFA (n-1) for FY 2023-24)	9.37	8.68	198.63
2	K factor approved (K) (%)			4.00%
3	Avg. WPI Inflation (%)			7.89%
4	R&M Expenses = K x (GFA n-1) x (1+WPIinflation)			8.57

The Commission has reviewed the capitalisation proposed by the Petitioner for FY 2024-25. It is observed that the Petitioner has not taken the prior approval for the following two schemes from the Commission. Considering the nature of expenses, the Commission has decided to consider the following two schemes under Repair and Maintenance expenses instead of capitalisation. Details are as follows:

1. To meet the amount for supply and installation of Solar Plant in islands, (Rs. 0.01 Crores).
2. Major overhauling/replacement of DG sets in Islands- 12 Islands, (Rs. 15 Crores)

The table below provides the R&M expenses approved in Tariff Order dated 28th March 2023, Petitioner's Submission and now approved by the Commission:

Table 109: R&M Expenses approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	R&M Expenses	9.37	8.68	23.58*

**Approved R&M Expenses Rs. 23.58 Crores is inclusive of re-estimated normative value of Rs. 8.57 Crores and aforesaid two schemes of worth Rs. 15.01 Crores.*

The Commission approves the Repair & Maintenance (R&M) expenses of Rs. 23.58 Crores for the FY 2024-25. However, while submitting the true-up of FY 2024-25 Petition, the Petitioner shall submit the details of R&M expenses including the expenses for above mentioned two schemes. It is to be clarified that the expenditure approved for the two schemes shall not be considered under normative R&M expenses under true-up and shall be approved as per actual basis during true-up exercise.

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 2024-25:

Table 110: O&M Expenses approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	Employee Expenses	32.25	30.46	24.27
2	Administrative & General Expenses (A&G)	5.91	2.51	2.70
3	Repair & Maintenance Expenses	9.37	8.68	23.58*
	Total Operation & Maintenance Expenses	47.54	41.65	50.55

**Approved R&M Expenses Rs. 23.58 Crores is inclusive of re-estimated normative value of Rs. 8.57 Crores and aforesaid two schemes of worth Rs. 15.01 Crores.*

The Commission approves Operation & Maintenance (O&M) expenses of **Rs. 50.55 Crores** in FY 2024-25.

5.9. Capitalization

Petitioner's submission:

The Petitioner has claimed the capitalisation of Rs. 26.31 Crores as against the capitalisation of Rs. 11.50 Crores approved in MYT order for FY 2024-25.

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 1st & 2nd deficiency note the Petitioner was asked to submit prior approval from the Commission on new schemes, detailed project report and cost benefit analysis of old & new schemes. The Petitioner was unable to submit the same.

The Commission has taken into account the nature of work related to following four schemes as proposed by the Petitioner and has decided as following:

a) Construction of office and power house building etc. (Rs. 1.50 Crores): The Commission has decided that the Scheme can be considered only after completion of Project and the Petitioner is directed to take prior approval from the Commission by submitting Detailed Project Report and Cost benefit analysis before the submission of True-up Petition of FY 2024-25.

b) To meet the amount for Supply of RCC Slab in Islands (Rs.0.25 Crores): The Commission has decided to consider the scheme in ARR of FY 2024-25. As this scheme was not approved in Business Plan, the Petitioner is directed to take prior approval from the Commission by submitting Detailed Project Report and Cost benefit analysis before the submission of True-up Petition of FY 2024-25.

c) **To meet the amount for supply and installation of Solar Plant in islands, (Rs. 0.01 Crores):** As the nature of the scheme is of R&M Expenses the Commission has decided to consider it under R&M Expenses.

d) **Major overhauling/replacement of DG sets in Islands- 12 Islands, (Rs. 15 Crores):** As the nature of the scheme is of R&M Expenses the Commission has decided to consider it under R&M Expenses.

The Commission has considered the approved closing value of the GFA for FY 2023-24 as the opening value of GFA for FY 2024-25. The Commission has reviewed the capitalisation for FY 2024-25 as approved by the Commission in the MYT order dated 31st March 2022 vis-à-vis as submitted by the Petitioner under present Petition. The Commission in its data deficiency note directed the Petitioner to submit the scheme wise details as well as schemes which are approved under MYT order and which are still not approved. After reviewing the submission, the Commission approves only those schemes, which are approved by the Commission in the MYT order. Accordingly, the Commission has arrived at the closing value of GFA for FY 2024-25 considering the approved capitalisation during FY 2024-25. 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 111: Capitalisation now approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	Capitalisation	11.50	26.31	9.80

The Commission approves the capitalisation of Rs. 9.80 crores for FY 2024-25.

The Commission directs the Petitioner that the Petitioner shall submit Detailed Project Report (DPR) along with Cost benefit Analysis and take prior approval of schemes, which were not considered in Business Plan order; then at the time of True-up of FY 2024-25 the above schemes only may be considered.

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 2024-25 as follows:

Table 112: GFA addition approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	FY 2024-25
1	Opening Gross Fixed Assets	198.63
2	Addition During the FY	9.80
3	Adjustment/Retirement During the FY	-
4	Closing Gross Fixed Assets	208.43

For the purpose of calculating the opening value of loan in FY 2024-25, the Commission has considered the closing value of loan for FY 2023-24 as approved in previous chapter.

Table 113: Loan addition approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	FY 2024-25
1	Opening Loan	7.08
2	Additions during the year	6.86
3	Less: Normative Repayment equivalent to Depreciation	5.82
4	Closing Loan	8.12

For the purpose of calculating the opening value of equity in FY 2024-25, the Commission has considered the closing value of equity for FY 2023-24 as approved in previous chapter.

Table 114: Normative Equity addition approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	FY 2024-25
1	Opening Equity	59.59
2	Additions during the year	2.94
3	Closing Equity	62.53

5.11. Depreciation

Petitioner's submission:

The Petitioner has submitted the depreciation of Rs. 8.67 crores as per JERC MYT Regulations, 2021 as against the approved depreciation of Rs. 7.10 crores in MYT Order dated 31st March 2022 for FY 2024-25.

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.

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

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

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

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

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

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

For calculating the depreciation for FY 2024-25, the Commission has considered the weighted average rate of depreciation as approved by the Commission in the Tariff order dated 31st March 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 115: Depreciation approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	Opening Gross Fixed Assets	229.09	201.06	198.38
2	Less: Assets depreciated up to 90% till FY 2019-20	22.92	22.92	22.92
3	Net Opening Gross Fixed Assets	206.17	178.14	175.45
4	Addition During the FY 2024-25	11.50	26.31	9.80
5	Closing Gross Fixed Assets	217.67	204.45	185.26
6	Average Gross Fixed Assets	211.92	191.30	180.36
7	Weighted Average Depreciation rate (%)	3.35%	4.53%	3.23%
8	Depreciation	7.10	8.67	5.82

The Commission approves a depreciation of Rs. 5.82 Crores for the FY 2024-25.

5.12. Interest on Loan and Finance Charges

Petitioner's submission:

The Petitioner has estimated the Interest and Finance charges as per the JERC MYT Regulations, 2021 for the year FY 2024-25. 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 (1 year tenor) 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."

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. The SBI 1-year MCLR as on 1st April 2023 plus 100 basis points i.e. 9.50% (8.50% + 1%) has been considered for computation of interest on loan.

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

Table 116: Interest on Loan approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	Opening Normative Loan	20.89	0.00	7.08
2	Add: Normative Loan During the year	8.05	18.42	6.86
3	Less: Normative Repayment equal to Depreciation	7.10	8.67	5.82
4	Closing Normative Loan	21.84	9.75	8.12
5	Average Normative Loan	21.37	4.88	7.60
6	Rate of Interest (%)	8.00%	9.50%	9.50%

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
7	Interest on Loan	1.71	0.46	0.72

The Commission approves Interest on Loan as Rs. 0.72 Crores for the FY 2024-25.

5.13. Return on Equity (RoE)

Petitioner's submission:

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

Table 117: Return on equity as submitted by the Petitioner (Rs. Crores)

Sr. No.	Particulars	FY 2024-25
1	Opening Equity Amount	60.32
2	Equity Addition during year (30% of Capitalization)	7.89
3	Closing Equity Amount	68.21
4	Average Equity Amount	64.26
5	Return on Equity (%)	16.00%
6	Total Return on Equity	10.28

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 15.5%/16% (on post-tax basis) with an opening equity considered equivalent to the closing equity of FY 2023-24 as derived in Section 5.10 Capital Structure above. The average equity is considered in the ratio of 90:10 for wheeling and retail supply business. Income Tax payable shall be considered on actual basis at the time of True-up. The following table provides the RoE approved in the ARR of FY 2024-25, the Petitioner's submission and RoE now approved by the Commission.

Table 118: RoE approved by the Commission for FY 2024-25 (Rs. Crores)

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Approved in MYT Order dated 31st March 2022</th><th>Petitioner's Submission</th><th>Now Approved by the Commission</th></tr>
<tr><td>1</td><td>Opening Equity</td><td>68.72</td><td>60.32</td><td>59.59</td></tr>
<tr><td>2</td><td>Additions in equity on account of new capitalisation</td><td>3.45</td><td>7.89</td><td>2.94</td></tr>
<tr><td>3</td><td>Closing Equity</td><td>72.17</td><td>68.21</td><td>62.53</td></tr>
<tr><td>4</td><td>Average Equity</td><td>70.45</td><td>64.26</td><td>61.06</td></tr>
<tr><td>5</td><td>Average Equity (Wires Business) (90%)</td><td></td><td></td><td>54.95</td></tr>
<tr><td>6</td><td>Average Equity (Retail supply Business) (10%)</td><td></td><td></td><td>6.11</td></tr>
<tr><td>7</td><td>Return on Equity for Wires Business (%)</td><td rowspan="2">16%</td><td rowspan="2">16%</td><td>15.50%</td></tr>
<tr><td>8</td><td>Return on Equity for Retail supply Business (%)</td><td>16.00%</td></tr>
<tr><td>9</td><td>Return on Equity for Wires Business</td><td></td><td></td><td>7.53</td></tr>
<tr><td>10</td><td>Return on Equity for Retail supply Business</td><td></td><td></td><td>0.86</td></tr>
<tr><td>12</td><td>Return on Equity</td><td>11.27</td><td>10.28</td><td>9.49</td></tr>
</table>

The Commission approves Return on Equity of Rs. 9.49 Crores for the FY 2024-25.

5.14. Interest on Security Deposits

Petitioner's submission:

The Petitioner has submitted that the addition in security deposit during the FY 2024-25 is Rs. 1.46 Crores and closing value of security deposit submitted by the Petitioner is Rs. 8.66 Crores, The Petitioner submitted the rate of Interest 4.25%, the interest on consumer deposit of Rs. 0.34 crores as per JERC MYT Regulations, 2021 as against the approved interest on consumer deposit of Rs 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 Petitioner wrongly considered the rate of interest as 4.25% for security deposit. The Commission considered the rate of interest, equivalent to the prevailing RBI Bank rate (i.e. 6.75%). The Commission approves the interest on security deposits on the basis of average security deposit during the year and the same shall be trued up at the time of true up of FY 2024-25.

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 2024-25:

Table 119: Interest on Security Deposits approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Approved by the Commission
1.	Opening Security Deposit	0.96	7.19	7.19
2.	Net addition during the year	0.01	1.46	1.46
3.	Refund during the year	-	-	-
4.	Closing Security Deposit	0.97	8.66	8.66
5.	Average Security Deposit	0.97	7.92	7.92
6.	Rate of Interest (%)	4.25%	4.25%	6.75%
7.	Interest on Security Deposit	0.04	0.34	0.53

The Commission approves Interest on Security Deposit as Rs. 0.53 Crores for the FY 2024-25.

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 by the Petitioner 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 1year MCLR as on 1st April 2023 plus 200 basis points i.e. 10.50% (8.50% + 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 120: Interest on Working Capital submitted by the Petitioner (Rs. Crores)

Sr. No.	Particulars	FY 2024-25
1.	O&M Expense for1 month;	4.34
2.	Maintenance Spare at 40% of R&M Expenses of month;	0.84
3.	Receivables equivalent to two (2) months of the expected revenue from Consumers at the prevailing tariff;	7.00
4.	Less: Amount held as Security Deposit	8.66
5.	Total Working Capital	1.19
6.	Interest Rate	10.50%
7.	Interest on Working Capital	0.13

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 and 32.4 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 2024-25 in accordance with the MYT Regulation, 2021. The interest rate has been considered as 10.50% (1-year MCLR as on 1st April 2023, i.e. 8.50% + 200 basis points). The computation of interest on working capital is shown in the following table:

Table 121: Interest on Working Capital approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	O&M Expense for 1 month	3.96	3.47	4.21
2	Maintenance spares at 40% of R&M expenses for one (1) month;	0.31	0.29	0.78
3	Receivables equivalent to two (2) months of the expected revenue from charges for use of distribution wires at the prevailing tariff	5.35	6.09	7.01
4	Less: Amount held as security deposits	0.97	8.66	8.66
5	Less: Power purchase for 1 month	0.00	0.00	0.00
6	Net Working Capital	8.65	1.19	3.35
7	Rate of Interest (%)	9.00%	10.50%	10.50%
8	Interest on Working Capital	0.78	0.13	0.35

The Commission approves the Interest on Working Capital as Rs. 0.35 Crores for the FY 2024-25.

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 2024-25.

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 has not considered any Provision for Bad & Doubtful Debts for the FY 2024-25 as the Petitioner has not proposed any amount for the same. 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 Rs. 1.48 Crores for FY 2024-25 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 2024-25 has been shown in the following table:

Table 122: Non -tariff Income approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by the Commission
1	Non-Tariff Income	1.48	1.48	1.48

The Commission approves Non-Tariff Income of Rs. 1.48 Crores for the FY 2024-25.

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 Rs. 267.92 Crores as against the approved net aggregate revenue requirement of Rs. 214.28 Crores in MYT Order dated 31st March 2022.

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 2024-25 is shown in table below:

Table 123: Aggregate Revenue Requirement approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Approved in MYT Order dated 31st March 2022	Petitioner's Submission	Now Approved by Commission
1.	Power Purchase Cost	0.00	0.00	0.00
2.	Fuel Cost	147.32	207.88	192.62
3.	REC Cost	0.00	0.00	0.49
4.	O&M Expenses	47.54	41.65	50.55
5.	Depreciation	7.10	8.67	5.82
6.	Interest and Finance charges	1.71	0.46	0.72
7.	Interest on Working Capital	0.78	0.13	0.35
8.	Return on Equity	11.27	10.28	9.49
9.	Interest on Security Deposit	0.04	0.34	0.53
10.	Income Tax	0.00	0.00	0.00
11.	**Total Revenue Requirement**	**215.76**	**269.40**	**260.57**
12.	**Less:** Non-Tariff Income	1.48	1.48	1.48
13.	**Net Revenue Requirement**	**214.28**	**267.92**	**259.09**

The Commission approves net Aggregate Revenue Requirement (ARR) of Rs. 259.09 Crores for the FY 2024-25.

5.19. Revenue at existing Retail Tariff

Petitioner's submission:

The Petitioner has estimated revenue from sale of power at existing tariff as Rs. 36.52 Crores for the FY 2024-25 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 converting connected load from kVA to kW. The revenue from different consumer category as computed by the Commission for the FY 2024-25 has been shown in the following table:

Table 124: Revenue at existing tariff computed by the Commission for the FY 2024-25 (Rs. Crores)

Sr. No.	Category	Sales (MUs)	Revenue from fixed Charges (Rs. Crore)	Revenue from Energy charges (Rs. Crore.)	Total (Rs. Cr.)	ABR (Rs. / Units)
1	Domestic	37.72	1.81	16.04	17.85	4.73
2	Commercial	4.47	0.28	3.39	3.67	8.21
3	Government Connections	7.54	0.41	8.94	9.35	12.40
4	Industrial	0.46	0.23	0.37	0.60	13.07
5	HT Industrial	2.76	0.18	2.90	3.08	11.15
6	Public Lighting	0.86	0.03	0.73	0.75	8.81
7	Temporary Connection	0.12	0.00	0.12	0.12	9.85*
	TOTAL	**53.92**	**2.94**	**32.49**	**35.42**	**6.57**

**As Petitioner has not submitted category wise information of Temporary connection, so to address the sales in this category the Commission considered Energy charge for this category as 1.5 times of overall ABR.*

The Commission has determined revenue from sale of power at existing tariff as Rs. 35.42 Crores in FY 2024-25.

5.20. Standalone Revenue Gap/ (Surplus)

Petitioner's submission:

Based on the ARR and the revenue from retail tariff projected by the Petitioner at existing rates, the Petitioner has submitted a standalone revenue gap of Rs. 231.40 Crores for the FY 2024-25.

Commission's analysis:

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

Table 125: Standalone Revenue Gap/ (Surplus) approved at existing tariff for the FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Petitioners' submission	Now Approved by the Commission
1.	Annual Revenue Requirement	267.92	259.09
2.	Revenue from sale of power	36.52	35.42
3.	**Revenue Gap/(Surplus)**	**231.40**	**223.67**

The standalone revenue gap at existing retail tariff is Rs. 223.67 Crores for the FY 2024-25.

Chapter 6 : Tariff Principles and Design

6.1. Overall Approach

The Commission while designing retail tariffs for the FY 2024-25 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 Electricity Act, 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 JERC MYT Regulations, 2021 states the following:

"*20. Annual determination of tariff*

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

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

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

Further, Regulation 68 of the JERC MYT 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 (majorly diesel based) 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 Rs. 231.40 Crores for FY 2024-25 at existing tariff. The revenue gap submitted by the Petitioner for FY 2024-25 is as follows:

Table 126: Revenue Gap at existing tariff submitted by the Petitioner for FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	FY 2024-25
1	Net Revenue Requirement	267.92
2	Revenue from Sale of Power at existing Tariff	36.52
3	Net Gap during the year	231.40
4	Add: Previous Year Gap	-
5	Total Gap	231.40

Commission's View:

The Commission based on the Aggregate Revenue Requirement and Revenue from sale of power computed above, has derived revenue gap for the FY 2024-25 at existing tariff as shown in table below:

Table 127: Revenue Gap determined by the Commission at existing tariff for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	FY 2024-25
1.	Net Revenue Requirement	259.09
2.	Revenue from Sale of Power at existing Tariff	35.42
3.	Net Gap during the year	223.67
4.	Add: Previous Year Gap	-
5.	Total Gap	223.67

Accordingly, the Commission determined the revenue gap of Rs. 223.67 Crores for FY 2024-25 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 Rs. 223.67 Crores for FY 2024-25. However, the Commission has appropriately revised the tariffs for FY 2024-25 as compared to tariffs of FY 2023-24, in view of the Petitioner's proposal for Tariff hike and the Letter dated 13th March 2024 with respect to the budgetary support by the UT administration to meet the balance revenue gap.

6.4.1. Tariff Proposal

Petitioner Submission:

The Petitioner has proposed that at existing tariff, the average cost of supply (ACoS) comes to Rs. 49.70 per unit, whereas Average revenue per unit at existing tariff is Rs. 6.78 per unit. Thus, there is a gap of Rs. 42.92 per unit.

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.

The Petitioner has proposed a tariff hike of 19.98%.

Accordingly, the tariff proposal submitted by the Petitioner for FY 2024-25 for individual category is as follows:

Table 128: Tariff proposal submitted by the Petitioner for FY 2024-25

Existing			Proposed		
Category	**Fixed Charges**	**Energy Charge (Rs. /kWh)**	**Category**	**Fixed Charges**	**Energy Charge (Rs. /kWh)**
Lifeline Connection	Rs. 10/- per kW per month	1.40	Lifeline Connection	Rs. 10/- per kW per month	1.60
Domestic Connection			Domestic Connection		
0 to 100 units	Rs. 20/- per kW per month	1.75	0 to 100 units	Rs. 25/- per kW per month	3.00
101 to 200 units		3.75	101 to 200 units		4.50
201 to 300 units		6.25	201 to 300 units		6.50
301 units & above		7.75	301 units & above		8.50
Commercial Connection			Commercial Connection		
0-100 Units	Rs. 30/- per kW per month	8.00	0-100 Units	Rs. 35/- per kW per month	10.00
101 to 200 Units		9.20	101 to 200 Units		11.50
201 units & above		12.00	201 units & above		15.00
Govt. Connection			Govt. Connection		
0-200 Units	Rs. 30/- per kW per month	10.00	0-200 Units	Rs. 35/- per kW per month	12.50
201 Units & above		12.00	201 units & above		13.80

Existing			Proposed		
Category	**Fixed Charges**	**Energy Charge (Rs. /kWh)**	**Category**	**Fixed Charges**	**Energy Charge (Rs. /kWh)**
Industrial	Rs. 50.00 per kVA per month	8.00	Industrial	Rs. 60.00 per kVA per month	10.00
HT Industrial	Rs. 150.00 per kVA per month	10.50	HT Industrial	Rs. 200 per kVA per month	13.15
Public Lighting	Rs. 75.00 per kVA per month	8.50	Public Lighting	Rs. 80.00 per kVA per month	10.65
EV Charging Stations		7.80	EV Charging Stations		9.75
Temporary Connections		1.5 times rate Applicable to that category	Temporary Connections		8.50

Accordingly, the computation of impact of proposed tariff on revenue for FY 2024-25 is as follows:

Table 129: Average Tariff Hike for FY 2024-25 as submitted by the Petitioner (Rs. Crores)

Sr. No.	Particulars	Units	FY 2024-25	
			Existing	**Proposed**
1	Net ARR for FY 2024-25	Rs. Crore	267.92	267.92
2	Revenue for FY 2024-25	Rs. Crore	36.52	43.82
3	Gap (1-2)	Rs. Crore	231.39	224.10
4	Total Sales	MUs	53.91	53.91
5	Average Cost of Supply (1/4x10)	Rs. /kWh	49.70	49.70
6	Average Billing Rate (2/4x10)	Rs. /kWh	6.78	8.13
7	Per Unit Gap (5-6)	Rs. /kWh	42.93	41.57
8	Average Hike in Tariff	Rs. /kWh		1.35
9	Tariff Hike in (%)	%		19.98%

Commission View:

As discussed above, the Commission has determined the retail tariff for the FY 2024-25 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:

Cost reflective: The tariffs determined should efficiently reflect the cost of supply for each consumer category, as far as possible.

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.

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.

Affordability: Assessing affordability of electricity for Domestic and Commercial consumers for defining slab ranges and setting tariffs.

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

Avoiding tariff shocks: Tariff shocks should be avoided and stakeholders should be able to predict the future trends in tariffs.

Demand management and grid stability: Demand management and grid stability should be ensured with demand-based tariffs.

Simplified tariff structure: Tariff structure should be simplified to make it easily administrable by the utility and easy to understand for the consumer.

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:

Cost of Supply

Context:

Due to electricity being a crucial utility item for all consumers, 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 are twofold – uncompetitive industries owing to higher input costs and inability of Distribution Licensees to recover sufficient tariffs from domestic consumers, resulting in financial distress. The issue is more pronounced for rural supply where tariffs are highly subsidized, actual cost of supply is higher and revenue recovery is poor.

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

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).

Tariff Affordability

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.

Approach:

On reviewing methodologies adopted for social impact assessment of electricity tariffs, the Commission found that Tariff Affordability Ratio (TAR) is a reliable parameter to measure affordability of electricity in households.

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

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

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

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

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

Cross Subsidy

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, cannot 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. 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 2024-25 is as follows:

Table 130: Existing vs. Tariff approved by the Commission for FY 2024-25

Existing			Approved		
Category	**Fixed Charges**	**Energy Charge (Rs. / kWh)**	**Category**	**Fixed Charges**	**Energy Charge (Rs. / kWh)**
Lifeline Connection	Rs. 10/- per kW per month	1.40	Lifeline Connection	Rs. 10/- per kW per month or part thereof	1.60
Domestic Connection			Domestic Connection		
0 to 100 units	Rs. 20/- per kW per month	1.75	0 to 100 units	Rs. 25/- per kW per month or part thereof	3.00
101 to 200 units		3.75	101 to 200 units		4.50
201 to 300 units		6.25	201 to 300 units		6.50
301 units & above		7.75	301 units & above		8.50
Commercial			Commercial		
0-100 Units	Rs. 30/- per kW per month	8.00	0-100 Units	Rs. 35/- per kW per month or part thereof	10.00
101 to 200 Units		9.20	101 to 200 Units		11.50
201 units & above		12.00	201 units & above		15.00

Existing			Approved		
Category	**Fixed Charges**	**Energy Charge (Rs. / kWh)**	**Category**	**Fixed Charges**	**Energy Charge (Rs. / kWh)**
Govt. Connection			Govt. Connection		
0-200 Units	Rs. 30/- per kW per month	10.00	0-200 Units	Rs. 45/- per kW per month or part thereof	14.00
201 units & above		12.00	201 units & above		15.30
Industrial	Rs. 50/- per kVA per month	8.00	Industrial	Rs. 65/- per kVA per month or part thereof	10.00
HT Industrial	Rs. 150/- per kVA per month	10.50	HT Industrial	Rs. 200/- per kVA per month or part thereof	13.15
Public Lighting	Rs. 75.00 per kVA per month	8.50	Public Lighting	Rs. 90.00 per kVA per month or part thereof	10.80
EV Charging Stations		7.80	EV Charging Stations		7.80
	-			-	
Temporary Connections	1.5 times the rate applicable to the relevant category of consumers		Temporary Connections	1.5 times the rate applicable to the relevant category of consumers	

6.4.2. Revenue from Approved Retail Tariff for FY 2024-25

The Commission has decided that the approved tariff for FY 2024-25 will be applicable from 16th June 2024.

Based on the retail tariff approved above, the revenue at existing tariff has been estimated for 2.5 months (i.e. from 1st April 2024 to 15th June 2024) and revenue at revised tariff for

9.5 months (i.e. from 16th June 2024 to 31st March 2024) as estimated by the Commission for FY 2024-25 is given in the following table:

Table 131: Re-estimation of Revenue (2.5 Months at existing tariff rates approved by the commission for FY 2023-24 and for 9.5 months at approved tariff rates for 2024-25 in this Tariff Order)

Category	Re-estimation of Revenue for (2.5 Months at existing Tariff Rates)			Re-estimation of Revenue for (9.5 Months at approved Tariff Rates for FY 2024-25)			Total Revenue		
	Revenue from Fixed charges (Rs. Crores)	Revenue from Energy Charges (Rs. Crores)	Total (Rs. Crores)	Revenue from Fixed charges (Rs. Crores)	Revenue from Energy Charges (Rs. Crores)	Total (Rs. Crores)	Revenue from Fixed charges (Rs. Crores)	Revenue from Energy Charges (Rs. Crores)	Total (Rs. Crores)
Domestic	0.38	3.34	3.72	1.79	15.16	16.96	2.17	18.50	20.68
Commercial	0.06	0.71	0.76	0.26	3.36	3.61	0.32	4.06	4.38
Government Connections	0.08	1.86	1.95	0.48	9.08	9.56	0.57	10.94	11.51
Industrial	0.05	0.08	0.12	0.24	0.36	0.60	0.29	0.44	0.73
HT Industrial	0.04	0.60	0.64	0.19	2.88	3.07	0.23	3.48	3.71
Public Lighting	0.005	0.15	0.16	0.02	0.73	0.76	0.03	0.88	0.91
Temporary Connection	0.03		0.03	0.11		0.11	0.14		0.14
Total	**0.61**	**6.77**	**7.38**	**2.99**	**31.68**	**34.67**	**3.60**	**38.45**	**42.05**

The total revenue approved by the Commission for FY 2024-25 given in following table:

Table 132: Revenue at tariff approved by the Commission for FY 2024-25

Sr. No.	Category	Sales (MUs)	Revenue from Fixed charges (Rs. Crores)	Revenue from Energy Charges (Rs. Crores)	Total (Rs. Crores)	ABR (Rs./unit)
1	Domestic	37.72	2.17	18.50	20.68	5.48
2	Commercial	4.47	0.32	4.06	4.38	9.80
3	Government Connections	7.54	0.57	10.94	11.51	15.26
4	Industrial	0.46	0.29	0.44	0.73	15.85

Sr. No.	Category	Sales (MUs)	Revenue from Fixed charges (Rs. Crores)	Revenue from Energy Charges (Rs. Crores)	Total (Rs. Crores)	ABR (Rs./unit)
5	HT Industrial	2.76	0.23	3.48	3.71	13.43
6	Public Lighting	0.86	0.03	0.88	0.91	10.67
7	Temporary Connection	0.12	0.14		0.14	11.31*
	Total	**53.92**	**3.60**	**38.45**	**42.05**	**7.80**

**As Petitioner has not submitted category wise information of Temporary connection, so to address the sales in this category the Commission considered Energy charge for this for temporary connection category as 1.5 times of overall ABR.*

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

Table 133: Revenue gap at tariff approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	FY 2024-25	
		Claimed by Petitioner	Approved by the Commission
1	Net Revenue Requirement	267.92	259.09
2	Revenue from Sale of Power at Revised Tariff	43.82	42.05
3	Net Gap during the year	224.10	217.04
4	Add: Previous Year Gap	-	-
5	Total Gap	224.10	217.04

The Petitioner has submitted a letter dated 13th March 2024, towards meeting the gap of FY 2024-25 as approved by the Commission through Budgetary support provided by UT administration. Hence, The Commission has considered the same while approving the tariffs for FY 2024-25. Therefore final (Surplus)/Gap is approved as 'NIL' for FY 2024-25

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 134: Percentage recovery of ACoS at tariff approved by the Commission for FY 2024-25

Sr. No.	Category	Average Cost of Supply (Rs./unit) (with fuel cost)	Average Billing Rate at existing tariff (Rs./unit	Average Billing Rate at approved tariff (Rs./unit	ABR at existing tariff as % of ACoS	ABR at approved tariff as % of ACoS
1	Life Line Connection (Up to 100 Units) *	48.05	-	-	-	-
2	Domestic	48.05	4.73	5.48	9.86%	11.41%
3	Commercial	48.05	8.21	9.80	17.11%	20.39%
4	Government Connection	48.05	12.40	15.26	25.83%	31.76%
5	Industrial	48.05	13.07	15.85	27.22%	32.99%
6	HT Industrial	48.05	11.15	13.43	23.24%	27.94%
7	Public Lighting	48.05	8.81	10.67	18.34%	22.22%
8	EV Charging Station *	48.05	-	-	-	-
9	Temporary Connection	48.05	9.85**	11.31**	20.53%	23.54%
10	**Overall**	**48.05**	**6.57**	**7.80**	**13.68%**	**16.23%**

**Average Billing Rate (ABR) has been considered as "Nil" due to unavailability of actual sales data with the Petitioner.*

*** As Petitioner has not submitted category wise information of Temporary connection, so to address the sales in this category the Commission considered Energy charge for this for temporary connection category as 1.5 times of overall ABR.*

Further, the Commission has computed the category wise cost coverage through the budgetary support at the approved tariffs for FY 2024-25 in the following table.

Table 135: Category wise cost coverage through the budgetary support at approved tariff for FY 2024-25

Sr. No.	Category	Average Cost of Supply (Rs. /unit)	Average Billing Rate at approved tariffs (Rs. /unit)	Budgetary Support at approved tariffs (Rs. /unit)
1	Life Line Connection (Up to 100 Units) *	48.05	-	-
2	Domestic	48.05	5.48	42.57
3	Commercial	48.05	9.80	38.25
4	Government Connection	48.05	15.26	32.79
5	Industrial	48.05	15.85	32.20
6	HT Industrial	48.05	13.43	34.62
7	Public Lighting	48.05	10.67	37.38

Sr. No.	Category	Average Cost of Supply (Rs. /unit)	Average Billing Rate at approved tariffs (Rs. /unit)	Budgetary Support at approved tariffs (Rs. /unit)
8	EV Charging Station	48.05	-	-
9	Temporary	48.05	11.31**	36.74
10	Overall	48.05	7.80	40.25

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

*** As Petitioner has not submitted category wise information of Temporary connection, so to address the sales in this category the Commission considered Energy charge for this for temporary connection category as 1.5 times of overall ABR.*

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

Table 136: Approved ACoS and ABR by the Commission at approved tariff for FY 2024-25

Sr. No.	Particulars	FY 2024-25
1	Net Revenue Requirement (Rs. Crore)	259.09
2	Revenue from Revised Tariff (Rs. Crore)	42.05
3	Gap (Rs. /kWh)	217.04
4	Energy Sales (MU's)	53.92
5	Average cost of supply (ACoS) (Rs. /kWh)	48.05
6	Average Billing Rate (Rs. /kWh)	7.80
7	Average Tariff hike	18.71%

The highlights of the tariff structure approved by the Commission for FY 2024-25 is as follows:

The Commission has approved tariff hike of 18.71% from existing rates for FY 2024-25.

The Commission has approved the Average Billing Rate for FY 2024-25 as Rs. 7.80/kWh as against the approved Average Cost of Supply of Rs. 48.05/kWh.

The Petitioner has submitted a letter dated 13th March 2024 towards meeting the gap of FY 2024-25 as approved by the Commission through Budgetary support. The Commission has considered the same while approving the tariffs for FY 2024-25.

Chapter 7 : Tariff Schedule

7.1. Tariff Schedule:

Category	Fixed Charges	Energy Charge (Rs. /kWh)
Lifeline Connection	Rs. 10/- per kW per month or part thereof	1.60
Domestic Connection		
0 to 100 units	Rs. 25/- per kW per month or part thereof	3.00
101 to 200 units		4.50
201 to 300 units		6.50
301 units & above		8.50
Commercial		
0-100 Units	Rs. 35/- per kW per month or part thereof	10.00
101 to 200 Units		11.50
201 units & above		15.00
Govt. Connection		
0-200 Units	Rs. 45/- per kW per month or part thereof	14.00
201 units & above		15.30
Industrial	Rs. 65.00 per kVA per month or part thereof	10.00
HT Industrial	Rs. 200.00 per kVA per month or part thereof	13.15

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Category	Fixed Charges	Energy Charge (Rs. /kWh)
Public Lighting	Rs. 90.00 per kVA per month or part thereof	10.80
EV Charging Stations		7.80
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.	

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Sr. No.	Category	Applicability	Point of Supply news
5	Industrial Supply	Applicable to all Low-tension 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.	
8	Electric Vehicle Charging Station	This tariff schedule shall apply to the Public Charging Stations (PCS) and Captive Charging Stations (CCS) as defined below in accordance with the Ministry of Power, GoI revised consolidated guidelines, and standards for charging infrastructures for Electric Vehicles dated 14th January, 2022. Public Charging Stations (PCS) shall mean an EV charging station where any electric vehicle can get its battery recharged. Captive Charging Stations (CCS) shall mean an electric vehicle charging station exclusively for the electric vehicles owned or under the control of the owner of the charging station e.g., Government Departments, Corporate houses, Bus Depots, charging stations owned by the fleet owners etc. shall not be used for commercial purpose of charging other vehicles on paid basis. The tariff for respective category consumption shall be applicable for respective charging (LT/HT).	
9	Temporary Supply	The supply may be given for a limited period as per the provisions of JERC	

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Sr. No.	Category	Applicability	Point of Supply news
		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 Code Regulations. Notice to this effect shall be printed on the bill of the consumer.

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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 Rs. 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.

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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:

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

Sr. No.	Particulars	Charges (Rs.)
RECONNECTION CHARGES AFTER TEMPORARY DISCONNECTION		
1.	Single Phase LT Connection	Rs. 50
2.	Three Phase LT Connection	Rs. 100
3.	HT Connection	Rs. 500
SERVICE CONNECTION CHARGES		
4.	Single Phase LT Connection	R. 250
5.	Three Phase LT Connection	Rs. 500
6.	HT Connection	Rs. 1,000
EXTRA LENGTH CHARGES		
7.	Single Phase	Rs. 50/meter

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Sr. No.	Particulars	Charges (Rs.)
8.	Three Phase	Rs. 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	Rs. 100 per meter
10.	Three Phase Meter	Rs. 300 per meter
11.	Three Phase Tri-vector Meter (0.5 Class) Industrial LT Consumer	Rs. 500 per meter
12.	Three Phase Tri-vector Meter (0.5 Class)11 KV HT Consumer	Rs. 500 per meter
13.	Combined CT-PT Unit for 11 KV Consumer	Rs. 500 per unit
14.	Three Phase CT Block	Rs. 300 per block
15.	CT Coil	Rs. 100 per coil
FEES (NON-REFUNDABLE) FOR SUBMISSION OF TEST REPORT OF WIRING COMPLETION		
16.	Single Phase Lighting / Domestic Connection	Rs. 10 per test report
17.	Three Phase Lighting /Domestic Connection	Rs. 25 per test report
18.	Single Phase Lighting / Commercial Connection	Rs. 50 per test report
19.	Three Phase Lighting / Commercial Connection	Rs. 100 per test report
20.	Three Phase LT Industries	Rs. 250 per test report
21.	Single Phase / Streetlight / Public Lighting & others	Rs. 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)	Rs. 100
23.	Meter shifting charges (within the premises on consumer request, if change in service cable required up to 30 metre)	Rs. 200
24.	Shifting of poles on consumer request	Rs. 1,500
25.	Diversion of HT/LT line on consumer request	Rs. 100/- per meter
26.	Penalty for tampering/damaging of supplier equipment	As per the relevant provisions of the JERC Supply Code Regulations, 2018

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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 31st October 2012
Commission's directive in Tariff Order dated 28th March 2023 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.
Petitioner's response in the present Tariff Petition Petitioner in current Petition submitted that accounts of FY 2019-20 is being audited and filed for true-up for FY 2019-20.
Commission's view: The Commission has considered the True-up of expenses for FY 2019-20. The Commission directs the Petitioner to get the accounts audited for FY 2020-21, FY 2021-22, FY 2022-

23 and FY 2023-24 and file the true up petitions along with the next MYT tariff filing for the control period FY 2025-26 to FY 2027-28.

8.1.2. Capital Expenditure

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 28th March 2023 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 The status of Capital Expenditure shall be submitted to Hon'ble Commission on quarterly basis.
Commission's view: The Commission regrets that despite repeated directions to submit the progress report of capitalization quarterly basis, the Petitioner does not seem concerned at all and have failed to comply the directions of the Commission. The Petitioner has not left any room before the Commission but to initiate Suo-moto proceeding under section 142 of the Electricity act 2023 for imposition of penalty. However, the Commission, giving the Petitioner a last opportunity, directs the Petitioner to submit the progress report of capitalisation on quarterly basis strictly in the format already shared failing which the Commission shall be constant to take action in accordance with the act.

8.1.3. Improvement of specific fuel consumption

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 28th March 2023 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.
Petitioner's response in the present Tariff Petition Detailed work undertaken for improvement of specific fuel consumption shall be submitted to Hon'ble Commission on quarterly basis.
Commission's view: The Commission has observed that the detailed work undertaken for improvement of specific fuel consumption is not being submitted on quarterly basis. The Commission regrets that despite repeated directions to submit the report on fuel consumption on quarterly basis, the Petitioner does not seem concerned at all and have failed to comply the directions of the Commission. The Petitioner has not left any room before the Commission but to initiate Suo-moto proceeding under section 142 of the Electricity act 2023 for imposition of penalty. However, the Commission, giving the Petitioner a last

opportunity, directs the Petitioner to submit the report on fuel consumption on quarterly basis strictly in the format already shared failing which the Commission shall be constant to take action in accordance with the act.

8.1.4. Metering of consumer installations/replacement of defective meters

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 28th March 2023 The Commission directs the Petitioner to submit the progress report on the quarterly basis.
Petitioner's response in the present Tariff Petition Status of consumer metering shall be submitted to Hon'ble Commission on quarterly basis.
Commission's view: The Commission appreciates the compliance by the Petitioner directs the Petitioner to submit the information on timely manner.

8.1.5. State Load Despatch Centre

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 28th March 2023 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
Petitioner's response in the present Tariff Petition The draft report from POSOCO has not yet received. Further Department shall take up the matter with Central Electricity Authority for extending support in this regard. The status of the same shall be communicated to the Hon'ble Commission in due course.
Commission's view: The Commission noted the submission and directs the Petitioner to expedite the establishment on priority. The Commission further directs the Petitioner to furnish a detailed report regarding a status of establishment of SLDC with in 60 days from the issuance of this tariff order.

8.1.6. Slab wise details

Originally issued in Tariff Order dated 19th March 2018

Commission's latest directive in Tariff Order dated 28th March 2023 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 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.
Petitioner's response in the present Tariff Petition The details shall be compiled and submitted in due course to Hon'ble Commission.
Commission's view: 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 19th March 2018
Commission's latest directive in Tariff Order dated 28th March 2023 The Commission directs the Petitioner to submit quarterly the status of the upcoming projects.
Petitioner's response in the present Tariff Petition The status of upcoming projects shall be submitted to Hon'ble Commission on quarterly basis.
Commission's view: 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 19th March 2018
Commission's latest directive in Tariff Order dated 28th March 2023 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.

Petitioner's response in the present Tariff Petition UT of Lakshadweep Administration and Department of Electricity is exploring all the possible solution for clean and green energy generation. In this regard, Department had signed MoU with M/s SECI for development of RE projects in Lakshadweep. Department is also exploring wind potential in Lakshadweep in collaboration with M/s SECI and NIWE. Commissioning of ground mounted SPV plants at Kavaratti (1.4 MW with BESS) and Agatti (0.3 MW) by M/s SECI is the starting initiatives towards greening of islands. The status of RE project development shall be communicated to Hon'ble Commission from time to time.
Commission's view: The Commission noted the progress submitted by the Petitioner and directs that the generation of electricity shared through Renewable Energy sources should be focused more in order to bring down the existing cost of supply from DG set.

8.1.9. Reliability Indices proposal for the control period

Originally issued in Tariff Order dated 31st March 2022
Commission's directive in Tariff Order dated 31st 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 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 latest directive in Tariff Order dated 28th March 2023 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.
Petitioner's response in the present Tariff Petition Department is in the process of compiling all the data and the same shall be submitted to Hon'ble Commission in due course.

Commission's view: The Commission directs the Petitioner to submit the data of failures for generating plants and distribution network separately for the entire 3rd control period within 30 days of from the issuance of this order. The Commission further directs the Petitioner to submit the trajectory for the Reliability Indices for 4th control period (i.e. FY 2025-26 to FY 2027-28) along with filing of the Business Plan for the next control period.

8.1.10. Proposal for implementation of kVA/kVAh tariff for HT consumers.

Originally issued in Tariff Order dated 28th March 2023
Commission's latest directive in Tariff Order dated 28th March 2023 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.
Petitioner's response in the present Tariff Petition Department has requisite infrastructure to implement the same. **Petitioner's response in Reply to TVS Queries:** Department of Electricity is only having 8 no of HT consumers. All the HT Consumers are metered and the meters are recording kVAh readings and hence department is able to implement the kVA/kVAh tariff for HT consumers. However, department has proposed Smart Metering under RDSS for all the consumers in Lakshadweep. It is requested to implement kVA/kVAh tariff for HT consumers after the implementation of Smart Metering for more convenience.
Commission's view: The Commission noted the submission and directs the petitioner that all HT consumers should be compliant for kVAh billing by 31st March 2025.

8.2. New Directives issued in this Order

8.2.1. Submission of separate tariff rates for Agriculture consumers

As per the comments received by the stakeholders, the Commission has instructed the department to include pertinent facts and a tariff recommendation for agricultural customers in the upcoming tariff petition.

Chapter 9 : Annexures

Annexure 1: List of Stakeholders who attended the public hearing on 14th May 2024 through Video Conference

Table 137: List of Stakeholders

Sr. No.	Name of Person (Mr./Ms.)
1.	Aboobacker Koya PP, Social Activist
2.	A. Misbah, Social Activist
3.	Mohammed Faisal, Member of Parliament (VC)
4.	M.I Attakoya, District Congress Committee President
5.	Muhsin P, General Secretary, Nationalist Congress Party (S)
6.	Kamaludheen, Social Activist
7.	Mohammed, Consumer
8.	Abdul Kader, Ex Chairperson, VDP, Kavaratti
9.	Achada Ahmed Haji, Ex President-Cum-Chief Councillor, District Panchayath, Kavaratti
10.	Adv. Hamdulla Sayeed, Ex Member of Parliament (VC)
11.	Abdu Rahman, Kavaratti
12.	Rahmanul Muhsin, Kavaratti
13.	Rafi, Kavaratti
14.	Basheer PP, Kavaratti
15.	Najmudheen, Kavaratti
16.	Muhsin, Kavaratti
17.	Badarudheen, Kavaratti
18.	Sajid Khan, Kavaratti
19.	Mohammed Irfan Khan, Kavaratti
20.	Basari, Kavaratti
21.	Mushafa, Kavaratti
22.	Shabeer, Kavaratti
23.	Raheem, Kavaratti
24.	Sunidha Ismail