TARIFF ORDER

Approval of True-up for FY 2017-18 and FY 2018-19, Annual Performance Revenue for FY 2021-22, Aggregate Revenue Requirement for 3rd MYT Control Period (FY 2022-23 to FY 2024-25) & Determination of Retail Supply Tariff for the FY 2022-23

Petition No. 75/2022

For

Lakshadweep Electricity Department (LED)

31st March 2022

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 and General
Act	The Electricity Act, 2003
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal of Electricity
CAGR	Compound Annualized Growth rate
Capex	Capital Expenditure
CEA	Central Electricity Authority
CGS	Central Generating Stations
Cr	Crores
DG	Diesel Generator
Discom	Distribution Company
FY	Financial Year
GoI	Government of India
HT	High Tension
HSD	High Speed Diesel
JERC	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
kVA	Kilo Volt Ampere
kWh	Kilo Watt Hour
LED	Lakshadweep Electricity Department
LEDA	Lakshadweep Energy Development Agency
LNG	Liquefied Natural Gas
LT	Low Tension
MoP	Ministry of Power
MU	Million Units
MW	Mega Watt
MYT	Multi Year Tariff
NIOT	National Institute of Ocean Technology
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance
OTEC	Ocean Thermal Energy Conversion
PLF	Plant Load Factor
PPA	Power Purchase Agreement
REC	Renewable Energy Certificate
RPO	Renewable Purchase Obligation
SECI	Solar Energy Corporation of India Limited
SERC	State Electricity Regulatory Commission
SFC	Specific Fuel Consumption

Abbreviation	Full Form
SPV	Solar Photovoltaic
T&D	Transmission & Distribution
TVS	Technical Validation Session
UI	Unscheduled Interchange
UT	Union Territory
YoY	Year on Year

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Before the

Joint Electricity Regulatory Commission

For the State of Goa and Union Territories, Gurugram

QUORUM

Smt. Jyoti Prasad, Member (Law)

Petition No. 75/2022

In the matter of

Approval of True-up for FY 2017-18 and FY 2018-19, Annual Performance Revenue for FY 2021-22, Aggregate Revenue Requirement for 3rd MYT Control Period (FY 2022-23 to FY 2024-25) & Determination of Retail Supply Tariff for the FY 2022-23.

And in the matter of

Lakshadweep Electricity Department (LED)..Petitioner

ORDER

Dated: 31st March 2022

1) This Order is passed in respect of a Petition filed by the Lakshadweep Electricity Department (LED) (herein after referred to as "The Petitioner" or "LED" or "The Licensee") for Approval of True-up for FY 2017-18 and FY 2018-19, Annual Performance Revenue for FY 2021-22, Aggregate Revenue Requirement for 3rd MYT Control Period (FY 2022-23 to FY 2024-25) & Determination of Retail Supply Tariff for the FY 2022-23, before the Joint Electricity Regulatory Commission (herein after referred to as "The Commission" or "JERC").

2) The Commission scrutinised the said Petition and generally found it in order. The Commission admitted the Petition on 17th January 2022. The Commission thereafter requisitioned further information/ clarifications on the data gaps observed to take a prudent view of the said Petition. The Commission also held a Technical Validation Session to determine sufficiency of data and the veracity of the information submitted. Further, suggestions/ comments/ views and objections were invited from the Stakeholders and Electricity Consumers. Further, due to the COVID-19 pandemic that had adversely impacted the movement of people as per the guidelines of GoI which had suggested avoiding of travel and gathering of people as far as possible, the Commission had decided to conduct the Public Hearing virtually. The virtual Public Hearing was held on 17th February 2022 and all the Stakeholders/Electricity Consumers present in the Public Hearing were heard.

3) The Petitioner has submitted the true-up petition for FY 2017-18, FY 2018-19 and has not submitted the true up petition for FY 2019-20 and FY 2020-21; therefore, the Commission has only carried out the True-up for FY 2017-18 and FY 2018-19. The Commission shall revisit the ARR for the FY 2019-20 and FY 2020-21 after the submission of true-up petition along with audited accounts by the Petitioner.

4) The Commission based on the Petitioner's submission, relevant MYT Regulations, facts of the matter, rules and provisions of the Electricity Act, 2003 and after proper due diligence and prudence check has

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approved the APR of FY 2021-22 and ARR for FY 2022-23 to FY 2024-25 along with Retail Tariff for the FY 2022-23.

5) A Summary has been provided as follows:

6) The following table provides ARR, Revenue and gap as submitted by the Petitioner and approved by the Commission in the true-up of FY 2017-18:

Table 1: Standalone Revenue Gap/ (Surplus) approved for FY 2017-18 (INR Crore)

S. No	Particulars	Petitioner's submission	Approved by Commission
1	Net Revenue Requirement	131.67	129.08
2	Revenue from Retail Sales at Existing Tariff	21.14	21.14
3	**Net Gap /(Surplus)**	**110.53**	**107.94**

(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 2018-19:

Table 2: Standalone Revenue Gap/ (Surplus) approved for FY 2018-19 (INR Crore)

S. No	Particulars	Petitioner's submission	Approved by Commission
1	Net Revenue Requirement	151.11	148.75
2	Revenue from Retail Sales at Existing Tariff	22.75	22.75
3	**Net Gap /(Surplus)**	**128.36**	**126.00**

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

Table 3: Standalone Revenue Gap/ (Surplus) approved for FY 2021-22 (INR Crore)

S. No	Particulars	Petitioner's submission	Approved by Commission
1	Net Revenue Requirement	199.08	177.18
2	Revenue from Retail Sales at Existing Tariff	27.99	25.38
3	**Net Gap /(Surplus)**	**171.09**	**151.80**

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

Table 4: Standalone Revenue Gap/ (Surplus) approved for FY 2022-23 (INR Crore)

S. No	Particulars	Petitioner's submission	Approved by Commission
1	Net Revenue Requirement	208.72	187.14
2	Revenue from Retail Sales at Approved Tariff	36.36	30.02
3	**Net Gap /(Surplus)**	**172.35**	**157.12**

(d) The Petitioner has proposed a hike of 24.24% in the energy charges and the remaining revenue gap shall be met through the budgetary support.

(e) The Commission has decided to increase the average tariff for FY 2022-23 by 13.40% from the existing tariff of FY 2021-22.

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

(g) The Commission has approved the average revenue for FY 2022-23 as INR 5.27/kWh as against the approved Average Cost of Supply of INR 32.83/kWh.

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

7) The licensee shall publish the Tariff Schedule and salient features of Tariff as determined by the Commission in this Order within one week of receipt of the Order in three daily newspapers in the respective local languages of the region, besides English, having wide circulation in their respective areas of supply and also upload the Tariff Order on its website.

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

Sd/-
Smt. Jyoti Prasad
Member (Law)

Place: Gurugram
Date: 31st March 2022

Certified Copy

Rakesh Kumar
(Secretary)

1. Chapter 1: Introduction

1.1. About Joint Electricity Regulatory Commission (JERC)

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

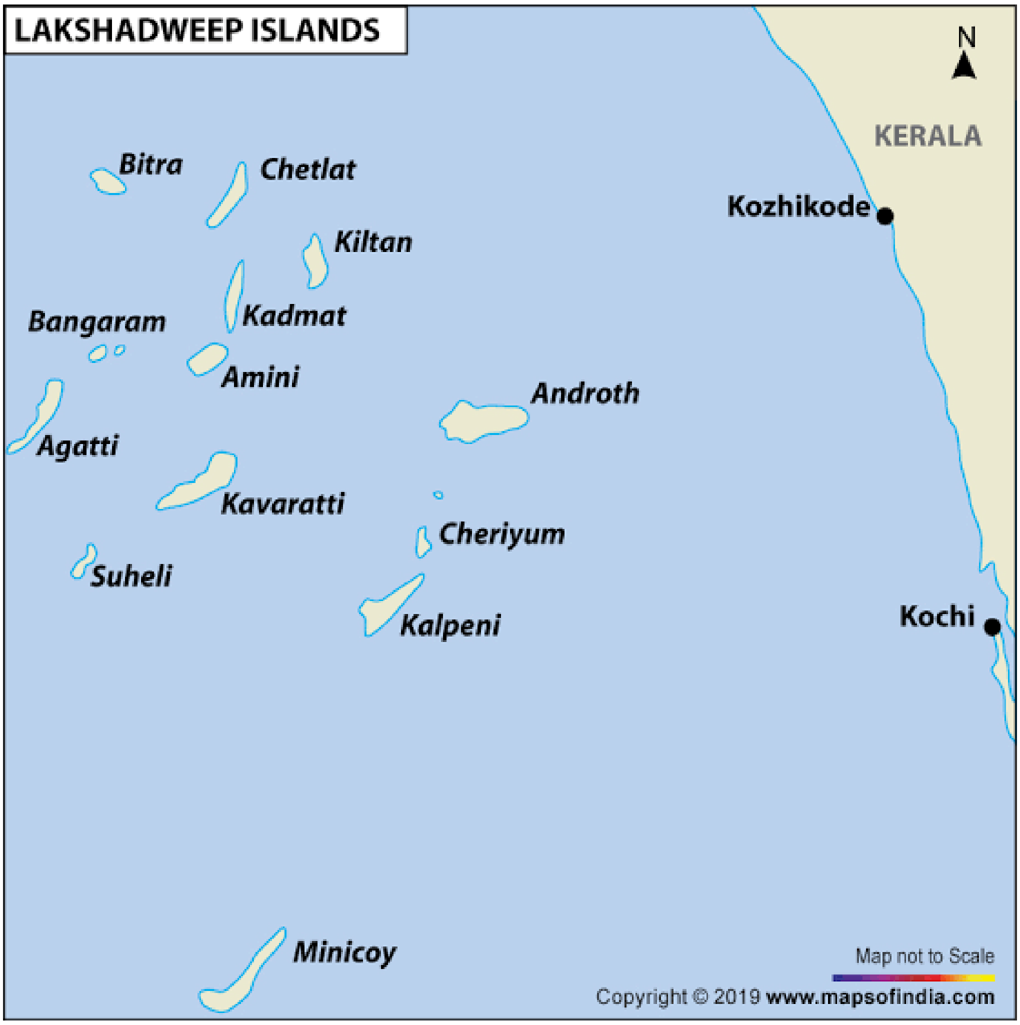
JERC is a statutory body responsible for regulation of the Power Sector in the State of Goa and the Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Dadra & Nagar Haveli and Daman & Diu and Puducherry, consisting of generation, transmission, distribution, trading and use of electricity.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

1.2. Lakshadweep Islands

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

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

Lakshadweep islands comprises of an area of 32 sq. kms. For operational purpose the area has been divided into 1 division and 10 sub-divisions. Pictorial view of the Islands is given below:



1.3. About Lakshadweep Electricity Department (LED)

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

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

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

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

The key duties being discharged by LED are:

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

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

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

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

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

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

Table 5: Electricity Department at a glance (FY 2020-21)

S. No.	Particulars	Details
1	Total Installed Capacity	27.606 MW
1(a)	Diesel Generation	26.566 MW
1 (b)	Solar Generation	1.040 MW
2	No. of Power Houses	17 Nos (11 Nos of Diesel power plant, 6 Nos of solar power plant)
3	Total Staff Strength	336
4	HT Line	112 kms
5	LT Line	351 kms
6	Distribution Transformer	109 Nos.
7	No. of consumers	25,422
8	Units Sold	53.10 MUs
9	T&D Loss	11.63 %
10	Street Light Points	8,321
11	11 kV Sub-station	9

1.4. Multi Year Tariff Regulations, 2014

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2014 (hereinafter referred to as MYT Regulations, 2014) on June 30, 2014. These Regulations are applicable in the 1st MYT Control Period comprising of three financial years from FY 2016-17 to FY 2018-19. 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, 2018

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

1.6. Multi Year Tariff Regulations, 2021

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 (hereinafter referred to as MYT Regulations, 2021) on March 22, 2021. These Regulations are applicable in the 3rd MYT Control Period comprising of three financial years from FY 2022-23 to FY 2024-25. These Regulations are applicable to all the generation companies, transmission and distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Dadra & Nagar Haveli and Daman & Diu and Puducherry.

1.7. Filing and Admission of the Present Petition

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

The Petitioner has submitted this Petition for approval of its Multi Year Tariff for the three years Control Period from FY 2022-23 to FY 2024-25 on 12th January 2022, which was admitted by the Commission on 17th January 2022 and marked as Petition no. 75/2022.

1.8. Interaction with the Petitioner

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

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

Table 6: List of interactions with the Petitioner

S. No	Subject	Date
1	Issue of First Discrepancy Note	07.02.2022
2	Public hearing	17.02.2022
3	Reply received from the Petitioner with regard to first discrepancy Note	23.02.2022
4	Technical Validation Session	04.03.2022
5	Issue of Second Discrepancy Note	07.03.2022

S. No	Subject	Date
6	Reply received from the Petitioner with regard to second discrepancy Note	09.03.2022
7	Petitioner's reply to the Stakeholders' comments sought by the Commission	14.03.2022
8	Issue of Third Discrepancy Note	15.03.2022
9	Reply received from the Petitioner with regard to third discrepancy Note	16.03.2022

1.9. Notice for Public Hearing

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

Table 7: Details of Public Notices published by the Petitioner

S. No.	Date	Name of Newspaper	Language	Place of circulation
1	January 31, 2022	The Lakshadweep Times	English	Lakshadweep islands, Kavaratti

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

The Petitioner uploaded the Petition on its website (http://lakpower.nic.in) for inviting objections and suggestions on the Petitions. The Commission also uploaded the Tariff Petition and the Public Notice on its website www.jercuts.gov.in giving due intimation to stakeholders, consumers, objectors and the public at large about the Public Hearing to be conducted by the Commission on February 17, 2022 through Video Conferencing due to ongoing COVID 19 pandemic.

1.10. Public Hearing

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

Accordingly, the Virtual Public Hearing was held on February 17, 2022 from 12 PM to discuss the issues, if any, related to the Petition filed by the Petitioner. The issues and concerns raised by the stakeholders in writing and as voiced by them during the Public Hearing have been examined by the Commission. The names of the stakeholders who attended the Public Hearing are provided in Annexure-I. The major issues discussed, the responses of the Petitioner thereon and the views of the Commission have been summarized in Chapter 2 of this Order.

2. Chapter 2: Public Hearing

2.1. Regulatory Process

On admitting the Petition, the Commission directed the Petitioner to make copies of the Petition available to the public, upload the Petition on the website and also publish the same in the newspapers in an abridged form in the given format duly inviting suggestions/ comments from the public as per the provisions of the JERC MYT Regulations, 2014, JERC MYT Regulations, 2018 and JERC MYT Regulations 2021.

The Public Hearing was held on 17th February 2022 through Video Conferencing on the Petition for Business Plan for MYT Control Period from FY 2022-23 to FY 2024-25 and Approval of True-up for FY 2017-18 and FY 2018-29, Annual Performance Revenue for FY 2021-22, Aggregate Revenue Requirement for 3rd MYT Control Period (FY 2022-23 to FY 2024-25) & Determination of Retail Supply Tariff for the FY 2022-23. During the Public Hearing, a few stakeholders who had submitted their comments in writing also presented their views in person before the Commission. Other participants from the general public, who had not submitted written suggestions/ comments earlier, were also given an equal opportunity to present their views/ suggestions in respect to the Petition.

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

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

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

2.2.1. Defer Domestic Tariff Hike

Stakeholders' Comments

The stakeholder submitted that the proposal of huge increase of specially the Domestic Tariff rate by the Lakshadweep Electricity Department/ UT of Lakshadweep Administration should not be accepted by the Commission.

Petitioner's Response

It is submitted that the Department of Electricity had proposed to increase the Tariff for meeting some portion of ARR only. With the proposed increase in Tariff, LED will only be able to recover 17% of ARR. Moreover, the major consumption is from Domestic category, the department has to increase the domestic category tariff considerably to meet the increased ARR.

Commission's View

The Commission understands the difficulties of life in the island of Lakshadweep and the adverse impact of ongoing COVID19 pandemic on the economic activities and accordingly, has appropriately revised the tariff. The Commission has discussed the principles adopted for approving the Tariff in Chapter 8 of the Tariff Order.

2.2.2. Defer Tariff Hike due to pandemic

Stakeholders' Comments

The stakeholder submitted that the long period of about 2 years of lock down and Covid restrictions has caused irreparable damage to the normal economic activities and income of the people.

Petitioner's Response

No comments

Commission's View

The Commission understands the difficulties of life in the island of Lakshadweep and the adverse impact of ongoing COVID19 pandemic on the economic activities and accordingly, has appropriately revised the tariff. The Commission has discussed the principles adopted for approving the Tariff in Chapter 8 of the Tariff Order.

2.2.3. Free Electricity

Stakeholders' Comments

The stakeholder submitted that in our country if any section is granted free electricity, the Lakshadweep Islanders deserve to be given such benefit in view of their difficulties and hardships to life on these Islands.

Petitioner's Response

The Petitioner has submitted that it is related with Governments Policy decision and hence no comment.

Commission's View

The Commission would like to highlight that the average cost of supply in case of Lakshadweep Islands is very high in comparison to other states, thereby making it difficult to provide free electricity. Further, UT Administration is already providing budgetary support to Electricity Department thus subsiding the consumers to a huge extent. The Commission has discussed the principles adopted for approving the Tariff in Chapter 8 of the Tariff Order.

2.2.4. Tariff on par with neighbouring states

Stakeholders' Comments

The stakeholder submitted that the current level of Tariff now being levied from the consumers is on par with the rate prevailing in neighbouring states.

Petitioner's Response

It is submitted that Department of Electricity had proposed to increase the Tariff for meeting some portion of ARR only. With the proposed increase in Tariff, department will only be able to recover 17% of ARR. Moreover, the major consumption is from Domestic category, the department has to increase the domestic category tariff considerably to meet the increased ARR.

Commission's View

The Commission understands the difficulties of life in the island of Lakshadweep but at the same time feels that cost of generation is very high and accordingly, has appropriately revised the tariff. The Commission has discussed the principles adopted for approving the Tariff in Chapter 8 of the Tariff Order.

2.2.5. Revenue from Light houses

Stakeholders' Comments

The stakeholder submitted that the Ministry of Shipping, Govt of India is receiving huge revenue running into hundreds of crores on account of Light Houses in different Islands of Lakshadweep. The Commission may get the fund required to meet the total expenditure of Electricity power generation and supply from above fund as electricity is an essential requirement for this tribal community.

Petitioner's Response

No comments.

Commission's View

The Commission has noted the suggestion of the stakeholders and would like to clarify that the operations of the Light House is outside the purview of the Commission and cannot direct them to subsidise the annual revenue requirement for the electricity department, Lakshadweep.

2.2.6. Infrastructure for Solar Energy

Stakeholders' Comments

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

Petitioner's Response

It is submitted that projects under M/S SECI include the installation of Roof Top Solar on all Govt Buildings and they had done the assessment of all the Govt buildings as well. The Department had initiated the proposal for implementation of Roof Top Solar plants under domestic category, however due to the ongoing privatization process, it was kept aside for the time being.

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 6 months of issuance of this Order.

2.2.7. Electricity generation by using OTEC plant

Stakeholders' Comments

The stakeholder submitted that the scientific community is well aware of the potential of the deep sea around islands to generate electricity by using OTEC. A plant sanctioned for Kavaratti has not been implemented

Petitioner's Response

It is submitted that the Desalination plant using OTEC technology is being implemented by NIOT. The Nodal agency is Lakshadweep Public Works Department. Department of Electricity has no role in it.

Commission's View

The Commission has noted the suggestion of the stakeholders and requests them to consider the Petitioner response in this regard.

2.2.8. Electricity generation through LNG

Stakeholders' Comments

The stakeholder submitted that it is a fact that the LNG is environmentally an eco-friendly fuel now used all over the world. Large quantity of LNG is arriving at Kochi Port and is distributed to the South Indian States. If the Power generation of Lakshadweep is changed from Diesel based to LNG the cost of production can be brought down by 2/3 of the present expenditure.

Petitioner's Response

It is submitted that the UT of Lakshadweep Administration has decided to privatize the entire power generation and distribution functions of the Department of Electricity. One of the important terms and conditions of this tender is to shift from Diesel based Generation to Clean Energy sources within a period of 2 years.

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 6 months of issuance of this Order.

2.2.9. Difficult Conditions in Lakshadweep

Stakeholders' Comments

The stakeholder submitted that the situation in Union Territory of Lakshadweep is very special and warranting special action. The Occupants are Scheduled tribe and fishermen community. The remoteness of the islands coupled with the economic backwardness. Hence, the Hon'ble Regulatory Commission is pleased to dismiss the petition.

Petitioner's Response

No comments.

Commission's View

The Commission understands the difficulties of life in the island of Lakshadweep and the adverse impact of ongoing COVID19 pandemic on the economic activities and accordingly, has only marginally raised the tariff. The Commission has discussed the principles adopted for approving the Tariff in Chapter 8 of the Tariff Order.

2.2.10. Unemployment and Poverty

Stakeholders' Comments

The stakeholder submitted that in the last one year for no justified reason, the UT Administration has dismissed the jobs for about 3000 workers (daily waged laborers and contract workers/employees including even Anganwadi workers). This has directly pushed about 3000 households to poverty. In this remote and difficult territory where there is no public sector or private sector industrial units and commercial establishments the workers have no source of alternate employment and income.

Petitioner's Response

No comments.

Commission's View

The Commission understands the difficulties of life in the island of Lakshadweep and the adverse impact of ongoing COVID19 pandemic on the economic activities and accordingly, has only marginally raised the tariff. The Commission has discussed the principles adopted for approving the Tariff in Chapter 8 of the Tariff Order.

Further, for the issue of the dismissal of the workers, the matter is outside the purview of the Commission and therefore, suggest the stakeholders to take up the matter with the UT Administration.

2.2.11. Solar Power Production

Stakeholders' Comments

The stakeholder submitted that there was proposal and repeated direction from Central Govt to augment the Solar Power production, Whereas UT Administration did not take timely action to implement more units of Renewable Energy in last 3 years even though sufficient fund was provided.

Petitioner's Response

It is submitted that projects under M/S SECIs project include the installation of Roof Top Solar's on all Govt Buildings and they had done the assessment of all the Govt buildings as well. The Department had initiated the proposal for implementation of Roof Top Solar plants under domestic category, however due to the ongoing privatization process, it was kept on aside for the time being.

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 6 months of issuance of this Order.

2.2.12. RPO Compliance

Stakeholders' Comments

The stakeholder submitted that as per the proposed Tariff, Department is expecting an additional revenue of around 7-8 Cr. The Department is having huge RPO compliance pending for the past years. However, it is embarrassing to see that no development has taken place in the field of Solar Energy. Earlier Department had signed an MOU with SECI for 29 MW project out of which 1.9 MW was land based Phase I project (Kavaratti, Agatti, Bangaram and Thinnakara). If the Administration had implemented at least the Phase I project, Department would have been able to meet at least 3 MU per annum which would have lead to savings of more than 8 Cr (Considering present ACOS of Rs.36 and SECI's PPA rate of Rs 10). From this it is very much clear that, if the Administration would have implemented the Solar project (Which can be easily possible in one year before i.e. 2020 itself), they would have been able to meet some of the RPO targets as well as saved more than 8 Cr per annum.

Petitioner's Response

It is submitted that the Department had signed a MOU with M/S SECI during the year 2018 for implementation of Floating Solar Projects and Ground mounted Solar Plants. As part of this M/S SECI has to deploy the following ground mounted SPV plants under Phase—I of the project.

Kavaratti - 1.4 MW with BESS,
Agatti - 0.3 MW
Bangaram - 0.1 MW
Thinnakara - 0.1 MW

However, due to various reasons, the projects are not implemented till date. The work for Phase—I projects has been awarded to M/S Sun source India and the installation works at Kavaratti and Agatti is going on. Meanwhile UT of Lakshadweep Administration had decided to privatize entire generation and distribution functions of Department of Electricity wherein it is mandated that the newly selected company has to establish

80% of power generation from RE sources within a period of 3 years. Hence all the projects of M/S SECI except Kavaratti and Agatti (where work order had already been issued) has been put on hold. Department is anticipated that, after the privatization the consumers shall get clean and green energy at lower cost (ARR) and better services.

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 6 months of issuance of this Order.

Further, the Petitioner is directed to provide the Action Plan to comply with the pending RPO compliances within 3 months of the issue of this Order.

2.2.13. Implementation of Solar Roof top

Stakeholders' Comments

The stakeholder submitted that the UT Administration is even not interested to implement Roof Top Solar Projects under MNRE subsidy whereby they will get cheap electricity.

Petitioner's Response

It is submitted that the implementation of Roof Top Solar Projects, it is submitted that, M/S SECI project include the installation of Roof Top Solar's on all Govt Buildings and they had done the assessment of all the Govt buildings. Department had initiated the proposal for implementation of Roof Top Solar plants under domestic category, however due to the ongoing privatization process, it was kept aside for the time being.

Commission's View

The Commission appreciates the suggestion of the stakeholders and accordingly, directs the Petitioner to provide the details such as the implemented solar rooftop capacity, initiatives already taken by the Department and action plan to increase the capacity within 6 months of issuance of this Order.

3. Chapter 3: True-up of FY 2017-18

3.1. Background

The Tariff Order on Aggregate Revenue Requirement (ARR) for FY 2017-18 was issued on April 5, 2017 (hereinafter referred to as the "ARR Order").

The Commission, now, in this Chapter carries out the True-up of FY 2017-18 in accordance with the principles laid down in the Tariff Regulations, 2014. The True up for the FY 2017-18 has to be carried out in accordance with Regulation 8 of the Tariff Regulations, 2014, which states as following:

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

The Truing Up for any year will ordinarily not be considered after more than one year of 'Review'.

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

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

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

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

3.2. Approach for True-up for FY 2017-18

The Petitioner has requested for True-up of FY 2017-18 on the basis of audited accounts. 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 of FY 2017-18.

The Commission has analysed various elements of the actual revenue and expenses for the FY 2017-18 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 Tariff Regulations, 2014 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 2017-18 as 48.50 MU as against the approved energy sales quantum of 60.66 MU in the ARR Order.

Commission's Analysis

The MYT Regulations, 2014 stipulate that the variation in sales constitutes "uncontrollable factors" that are beyond the control of the Petitioner and cannot be mitigated. Regulation 9.1 of the MYT Regulations, 2014 in this regard stipulates the following:

"The "uncontrollable factors" shall comprise of the following factors which were beyond the control of, and could not be mitigated by the applicant:
(a) Force Majeure events, such as acts of war, fire, natural calamities, etc.
(b) Change in law;
(c) Taxes and Duties;
(d) Variation in sales; and
(e) Variation in the cost of power generation and/or power purchase due to the circumstances specified in these Regulations;"

The table below provides the energy sales approved by the Commission in the Tariff Order of FY 2017-18, the Petitioner's submission and quantum of energy sales now trued-up by the Commission.

Table 8: Energy Sales trued-up by the Commission (MU)

S. No.	Category	Approved in ARR order	Petitioner's Submission	Trued-up by the Commission
1	Domestic	47.45	35.90	35.90
2	Commercial	11.98	10.91	10.91
3	Industrial	0.42	0.96	0.96
4	Public Lighting	0.81	0.65	0.65
5	Temporary Connection	0.00	0.09	0.09
6	**Total Sales**	**60.66**	**48.50**	**48.50**

The Commission approves 48.50 MU as energy sales in the True-up of the FY 2017-18.

3.4. Power Purchase Quantum & Cost

Petitioner's Submission

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 has provided plant-wise power generation details as follows:

Table 9: Island wise power generation (MU)

S. No.	Islands	Solar Generation	Diesel Generation	Total Generation
1	Minicoy	0.26	8.06	8.31
2	Kavaratti	0.58	12.77	13.35
3	Amini	-	5.51	5.51
4	Androth	0.32	8.25	8.57
5	Kalpeni	0.13	3.83	3.97
6	Agatti	0.08	6.76	6.84
7	Kadmat	0.31	4.34	4.65
8	Kiltan	0.10	2.99	3.09
9	Chetlat	-	1.61	1.61
10	Bitra	0.01	0.29	0.30
11	Bangram	-	0.15	0.15
12	**Grand Total**	**1.79**	**54.56**	**56.35**

The Petitioner has claimed a fuel cost of Rs 79.71 crore against Rs 74.76 crore as approved by the Commission in the Tariff Order dated April 5, 2017.

Commission's analysis

The MYT Regulations, 2014 stipulate that any variation in the cost of power generation and/or power purchase shall be treated as an uncontrollable factor. Regulation 9.1 of the MYT Regulations stipulates the following:

"The "uncontrollable factors" shall comprise of the following factors which were beyond the control of, and could not be mitigated by the applicant:
(a) Force Majeure events, such as acts of war, fire, natural calamities, etc.
(b) Change in law;
(c) Taxes and Duties;
(d) Variation in sales; and
(e) Variation in the cost of power generation and/or power purchase due to the circumstances specified in these Regulations;"

The Commission has observed that the Petitioner has claimed the fuel cost as per the annual audited accounts of FY 2017-18 in regard to the Diesel generation. Accordingly, the Commission approves the following power purchase quantum and cost for the True-up of FY 2017-18:

Table 10: Power Purchase cost and Quantum as approved by the Commission

S. No.	Source	Quantum (MU)	Cost (INR Crore)
1	Diesel Generation	54.56	79.71
2	Solar Generation	1.79	-
3	**Total Generation**	**56.35**	**79.71**

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 per the audited accounts 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 approved for the department as a whole in subsequent sections. Accordingly, no separate cost has been approved for own renewable based generation.

The Commission approves power purchase quantum of 56.35 MU and cost of INR 79.71 Crore in the True-up of the FY 2017-18 with Average Power Purchase Cost as INR 14.14/kWh.

3.5. Renewable Purchase Obligation (RPOs)

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

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

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and revised the RPO targets, according to which the Petitioner had to purchase 6.70% of its total consumption (including 2.50% from Solar) from renewable sources for the FY 2017-18.

As per Tariff Order dated 17th April 2015, the Commission has taken a following view:

"The Petitioner would be able to meet its RPO targets of Solar Power for FY 2015-16 based on the capacity addition proposed. It is observed that the Petitioner is not meeting its RPO target of 2.70% to be met from non-solar sources of renewable power generation; however, the Petitioner is meeting its overall target of 3.30%.

The Commission, after considering the availability of solar energy and the difficult logistic/terrain conditions of the Islands, as a special case, approves clubbing of Renewable Purchase Obligations of Solar and non-solar energy to meet the target set by the Commission. However, in view of the cost of fuel and environmental pollution caused by using diesel, the Commission directs the LED to maximize the generation and purchase of renewable (both Solar and non-solar) energy."

For the FY 2017-18, the Petitioner had a standalone target of 3.25 MU comprising of 1.21 MU Solar and 2.04 MU Non-Solar. Against the compliance target, the Petitioner has only been able to procure 1.79 MU of solar power, thereby resulting into a shortfall of 1.46 MU in achieving overall RPO target.
Based on the above, the Commission has computed the standalone RPO compliance for FY 2017-18 as shown in the following table:

Table 11: Compliance status of Renewable Purchase Obligation (RPO) (In MU)

Sr. No.	Particulars	Value
1.	Sales within the state	48.50
2.	RPO Obligation (In %)	6.70%
a)	Solar	2.50%
b)	Non-Solar	4.20%
3.	RPO Obligation	3.25
a)	Solar	1.21
b)	Non-Solar	2.04
4.	RPO Compliance (Own Generation)	1.79
a)	Solar	1.79
b)	Non-Solar	-
5.	RPO Compliance (REC Certificate Purchase)	-
6.	Total RPO Compliance	1.79
7.	**Shortfall/ (Surplus) in RPO Compliance**	**1.46**
7.	Cumulative Shortfall in RPO compliance till last year	1.58
7.	**Shortfall/ (Surplus) in RPO Compliance**	**3.04**

The Commission notes that there is a net shortfall in RPO compliance for FY 2017-18 (1.46 MU) and cumulative shortfall of 3.04 MU till FY 2017-18 to be complied in later years.

3.6. 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 13.03% in the FY 2017-18 against target of 12.75% in FY 2017-18.

Commission's analysis

The Petitioner has not submitted the energy Audit report for FY 2017-18. In absence of the energy audit report, the Commission has considered the net generation/purchase as submitted by the Petitioner for the purpose of True-up. Considering actual sales of 48.50 MU and actual generation of 56.35 MU as approved above, actual T&D loss comes to 13.93%.

Since, the Petitioner has not been able to achieve the Intra-State T&D loss target for the year, the disincentive for the same has to be borne by the Petitioner in accordance with the MYT Regulations, 2014. The calculation of the same has been discussed in detail in "Section 3.18.: Incentive/Disincentive towards over/under-achievement of norms of distribution losses section" of this Order.

The table below provides the Intra-State T&D loss approved in the ARR of FY 2017-18, the Petitioner's submission and as approved by the Commission now.

Table 12: Intra-State distribution loss (%)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Intra-State distribution loss	12.75%	13.03%	13.93%

The Commission, while truing up for FY 2017-18, has considered the actual Intra-State T&D loss of 13.93% for the FY 2017-18 and dis-incentive in this regard has been considered in Section 3.18.

3.7. Energy Balance

Petitioner's submission

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

Table 13: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	48.50
2	Transmission and Distribution losses (%)	13.03%
	Transmission and Distribution losses (MU)	7.27
3	**Total Energy Requirement (for sale to retail consumers)**	**55.77**
B	**Energy Availability at Periphery**	
1	Power Purchase	0.00
2	Own Generation	55.77
3	**Total Energy Availability**	**55.77**
C	**Total shortfall/(Surplus)**	**0.00**

Commission's analysis

The information submitted by the Petitioner on power purchase quantum has been examined and accordingly the energy balance for the FY 2017-18 is derived. The following table provides the energy balance approved in the ARR of the FY 2017-18, the Petitioner's submission and now trued-up by the Commission.

Table 14: Energy Balance (MU) approved by the Commission

S. No.	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**			
1	Total Sales within the UT	60.66	48.50	48.50
2	Transmission and Distribution losses (%)	12.75%	13.03%	13.93%
	Transmission and Distribution losses (MU)	8.86	7.27	7.85

S. No.	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
3	**Total Energy Requirement (for sale to retail consumers)**	**69.53**	**55.77**	**56.35**
B	**Energy Availability at Periphery**			
1	Power Purchase	0.00	0.00	0.00
2	Own Generation	69.53	55.77	56.35
3	**Total Energy Availability**	**69.53**	**55.77**	**56.35**
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**0.00**

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 MYT Regulations, 2014 considers the variation of O&M Expenses to be controllable. Regulation 9.2 of the MYT Regulation, 2014 states the following:

“9.2 Some illustrative variations or expected variations in the performance of the applicant, which may be attributed by the Commission to controllable factors include, but are not limited to the following:

(a)Variations in capital expenditure 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)Variations in Transmission and Distribution Losses (T&D) losses in case of bundled utilities and Distribution losses in case of unbundled utilities which shall be measured as the difference between the units input into the distribution system and the units supplied and billed;

(c)Depreciation and working capital requirements;

(d)Failure to meet the standards specified in the Joint Electricity Regulatory Commission (Standards of Performance) Regulations, 2009 except where exempted;

(e)Variation in operation & maintenance expenses, except those attributable to directions of the Commission;

(f)Variation in Wires Availability and Supply Availability;

(g)Variation on account of inflation;”

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 incurred the actual employee expenses of INR 19.31 Cr against the approved expenses of INR 13.35 Crore in the ARR of FY 2017-18.

Commission’s analysis

The Commission has analysed the information available in the audited accounts and found certain variations/discrepancies in the submissions of the Petitioner viz-a-viz the audited accounts. The Commission observed that the Petitioner has wrongly classified expenses between Employee, R&M and A&G expenses.

The Petitioner has also requested to allow the employee expenses as per actual as actual base data was not available at the time of MYT trajectory setting and certain assumptions were used to set the same. Accordingly, the Commission finds it appropriate to allow the employee expenses as per actuals. The table below provides the employee expenses approved in the ARR Order, submission of the Petitioner and now trued-up by the Commission.

Table 15: Employee Expenses approved by the Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	**Total Employee Expenses**	**13.35**	**19.31**	**24.26**

The Commission approves the Employee Expenses of INR 24.26 Crore in the True-up of the FY 2017-18.

3.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has incurred A&G expenses of INR 4.26 Crore against the approved expenses of INR 1.83 Crore in the ARR Order.

Commission's analysis

A&G expenses mainly comprise of rents, telephone and other communication expenses, professional charges, postal and telegram etc.

The Commission has analysed the information available in the audited accounts and found certain variations/discrepancies in the submissions of the Petitioner viz-a-viz the audited accounts. The Commission observed that the Petitioner has wrongly classified expenses between Employee, R&M and A&G expenses.

The Petitioner has also requested to allow the A&G expenses as per actual as actual base data was not available at the time of MYT trajectory setting and certain assumptions were used to set the same. Accordingly, the Commission finds it appropriate to allow the A&G expenses as per actuals. The table below provides the A&G expenses approved in the ARR Order, submission of the Petitioner and now trued-up by the Commission

Table 16: A&G Expenses approved by the Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	**Total A&G Expenses**	**1.83**	**4.26**	**7.24**

The Commission approves the A&G Expenses of INR 7.24 Crore in the True-up of the FY 2017-18.

3.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has incurred R&M expenses of INR 10.08 Crore against the approved expenses of INR 4.52 Crore in the Tariff Order.

Commission's analysis

The Commission has analysed the information available in the audited accounts and found certain variations/discrepancies in the submissions of the Petitioner viz-a-viz the audited accounts. The Commission observed that the Petitioner has wrongly classified expenses between Employee, R&M and A&G expenses.

The Petitioner has also requested to allow the R&M expenses as per actual as actual base data was not available at the time of MYT trajectory setting and certain assumptions were used to set the same. Accordingly, the Commission finds it appropriate to allow the R&M expenses as per actuals. The table below provides the R&M expenses approved in the ARR Order, submission of the Petitioner and now trued-up by the Commission

Table 17: R&M Expenses approved by the Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	**Repair & Maintenance Expenses (R&M)**	**4.52**	**10.08**	**2.15**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 2.15 Crore in the True-up of FY 2017-18

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

The following table provides the O&M expenses approved in the Tariff Order, submitted by the Petitioner and now trued-up by the Commission.

Table 18: O&M Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Employee Expenses	13.35	19.31	24.26
2	Administrative & General Expenses (A&G)	1.83	4.26	7.24
3	Repair & Maintenance Expenses	4.52	10.08	2.15
	Total Operation & Maintenance Expenses	**19.70**	**33.65**	**33.65**

The Commission approves the Operation & Maintenance (O&M) Expenses of INR 33.65 Crore in the True-up of FY 2017-18.

3.9. Capitalisation

Petitioner's submission

The Petitioner submitted the actual capitalisation for the FY 2017-18 as INR 6.44 Crore against an approved capitalization of INR 18.95 Crore in the ARR of FY 2017-18.

Commission's analysis

The Commission approves the capitalisation as per the submission in the audited Accounts by the Petitioner.

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

Table 19: Capitalisation approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Capitalisation	18.95	6.44	6.44

The Commission approves the capitalisation of INR 6.44 Crore in the True-up of FY 2017-18.

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

The MYT Regulations 2014, specify that if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as the normative loan. Regulation 24 of the MYT Regulations, states the following:

(a) The Distribution Licensee shall provide detailed loan-wise, project-wise and utilization-wise details of all of the pending loans

(b) If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans.

The Commission sought details of assets created out of consumer contribution/ grants from the Petitioner, on which the Petitioner has responded that no assets have been created out of consumer contribution/ grants. Further, the opening GFA for FY 2017-18 has been considered as the closing GFA for FY 2016-17 as approved by the Commission in the true-up of FY 2016-17.

In accordance with the MYT Regulations, 2014, and the submissions made by the Petitioner, the Commission has determined the Capital Structure for FY 2017-18 as follows:

Table 20: GFA Approved by the Commission (INR Crore)

Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
Opening GFA	105.18	162.30	162.30
Additions during the FY	18.95	6.44	6.44
Adjustment/Retirement During the FY	-	-	0.00
Closing GFA	124.13	168.74	168.74

Table 21: Normative Loan addition approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	53.92	21.65	21.65
2	Add: Normative Loan During the year	13.27	4.51	4.51
3	Less: Normative Repayment equivalent to Depreciation	6.36	6.61	6.85*
4	Closing Normative Loan	60.83	19.55	19.31

**Depreciation calculated in next section*

Table 22: Normative Equity addition approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	31.55	48.69	48.69

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
2	Additions on account of new capitalisation	5.69	1.93	1.93
3	Closing Equity	37.24	50.62	50.62

3.11. Depreciation

Petitioner's submission

The Petitioner has submitted the actual depreciation of assets as per the audited annual accounts of FY 2017-18. The depreciation as claimed by the Petitioner has been tabulated below:

Table 23: Depreciation submitted by the Petitioner (INR Crore)

S. No	Particulars	Petitioner's Submission
1	Opening Gross Fixed Assets	162.30
2	Addition During the FY	6.44
3	Adjustment/Retirement During the FY	-
4	Closing Gross Fixed Assets	168.74
5	Average Gross Fixed Assets	165.52
6	Rate of Depreciation (%)	3.99%
	Depreciation	**6.61**

Commission's analysis

Regulation 23 of the MYT Regulations 2014, states the following:

(a) Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year.

(b) Depreciation shall not be allowed on assets funded by capital subsidies, consumer contributions or grants.

(c) Depreciation shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation. The same shall be as specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014. (The same may vary as notified by CERC from time to time.)

(d) The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset.
Provided that Land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

(e) Depreciation shall be charged from the first year of operation of the asset.

Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis.

(f) A provision of replacement of assets shall be made in the capital investment plan."

As per the norms specified in the MYT Regulations, 2014 the Commission has verified the asset wise capitalisation of the Petitioner and has accordingly derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in the CERC Tariff Regulations, 2014, provided in the table below:

Table 24: Depreciation Rate (%)

Description	Rate
Plant & Machinery	5.28%
Buildings	3.34%
Furniture & Fixtures	6.33%
Land	0.00%
Vehicles	9.50%
Computers	15.00%

The Petitioner as part of this Petition has submitted the Fixed Asset Register (FAR) for FY 2017-18 which specifies the value of assets that have achieved 90% depreciation as of FY 2017-18. As the MYT Regulations, 2014 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 upto 90% as reflected in the FAR of FY 2017-18 has been deducted from the opening GFA as approved in the previous section.

On scrutiny, the Commission found that the Fixed Asset Register includes the renewable generation assets as well, therefore, the Commission directs the Petitioner to maintain the FAR for renewable generation assets separately and file the tariff petition for these assets separately from the next year onwards.

The revised GFA has then been considered and the depreciation on average Gross Fixed Assets (GFA) 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 2017-18:

Table 25: Calculation of revised GFA (In INR Crore)

Description	Opening GFA as per audited accounts	Less: Assets depreciated upto 90% till FY 2017-18	Revised Opening GFA	Addition/Deletion during the year	Closing GFA	Depreciation Rate	Depreciation
Plants & Machinery	120.89	19.65	101.24	6.25	107.49	5.28%	5.51
Building	23.01	1.54	21.47	0.19	21.66	3.34%	0.72
Furnitures & Fixtures	0.65	0.49	0.17	-	0.17	6.33%	0.01
Land	12.93	-	12.93	-	12.93	0.00%	-
Vehicles	0.76	0.76	0.00		0.00	9.50%	0.00
Computers	4.06	-	4.06		4.06	15.00%	0.61
Total	**162.30**	**22.44**	**139.87**	**6.44**	**146.31**		**6.85**

Therefore, it can be deduced that the depreciation rate as average of opening and closing GFA for FY 2017-18 is 4.79%. The following table provides the calculation of depreciation during the year FY 2017-18:

Table 26: Depreciation approved by the Commission (In INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Gross Fixed Assets	105.18	162.30	162.30
2	Less: Assets depreciated upto 90% till FY 2017-18			22.44
3	Opening Net GFA			139.87
4	Addition During the FY	18.95	6.44	6.44

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
5	Closing Net Fixed Assets	124.13	168.74	146.31
6	Average Net Fixed Assets	114.66	165.52	143.09
7	Weighted Average Depreciation rate (%)	5.54%	3.99%	4.79%
	Depreciation	**6.36**	**6.61**	**6.85**

The Commission approves depreciation of INR 6.85 Crore in the true-up of FY 2017-18

3.12. Interest and Finance Charges

Petitioner's submission

The Petitioner has calculated the Interest on Loan on normative basis. The opening balance of loans for FY 2017-18 is considered as the closing value of balance of loans for FY 2016-17. The normative loan addition in FY 2017-18 has been computed as 70% of the actual capitalisation for FY 2017-18. The repayment of loans has been considered equal to the depreciation during the FY 2017-18.

Further, the rate of interest has been considered as the State Bank of India Prime Lending Rate (SBI PLR) of 13.85% (rate as on 1st April 2017).

Commission's analysis

The MYT Regulations, 2014 stipulate that the rate of interest to be considered while determining the ARR shall be the weighted average interest rate of the actual loan portfolio. Regulation 24 of the MYT Regulations, states the following:

(a) The Distribution Licensee shall provide detailed loan-wise, project-wise and utilization-wise details of all of the pending loans

(b) If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans.

(c) Actual loan or normative loan, if any, shall be referred as gross normative loan in this Regulation.

(d) The normative loan outstanding as of 1st April of control period shall be computed by deducting the cumulative repayment as approved by the Commission (basis as mentioned below) up to 31st March of current period (a year before control period) from the gross normative loan.

(e) The repayment for the control period shall be deemed to be equal to the depreciation allowed for the year.

(f) Notwithstanding any moratorium period availed by the Distribution Licensee, the repayment of the loan shall be considered from the first year of the control period as per annual depreciation allowed.

(g) The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the control period, in accordance with terms and conditions of relevant loan agreements, or bonds or non-convertible debentures.

Provided that if no actual loan is outstanding but normative loan is still outstanding, the last available weighted average rate of interest shall be applicable.

Provided further that the interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

Provided also that exception shall be made for the existing loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects.

(h) The Distribution Licensee shall make every effort to refinance the loan as long as it results in net benefit to the consumers.

Provided that the cost associated with such refinancing shall be eligible to be passed through in tariffs and the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Distribution Licensee and the consumers.
Provided further that the Distribution Licensee shall submit the calculation of such benefit to the Commission for its approval. •

(i) (The Distribution Licensee shall enable tracking of the loans converted into grants under schemes, like APDRP by providing information and data regularly to the Commission and for ensuring that the interest on these loans which has been passed on to the consumers inappropriately in the earlier years shall be recovered from the Distribution Licensee."

As per the MYT Regulations 2014, if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as normative loan. Further, the Commission has considered the actual capitalisation of assets as approved in the foregoing paragraphs. The Commission for the purpose of funding of the capitalisation has considered the normative debt-equity ratio of 70:30. Repayment has been considered equivalent to depreciation allowed during the year.

The Commission for the purpose of calculation of Interest on Loan has considered interest rate equivalent to SBI PLR @ 13.85%, as on 1st April 2017. Further, in accordance with the MYT Regulations, 2014, the interest has been calculated on the average loan during the year with the opening loan considered equivalent to the closing loan approved for FY 2016-17. The addition of loan has been considered as explained above and the repayment is considered same as per accrued depreciation during the year.

The following table provides the Interest and Finance charges as approved by the Commission:

Table 27: Interest and Finance Charges approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	53.92	21.65	21.65
2	Add: Normative Loan During the year	13.27	4.51	4.51
3	Less: Normative Repayment equivalent to Depreciation	6.36	6.61	6.85
4	Closing Normative Loan	60.83	19.55	19.31
5	Average Normative Loan	57.38	20.60	20.48
6	Rate of Interest (%)	14.05%	13.85%	13.85%
7	**Interest on Loan**	**8.06**	**2.84**	**2.84**

The Commission approves the Interest and Finance Charges of INR 2.84 Crore in the True-up of the FY 2017-18

3.13. Return on Equity (RoE)

Petitioner's submission

RoE is calculated in accordance with the MYT Regulations 2014 on 30% of the capital base. Equity to the tune of 30% has been considered based on the assets capitalized during the year. Accordingly, the Return on Equity has been computed at 16% on post-tax basis.

Commission's analysis

According to the Regulation 27 of the MYT Regulations, 2014,

(a) the Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower: Provided that assets funded by consumer contribution, capital subsidies/grants and corresponding depreciation shall not form part of the capital base. Actual equity infused in the Distribution Licensee as per book value shall be considered as perpetual and shall be used for computation in this Regulation.

(b) The return on the equity invested in working capital shall be allowed from the date of start of commercial operation.

(c) 16% post-tax return on equity shall be considered irrespective of whether the Distribution Licensee has claimed return on equity in the ARR petition"

As mentioned above, the total asset capitalisation other than the Central Government schemes during the year has been funded by equity. The Commission for the purpose of equity addition during the year, has limited it to 30% of total capitalisation as prescribed in the MYT Regulations, 2014. The RoE has been calculated on the average of opening and closing of equity during the year @ 16% post-tax basis with opening equity considered at 30% of the opening GFA for FY 2017-18 as the assets are fully funded by the equity contribution from Lakshadweep Administration. The following table provides the RoE approved by the Commission now:

Table 28: RoE approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	31.55	48.69	48.69
2	Additions on account of new capitalisation	5.69	1.93	1.93
3	Closing Equity	37.24	50.62	50.62
4	Average Equity	34.40	49.66	49.66
5	Rate of Return	16.00%	16.00%	16.00%
6	**Return on Equity**	**5.50**	**7.95**	**7.94**

The Commission approves a Return on Equity of INR 7.94 Crore in the True-up of FY 2017-18

3.14. Interest on Security Deposits

Petitioner's submission

The Petitioner has claimed an Interest on the Consumer Security Deposits of INR 0.07 crore as against the approved value of INR 0.01 crore in the Tariff Order.

Commission's analysis

As per Regulation 6.10 (8) of the JERC Electricity Supply Code Regulations, 2010

"The distribution licensee shall pay interest, at the bank rate notified by the Reserve Bank of India from time to time on such security deposits taken from the consumer. In this regard it shall be the responsibility of the licensee to keep a watch on the bank rate from time to time. The interest amount of previous financial year shall be adjusted in the energy bill issued in May / June of each financial year depending on billing cycle."

The security deposit of Rs 0.07 crore is available to the Petitioner as per the audited balance sheet. 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 0.07 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 2017-18.

Therefore, the Commission has not approved any interest on security deposits of the consumers in the True-up of FY 2017-18.

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 (Multi-Year Distribution Tariff) Regulations, 2014.

The Working Capital requirement for the Control Period has been computed considering the following parameters:

(a) Receivables of two months of billing

(b) Less power purchase cost of one month

(c) Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit

(d) Inventory for two months based on the annual requirement for the previous year

Table 29: Interest on Working Capital submitted by the Petitioner (INR Crore)

S. No	Particulars	Petitioner's Submission
1	Receivables (2 months)	21.94
2	Less: Power Purchase cost (1 month)	0.00
3	Less: Consumer Deposit Excl. BG/FDR	0.90
4	Add: Inventory Based on Annual Requirement for previous 2 months	0.00
5	Working Capital Requirement	21.05
6	Rate of Interest (%)	9.10%
7	**Interest on Working Capital**	**1.92**

Commission's analysis

The computation of the working capital requirements and the rate of interest to be considered as stipulated in the MYT Regulations. Regulation 25 of the MYT Regulations states the following:

"Working capital for retail supply activity of the licensee shall consist of:
(i) Receivables of two months of billing
(ii) Less power purchase cost of one month
(iii) Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt
(iv) Inventory for two months based on annual requirement for previous year.

The rate of interest on working capital shall be equal to the base rate for the State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be 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 worked out on the normative figures.*

The Commission for determination of Working Capital requirements of the Petitioner during the year has considered the receivables as proportionate ARR for 2 months, the net power purchase cost after adjusting the rebate in power purchase bills, the consumer security deposit and the inventory for two months as per the audited annual accounts of FY 2017-18.

With regards to the interest rate, the Commission has considered the SBI Base rate as on 1st April 2017, as stipulated in the MYT Regulations, 2014. Accordingly, the Interest on Working Capital has been calculated, as shown in the table below:

Table 30: Interest on Working Capital approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued up by Commission
1	Recievables (2 months)	20.13	21.94	3.52
2	Less: Power Purchase cost (1 month)	6.70	0.00	0.00
3	Less: Consumer Deposit Excl. BG/FDR	0.14	0.90	0.90
4	Add: Inventory Based on Annual Requirement for previous 2 months	0.00	0.00	0.00
5	Working Capital Requirement	13.29	21.05	2.62
6	Rate of Interest (%)	9.30%	9.10%	9.10%
7	**Interest on Working Capital**	**1.24**	**1.92**	**0.24**

The Commission approves the Interest on Working Capital as INR 0.24 crore in the True- up of FY 2017-18.

3.16. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner hasn't claimed any amount towards bad and doubtful debts for the year.

Commission's analysis

As per Regulation 29 of the MYT Regulations, 2014:

"Bad and Doubtful Debts shall be limited to 1% of receivables in the true up, subject to the condition that amount of bad and doubtful debts have actually been written off in the licensee books of accounts."

It is observed that as per the audited accounts, the licensee has not written off any amount in the FY 2017-18. Therefore, the Commission does not approve any amount under the provision for bad and doubtful debts.

3.17. Non-Tariff Income

Petitioner's submission

The Petitioner has claimed a Non-Tariff Income (NTI) of INR 1.07 crore as against the approved value of INR 0.45 crore in the tariff order.

Commission's analysis

The Commission has verified the submission of the Petitioner from the audited accounts and found the same to be correct. The NTI approved in the tariff Order, the Petitioner's submission and now trued-up by the Commission is shown in the following table:

Table 31: Non-Tariff Income approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued up by Commission
	Non-Tariff Income	**0.45**	**1.07**	**1.07**

The Commission approves Non-Tariff Income of INR 1.07 Crore in the True-up of FY 2017-18.

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

Petitioner's submission

No submission has been made in this regard.

Commission's analysis

In the ARR of the FY 2017-18, the Commission had approved the distribution loss level of 12.75%. As discussed earlier, the Petitioner has only been able to achieve an Intra-State T&D Loss of 13.93%. Thus, there is an underachievement of the loss target. The Commission, in accordance with Regulations 10 & 11 of the MYT Regulations, 2014 (reproduced below) therefore has determined the disincentive towards underachievement of the target of Intra-State distribution loss for FY 2017-18.

"10. Mechanism for Sharing of Gains with Respect to Norms and Targets Mechanism for pass through of gains or losses:

10.1 The licensee shall pass on to the consumers, the 70% of the gain arising from over achievement of the norms laid down by the Commission in these Regulations or targets set the Commission from time to time and retaining balance 30% with themselves.

10.2 The approved aggregate gain or loss to the Distribution Licensee on account of uncontrollable factors shall be passed through, as an adjustment in the tariff of the Distribution Licensee, as specified in these Regulations and as may be determined in the Order of the Commission passed under these Regulations.

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

10.4 Nothing contained in this Regulation 10 shall apply in respect of any gain or loss arising out of variations in the price of fuel and power purchase, which shall be dealt with as specified by the Commission from time to time.

11. Mechanism for Sharing of Losses with Respect to Norms and Targets

(1) the licensee shall bear the entire loss on account of its failure to achieve the norms laid down by the Commission or targets set by the Commission from time to time."

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. 14.14/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 (56.35 MU) with the approved Intra-State T&D Loss (13.93%).

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

Table 32: Disincentive towards underachievement of Intra-State distribution loss (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Retail Sales (MU)	60.66	48.50	48.50
2	T&D Loss	12.75%	12.75%	13.93%
3	Energy Requirement at Periphery (MU)		55.59	56.35
4	Gain/(Loss)			-0.76
5	Average Power Purchase Cost (INR/kWh)			14.14
6	Gain/(Loss)			-1.08
7	**Sharing (30% to LED in case of gain and 100% in case of loss)**			**-1.08**

The Commission approves INR 1.08 Crore as disincentive for under-achieving the Intra-State distribution loss target for FY 2017-18.

3.19. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the net aggregate revenue requirement of INR 131.67 Crore is submitted for approval in the True-up of FY 2017-18.

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 2017-18 as given in the following table:

Table 33: Aggregate Revenue Requirement approved by the Commission for FY 2017-18 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued up by Commission
1	Power Purchase Cost	5.59	0.00	0.00
2	Fuel Cost	74.76	79.71	79.71
3	Employee Expenses	13.35	19.31	24.26
4	R&M Expenses	4.52	10.08	7.24
5	A&G Expenses	1.83	4.26	2.15
6	Depreciation	6.36	6.61	6.85
7	Interest and Finance charges	8.06	2.84	2.84
8	Interest on Working Capital	1.24	1.92	0.24
9	Interest on Security Deposit	0.01	0.07	0.00
10	Return on Equity	5.50	7.95	7.94
11	Incentive/ (Disincentive)on achievement of norms	0.00	0.00	-1.08
12	**Total Revenue Requirement**	**121.22**	**132.74**	**130.15**
13	Less: Non-Tariff Income	0.45	1.07	1.07
14	**Net Revenue Requirement**	**120.77**	**131.67**	**129.08**

The Commission approves net Aggregate Revenue Requirement of INR 129.08 Crore in the True-up of the FY 2017-18.

3.20. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the net actual revenue for the FY 2017-18 as INR 21.14 Crore against the revenue of INR 31.06 Crore approved by the Commission in the ARR Order.

Commission analysis

The Commission has analysed 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 34: Revenue at existing tariff approved by the Commission for FY 2017-18 (INR Crore)

S. No.	Category	Approved in ARR order	Petitioner's submission	Trued up by Commission
1	Domestic	21.01	10.71	10.71
2	Commercial	9.23	8.83	8.83
3	Industrial	0.28	1.00	1.00
4	Public Lighting	0.15	0.35	0.35
5	Temporary	0.39	0.26	0.26
	TOTAL	**31.06**	**21.14**	**21.14**

The Commission approves the revenue from sale of power as INR 21.14 Crore in the True-up of the FY 2017-18.

3.21. Standalone Revenue Gap/Surplus

Petitioner's submission

Based on the ARR submitted and the revenue from retail tariff, the standalone revenue gap of INR 110.53 Crore is arrived at in the True-up of FY 2017-18.

Commission analysis

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

Table 35: Standalone Revenue Gap/ Surplus at existing tariff (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Net Revenue Requirement	120.77	131.67	129.08
2	Revenue from Retail Sales at Existing Tariff	31.06	21.14	21.14
3	**Net Gap /(Surplus)**	**89.71**	**110.53**	**107.94**

The Commission, in the True-up of FY 2017-18 approves a standalone gap of INR 107.94 Crore, to be met from the budgetary support by the Government.

4. Chapter 4: True-up of FY 2018-19

4.1. Background

The Tariff Order on Aggregate Revenue Requirement (ARR) for FY 2018-19 was issued on March 19, 2018 (hereinafter referred to as the "ARR Order").

The Commission, now, in this Chapter carries out the True-up of FY 2018-19 in accordance with the principles laid down in the Tariff Regulations, 2014. The True up for the FY 2018-19 has to be carried out in accordance with Regulation 8 of the Tariff Regulations, 2014, which states as following:

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

The Truing Up for any year will ordinarily not be considered after more than one year of 'Review'.

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

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

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

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

4.2. Approach for True-up for FY 2018-19

The Petitioner has requested for True-up of FY 2018-19 on the basis of audited accounts. 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 of FY 2018-19.

The Commission has analysed various elements of the actual revenue and expenses for the FY 2018-19 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 Tariff Regulations, 2014 after due prudence check. The Commission has allowed necessary adjustments in cases where variations are for reasonable and justifiable reasons.

4.3. Energy Sales

Petitioner's Submission

The Petitioner has submitted the total quantum of energy sales for FY 2018-19 as 48.90 MU as against an approved energy sales quantum of 67.50 MU in the ARR Order.

Commission's Analysis

The MYT Regulations, 2014 stipulate that the variation in sales constitutes "uncontrollable factors" that are beyond the control of the Petitioner and cannot be mitigated. Regulation 9.1 of the MYT Regulations, 2014 in this regard stipulates the following:

"The "uncontrollable factors" shall comprise of the following factors which were beyond the control of, and could not be mitigated by the applicant:
(a) Force Majeure events, such as acts of war, fire, natural calamities, etc.
(b) Change in law;
(c) Taxes and Duties;
(d) Variation in sales; and
(e) Variation in the cost of power generation and/or power purchase due to the circumstances specified in these Regulations;"

The table below provides the energy sales approved by the Commission in the Tariff Order of FY 2018-19, the Petitioner's submission and quantum of energy sales now trued-up by the Commission.

Table 36: Energy Sales trued-up by the Commission (MU)

S. No.	Category	Approved in ARR order	Petitioner's Submission	Trued-up by the Commission
1	Domestic	53.25	35.97	35.97
2	Commercial	13.02	11.09	11.09
3	Industrial	0.42	1.08	1.08
4	Public Lighting	0.81	0.67	0.67
5	Temporary Connection	-	0.11	0.11
6	**Total Sales**	**67.50**	**48.90**	**48.90**

The Commission approves 48.90 MU as energy sales in the True-up of the FY 2018-19.

4.4. 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 13.01% in the FY 2018-19 against target of 12.25% in FY 2018-19.

Commission's analysis

The Petitioner has submitted the energy Audit report for FY 2018-19. Therefore, the Commission has considered the T&D loss of 13.01% as per the Energy Audit Report submitted by the Petitioner.

Since, the Petitioner has not been able to achieve the Intra-State T&D loss target for the year, the disincentive for the same has to be borne by the Petitioner in accordance with the MYT Regulations, 2014. The calculation of the same has been discussed in detail in "Section 4.18.: Incentive/Disincentive towards over/under-achievement of norms of distribution losses section" of this Order.
The table below provides the Intra-State T&D loss approved in the ARR of FY 2018-19, Petitioner's submission and as approved by the Commission now.

Table 37: Intra-State distribution loss (%)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Intra-State distribution loss	12.25%	13.01%	13.01%

The Commission, while truing up for FY 2018-19, has considered the actual Intra-State T&D loss of 13.01% for the FY 2018-19 dis-incentive in this regard has been considered in Section 4.18.

4.5. Energy Balance

Petitioner's submission

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

Table 38: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	48.90
2	Transmission and Distribution losses (%)	13.01%
	Transmission and Distribution losses (MU)	7.31
3	**Total Energy Requirement (for sale to retail consumers)**	**56.22**
B	**Energy Availability at Periphery**	
1	Power Purchase	0.00
2	Own Generation	56.22
3	**Total Energy Availability**	**56.22**
C	**Total shortfall/(Surplus)**	**0.00**

Commission's analysis

The information submitted by the Petitioner on power purchase quantum has been examined and accordingly the energy balance for the FY 2018-19 is derived. The following table provides the energy balance approved in the ARR of the FY 2018-19, the Petitioner's submission and now trued-up by the Commission.

Table 39: Energy Balance (MU) approved by the Commission

S. No.	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**			
1	Total Sales within the UT	67.50	48.90	48.90
2	Transmission and Distribution losses (%)	12.25%	13.01%	13.01%
	Transmission and Distribution losses (MU)	9.43	7.31	7.31
3	**Total Energy Requirement (for sale to retail consumers)**	**76.93**	**56.22**	**56.21**
B	**Energy Availability at Periphery**			
1	Power Purchase	0.00	0.00	0.00
2	Own Generation	76.93	56.22	56.21
3	**Total Energy Availability**	**76.93**	**56.22**	**56.21**
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**0.00**

4.6. Power Purchase Quantum & Cost

Petitioner's Submission

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 has provided plant-wise power generation details as follows:

Table 40: Island wise power generation (MU)

S. No.	Islands	Solar Generation	Diesel Generation	Total Generation
1	Minicoy	0.20	7.98	8.18
2	Kavaratti	0.36	13.16	13.51
3	Amini	-	5.53	5.53
4	Androth	0.21	8.30	8.51
5	Kalpeni	0.04	3.91	3.95
6	Agatti	0.04	7.24	7.28
7	Kadmat	0.24	4.24	4.48
8	Kiltan	0.05	3.03	3.09
9	Chetlat	-	1.80	1.80
10	Bitra	0.03	0.28	0.31
11	Bangram	-	0.08	0.08
12	**Grand Total**	**1.18**	**55.55**	**56.73**

The Petitioner has claimed a fuel cost of Rs 95.84 crore against Rs 79.94 crore as approved by the Commission in the Tariff Order dated March 19, 2018.

Commission's analysis

The MYT Regulations, 2014 stipulate that any variation in the cost of power generation and/or power purchase shall be treated as an uncontrollable factor. Regulation 9.1 of the MYT Regulations stipulates the following:

"The "uncontrollable factors" shall comprise of the following factors which were beyond the control of, and could not be mitigated by the applicant:
(a) Force Majeure events, such as acts of war, fire, natural calamities, etc.
(b) Change in law;
(c) Taxes and Duties;
(d) Variation in sales; and
(e) Variation in the cost of power generation and/or power purchase due to the circumstances specified in these Regulations;"

The Commission has observed that the Petitioner has claimed the fuel cost as per the annual audited accounts of FY 2018-19 in regard to the Diesel generation. Accordingly, the Commission approves the following power purchase quantum and cost for True-up of FY 2018-19:

Table 41: Power Purchase cost and Quantum as approved by the Commission

S. No.	Source	Quantum (MU)	Cost (INR Crore)
1	Diesel Generation	55.55	95.84
2	Solar Generation	1.18	-
3	**Total Generation**	**56.73**	**95.84**

The Commission in the energy balance has approved the total energy requirement of 56.22 MUs vis-à-vis the power generation quantum of 56.73 MUs as submitted by the Petitioner. Majority of the power generation in the islands of Lakshadweep is through Diesel sets, which also incurs the auxiliary consumption. The difference might on the account of it and therefore, the Commission has considered the total energy requirement of 56.22 MUs for computing the average power purchase cost.

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 per the audited accounts 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 approved for the department as a whole in subsequent sections. Accordingly, no separate cost has been approved for own renewable based generation.

The Commission approves power purchase quantum of 56.73 MU and cost of INR 95.84 Crore in the True-up of the FY 2018-19 with Average Power Purchase Cost as INR 17.05/kWh.

4.7. Renewable Purchase Obligation (RPOs)

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

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

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and revised the RPO targets, according to which the Petitioner had to purchase 9.00% of its total consumption (including 3.60% from Solar) from renewable sources for the FY 2018-19.

As per Tariff Order dated 17th April 2015, the Commission has taken a following view:

"The Petitioner would be able to meet its RPO targets of Solar Power for FY 2015-16 based on the capacity addition proposed. It is observed that the Petitioner is not meeting its RPO target of 2.70% to be met from non-solar sources of renewable power generation; however, the Petitioner is meeting its overall target of 3.30%. **The Commission, after considering the availability of solar energy and the difficult logistic/terrain conditions of the Islands, as a special case, approves clubbing of Renewable Purchase Obligations of Solar and non-solar energy to meet the target set by the Commission.** However, in view of the cost of fuel and environmental pollution caused by using diesel, the Commission directs the LED to maximize the generation and purchase of renewable (both Solar and non-solar) energy."

For the FY 2018-19, the Petitioner had a standalone target of 4.40 MU comprising of 1.76 MU Solar and 2.84 MU Non-Solar. Against the compliance target, the Petitioner has only been able to procure 1.18 MU of solar power, thereby resulting into a shortfall of 3.22 MU in achieving overall RPO target.

Based on the above, the Commission has computed the standalone RPO compliance for FY 2018-19 as shown in the following table:

Table 42: Compliance status of Renewable Purchase Obligation (RPO) (In MU)

Sr. No.	Particulars	Value
1.	Sales within the state	48.90
2.	RPO Obligation (In %)	9.00%
a)	Solar	3.60%
b)	Non-Solar	5.40%
3.	RPO Obligation	4.40
a)	Solar	1.76
b)	Non-Solar	2.64

Sr. No.	Particulars	Value
4.	RPO Compliance (Own Generation)	1.18
a)	Solar	1.18
b)	Non-Solar	-
5.	RPO Compliance (REC Certificate Purchase)	-
6.	Total RPO Compliance	1.18
7.	**Shortfall/ (Surplus) in RPO Compliance**	**3.22**
7.	Cumulative Shortfall in RPO compliance till last year	3.04
7.	**Shortfall/ (Surplus) in RPO Compliance**	**6.25**

The Commission notes that there is a net shortfall in RPO compliance for FY 2018-19 (3.22 MU) and cumulative shortfall of 6.25 MU till FY 2018-19 to be complied in later years.

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). The MYT Regulations, 2014 considers the variation of O&M Expenses to be controllable. Regulation 9.2 of the MYT Regulation, 2014 states the following:

"9.2 Some illustrative variations or expected variations in the performance of the applicant, which may be attributed by the Commission to controllable factors include, but are not limited to the following:

(a)Variations in capital expenditure 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)Variations in Transmission and Distribution Losses (T&D) losses in case of bundled utilities and Distribution losses in case of unbundled utilities which shall be measured as the difference between the units input into the distribution system and the units supplied and billed;

(c)Depreciation and working capital requirements;

(d)Failure to meet the standards specified in the Joint Electricity Regulatory Commission (Standards of Performance) Regulations, 2009 except where exempted;

(e)Variation in operation & maintenance expenses, except those attributable to directions of the Commission;

(f)Variation in Wires Availability and Supply Availability;

(g)Variation on account of inflation;"

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 incurred actual employee expenses of INR 19.98 Cr against the approved expenses of INR 14.03 Crore in the ARR of FY 2018-19.

Commission's analysis

The Commission has analysed the information available in the audited accounts and found certain variations/discrepancies in the submissions of the Petitioner viz-a-viz the audited accounts. The Commission observed that the Petitioner has wrongly classified expenses between Employee, R&M and A&G expenses.

The Petitioner has also requested to allow the employee expenses as per actual as actual base data was not available at the time of MYT trajectory setting and certain assumptions were used to set the same. Accordingly, the Commission finds it appropriate to allow the employee expenses as per actuals. The table below provides the employee expenses approved in the ARR Order, submission of the Petitioner and now trued-up by the Commission.

Table 43: Employee Expenses approved by the Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Total Employee Expenses	14.03	19.98	25.96

The Commission approves the Employee Expenses of INR 25.96 Crore in the True-up of the FY 2018-19.

4.8.2. Administrative and General (A&G) Expenses

Petitioner’s submission

The Petitioner has incurred A&G expenses of INR 4.67 Crore against the approved expenses of INR 1.94 Crore in the ARR Order.

Commission’s analysis

A&G expenses mainly comprise of rents, telephone and other communication expenses, professional charges, postal and telegram etc.

The Commission has analysed the information available in the audited accounts and found certain variations/discrepancies in the submissions of the Petitioner viz-a-viz the audited accounts. The Commission observed that the Petitioner has wrongly classified expenses between Employee, R&M and A&G expenses.

The Petitioner has also requested to allow the A&G expenses as per actual as actual base data was not available at the time of MYT trajectory setting and certain assumptions were used to set the same. Accordingly, the Commission finds it appropriate to allow the A&G expenses as per actuals. The table below provides the A&G expenses approved in the ARR Order, submission of the Petitioner and now trued-up by the Commission

Table 44: A&G Expenses approved by the Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Total A&G Expenses	1.94	4.67	8.28

The Commission approves the A&G Expenses of INR 8.28 Crore in the True-up of the FY 2018-19.

4.8.3. Repair & Maintenance Expenses (R&M)

Petitioner’s submission

The Petitioner has incurred R&M expenses of INR 12.19 Crore against the approved expenses of INR 5.33 Crore in the Tariff Order.

Commission’s analysis

The Commission has analysed the information available in the audited accounts and found certain variations/discrepancies in the submissions of the Petitioner viz-a-viz the audited accounts. The Commission observed that the Petitioner has wrongly classified expenses between Employee, R&M and A&G expenses.

The Petitioner has also requested to allow the R&M expenses as per actual as actual base data was not available at the time of MYT trajectory setting and certain assumptions were used to set the same. Accordingly, the Commission finds it appropriate to allow the R&M expenses as per actuals. The table below provides the R&M expenses approved in the ARR Order, submission of the Petitioner and now trued-up by the Commission

Table 45: R&M Expenses approved by the Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	**Repair & Maintenance Expenses (R&M)**	**5.33**	**12.19**	**2.60**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 2.60 Crore in the True-up of FY 2018-19

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

The following table provides the O&M expenses approved in the Tariff Order, submitted by the Petitioner and now trued-up by the Commission.

Table 46: O&M Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Employee Expenses	14.03	19.98	25.96
2	Administrative & General Expenses (A&G)	1.94	4.67	8.28
3	Repair & Maintenance Expenses	5.33	12.19	2.60
	Total Operation & Maintenance Expenses	**21.30**	**36.84**	**36.84**

The Commission approves the Operation & Maintenance (O&M) Expenses of INR 36.84 Crore in the True-up of FY 2018-19.

4.9. Capitalisation

Petitioner's submission

The Petitioner submitted the actual capitalisation for the FY 2018-19 as INR 5.66 Crore against an approved capitalization of INR 14.60 Crore in the ARR of FY 2018-19.

Commission's analysis

The Commission approves the Capitalisation as per the submission in the audited Accounts by the Petitioner.

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

Table 47: Capitalisation approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Capitalisation	14.60	5.66	5.66

The Commission approves the Capitalisation of INR 5.66 Crore in the True-up of FY 2018-19.

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 MYT Regulations 2014, specify that if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as the normative loan. Regulation 24 of the MYT Regulations, states the following:

(a) The Distribution Licensee shall provide detailed loan-wise, project-wise and utilization-wise details of all of the pending loans

(b) If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans.

The Commission sought details of assets created out of consumer contribution/ grants from the Petitioner, on which the Petitioner has responded that no assets have been created out of consumer contribution/ grants.

In accordance with the MYT Regulations, 2014, and the submissions made by the Petitioner, the Commission has determined the Capital Structure for FY 2018-19 as follows:

Table 48: GFA Approved by the Commission (INR Crore)

Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
Opening GFA	124.13	168.74	168.74
Additions during the FY	14.60	5.66	5.66
Adjustment/Retirement During the FY	-	0.00	0.00
Closing GFA	138.73	174.41	174.41

Table 49: Normative Loan addition approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	60.83	19.55	19.31
2	Add: Normative Loan During the year	10.22	3.96	3.96
3	Less: Normative Repayment equivalent to Depreciation	7.19	6.68	7.14*
4	Closing Normative Loan	63.86	16.83	16.13

**Depreciation calculated in next section*

Table 50: Normative Equity addition approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	37.24	50.62	50.62
2	Additions on account of new capitalisation	4.38	1.70	1.70
3	Closing Equity	41.62	52.32	52.32

4.11. Depreciation

Petitioner's submission

The Petitioner has submitted the actual depreciation of assets as per the audited annual accounts of FY 2018-19. The depreciation as claimed by the Petitioner has been tabulated below:

Table 51: Depreciation submitted by the Petitioner (INR Crore)

S. No	Particulars	Petitioner's Submission
1	Opening Gross Fixed Assets	168.74
2	Addition During the FY	5.66
3	Adjustment/Retirement During the FY	-
4	Closing Gross Fixed Assets	174.41
5	Average Gross Fixed Assets	171.58
6	Rate of Depreciation (%)	3.89%
	Depreciation	**6.68**

Commission's analysis

Regulation 23 of the MYT Regulations 2014, states the following:

(a) Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year.

(b) Depreciation shall not be allowed on assets funded by capital subsidies, consumer contributions or grants.

(c) Depreciation shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation. The same shall be as specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014. (The same may vary as notified by CERC from time to time.)

(d) The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset.
Provided that Land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

(e) Depreciation shall be charged from the first year of operation of the asset.

Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis.

(f) A provision of replacement of assets shall be made in the capital investment plan."

As per the norms specified in the MYT Regulations, 2014 the Commission has verified the asset wise capitalisation of the Petitioner and has accordingly derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in the CERC Tariff Regulations, 2014, provided in the table below:

Table 52: Depreciation Rate (%)

Description	Rate
Plant & Machinery	5.28%
Buildings	3.34%
Furniture & Fixtures	6.33%
Land	0.00%
Vehicles	9.50%
Computers	15.00%

The Petitioner as part of this Petition has submitted the Fixed Asset Register (FAR) for FY 2018-19 which specifies the value of assets that have achieved 90% depreciation as of FY 2018-19. As the MYT Regulations, 2014 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 upto 90% as reflected in the FAR of FY 2018-19 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) 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 2018-19:

Table 53: Calculation of revised GFA (In INR Crore)

Description	Opening GFA as per audited accounts	Less: Assets depreciated upto 90% till FY 2017-18	Revised Opening GFA	Addition/Deletion during the year	Closing GFA	Depreciation Rate	Depreciation
Plants & Machinery	127.14	20.14	107.01	5.66	112.67	5.28%	5.80
Building	23.20	1.54	21.66	-	21.66	3.34%	0.72
Furnitures & Fixtures	0.65	0.49	0.17	-	0.17	6.33%	0.01
Land	12.93	-	12.93	-	12.93	0.00%	-
Vehicles	0.76	0.76	0.00	-	0.00	9.50%	0.00
Computers	4.06	-	4.06	-	4.06	15.00%	0.61
Total	**168.74**	**22.92**	**145.82**	**5.66**	**151.49**		**7.14**

Therefore, it can be deduced that the depreciation rate as average of opening and closing GFA for FY 2018-19 is 4.80%. The following table provides the calculation of depreciation during the year FY 2018-19:

Table 54: Depreciation approved by the Commission (In INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Gross Fixed Assets	124.13	168.74	168.74
2	Less: Assets depreciated upto 90% till FY 2017-18			22.92
3	Opening Net GFA			145.82

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
4	Addition During the FY	14.60	5.66	5.66
5	Closing Net Fixed Assets	138.73	174.41	151.48
6	Average Net Fixed Assets	131.44	171.58	148.65
7	Weighted Average Depreciation rate (%)	5.47%	3.89%	4.180%
	Depreciation	**7.19**	**6.68**	**7.14**

The Commission approves depreciation of INR 7.14 Crore in the true-up of FY 2018-19

4.12. Interest and Finance Charges

Petitioner's submission

The Petitioner has calculated the Interest on Loan on normative basis. The opening balance of loans for FY 2018-19 is considered as the closing value of balance of loans for FY 2017-18. The normative loan addition in FY 2018-19 has been computed as 70% of the actual capitalisation for FY 2018-19. The repayment of loans has been considered equal to the depreciation during the FY 2018-19

Further, the rate of interest has been considered as the State Bank of India Prime Lending Rate (SBI PLR) of 13.45% (rate as on 1st April 2018).

Commission's analysis

The MYT Regulations, 2014 stipulate that the rate of interest to be considered while determining the ARR shall be the weighted average interest rate of the actual loan portfolio. Regulation 24 of the MYT Regulations, states the following:

(a) The Distribution Licensee shall provide detailed loan-wise, project-wise and utilization-wise details of all of the pending loans

(b) If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans.

(c) Actual loan or normative loan, if any, shall be referred as gross normative loan in this Regulation.

(d) The normative loan outstanding as of 1st April of control period shall be computed by deducting the cumulative repayment as approved by the Commission (basis as mentioned below) up to 31st March of current period (a year before control period) from the gross normative loan.

(e) The repayment for the control period shall be deemed to be equal to the depreciation allowed for the year.

(f) Notwithstanding any moratorium period availed by the Distribution Licensee, the repayment of the loan shall be considered from the first year of the control period as per annual depreciation allowed.

(g) The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the control period, in accordance with terms and conditions of relevant loan agreements, or bonds or non-convertible debentures.

Provided that if no actual loan is outstanding but normative loan is still outstanding, the last available weighted average rate of interest shall be applicable.

Provided further that the interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

Provided also that exception shall be made for the existing loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects.

(h) The Distribution Licensee shall make every effort to refinance the loan as long as it results in net benefit to the consumers.

Provided that the cost associated with such refinancing shall be eligible to be passed through in tariffs and the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Distribution Licensee and the consumers.

Provided further that the Distribution Licensee shall submit the calculation of such benefit to the Commission for its approval. •

(i) (The Distribution Licensee shall enable tracking of the loans converted into grants under schemes, like APDRP by providing information and data regularly to the Commission and for ensuring that the interest on these loans which has been passed on to the consumers inappropriately in the earlier years shall be recovered from the Distribution Licensee."

As per the MYT Regulations 2014, if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as normative loan. Further, the Commission has considered the actual capitalisation of assets as approved in the foregoing paragraphs. The Commission for the purpose of funding of the capitalisation has considered the normative debt-equity ratio of 70:30. Repayment has been considered equivalent to depreciation allowed during the year.

The Commission for the purpose of calculation of Interest on Loan has considered interest rate equivalent to SBI PLR @ 13.45%, as on 1st April 2018. Further, in accordance with the MYT Regulations, 2014, the interest has been calculated on the average loan during the year with the opening loan considered equivalent to the closing loan approved for FY 2017-18. The addition of loan has been considered as explained above and the repayment is considered same as per accrued depreciation during the year.

The following table provides the Interest and Finance charges as approved by the Commission:

Table 55: Interest and Finance Charges approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	60.83	19.55	19.21
2	Add: Normative Loan During the year	10.22	3.96	3.96
3	Less: Normative Repayment equivalent to Depreciation	7.19	6.68	7.14
4	Closing Normative Loan	63.86	16.83	16.13
5	Average Normative Loan	62.35	18.19	17.72
6	Rate of Interest (%)	14.05%	13.45%	13.45%
7	**Interest on Loan**	**8.76**	**2.44**	**2.38**

The Commission approves the Interest and Finance Charges of INR 2.38 Crore in the True-up of the FY 2018-19

4.13. Return on Equity (RoE)

Petitioner's submission

RoE is calculated in accordance with the MYT Regulations 2014 on 30% of the capital base. Equity to the tune of 30% has been considered based on the assets capitalized during the year. Accordingly, the Return on Equity has been computed at 16% on post-tax basis.

Commission's analysis

According to the Regulation 27 of the MYT Regulations, 2014,

(a) the Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower: Provided that assets funded by consumer contribution, capital subsidies/grants and corresponding depreciation shall not form part of the capital base. Actual equity infused in the Distribution Licensee as per book value shall be considered as perpetual and shall be used for computation in this Regulation.

(b) The return on the equity invested in working capital shall be allowed from the date of start of commercial operation.

(c) 16% post-tax return on equity shall be considered irrespective of whether the Distribution Licensee has claimed return on equity in the ARR petition"

As mentioned above, the total asset capitalisation other than the Central Government schemes during the year has been funded by equity. The Commission for the purpose of equity addition during the year, has limited it to 30% of total capitalisation as prescribed in the MYT Regulations, 2014. The RoE has been calculated on the average of opening and closing of equity during the year @ 16% post-tax basis with opening equity considered at 30% of the opening GFA for FY 2018-19 as the assets are fully funded by the equity contribution from Lakshadweep Administration. The following table provides the RoE approved by the Commission now:

Table 56: RoE approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	37.24	50.62	50.62
2	Additions on account of new capitalisation	4.38	1.70	1.70
3	Closing Equity	41.62	52.32	52.32
4	Average Equity	39.43	51.47	51.47
5	Rate of Return	16.00%	16.00%	16.00%
6	**Return on Equity**	**6.31**	**8.24**	**8.24**

The Commission approves a Return on Equity of INR 8.24 Crore in the True-up of FY 2018-19

4.14. Interest on Security Deposits

Petitioner's submission

The Petitioner has claimed an Interest on the Consumer Security Deposits of INR 0.07 crore as against the approved value of INR 0.01 crore in the Tariff Order.

Commission's analysis

As per Regulation 6.10 (8) of the JERC Electricity Supply Code Regulations, 2010

"The distribution licensee shall pay interest, at the bank rate notified by the Reserve Bank of India from time to time on such security deposits taken from the consumer. In this regard it shall be the responsibility of the licensee to keep a watch on the bank rate from time to time. The interest amount of previous financial year shall be adjusted in the energy bill issued in May / June of each financial year depending on billing cycle."

The security deposit of Rs 0.07 crore is available to the Petitioner as per the audited balance sheet. 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 0.07 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 2018-19.

Therefore, the Commission has not approved any interest on security deposits of the consumers in the True-up of FY 2018-19.

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 (Multi-Year Distribution Tariff) Regulations, 2014.

The Working Capital requirement for the Control Period has been computed considering the following parameters:

(a) Receivables of two months of billing

(b) Less power purchase cost of one month

(c) Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit

(d) Inventory for two months based on the annual requirement for the previous year

Table 57: Interest on Working Capital submitted by the Petitioner (INR Crore)

S. No	Particulars	Petitioner's Submission
1	Receivables (2 months)	25.18
2	Less: Power Purchase cost (1 month)	0.00
3	Less: Consumer Deposit Excl. BG/FDR	0.91
4	Add: Inventory Based on Annual Requirement for previous 2 months	0.00
5	Working Capital Requirement	24.28
6	Rate of Interest (%)	8.70%
7	**Interest on Working Capital**	2.11

Commission's analysis

The computation of the working capital requirements and the rate of interest to be considered as stipulated in the MYT Regulations. Regulation 25 of the MYT Regulations states the following:

"Working capital for retail supply activity of the licensee shall consist of:
(i) Receivables of two months of billing
(ii) Less power purchase cost of one month
(iii) Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt
(iv) Inventory for two months based on annual requirement for previous year.

The rate of interest on working capital shall be equal to the base rate for the State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be 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 worked out on the normative figures.

The Commission for determination of Working Capital requirements of the Petitioner during the year has considered the receivables as proportionate ARR for 2 months, the net power purchase cost after adjusting the rebate in power purchase bills, the consumer security deposit and the inventory for two months as per the audited annual accounts of FY 2018-19.

With regards to the interest rate, the Commission has considered the SBI Base rate as on 1st April 2018, as stipulated in the MYT Regulations, 2014. Accordingly, the Interest on Working Capital has been calculated, as shown in the table below:

Table 58: Interest on Working Capital approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued up by Commission
1	Receivables (2 months)	22.17	25.18	3.79
2	Less: Power Purchase cost (1 month)	7.38	0.00	0.00
3	Less: Consumer Deposit Excl. BG/FDR	0.16	0.91	0.91
4	Add: Inventory Based on Annual Requirement for previous 2 months	0.00	0.00	0.00
5	Working Capital Requirement	14.63	24.28	2.88
6	Rate of Interest (%)	9.30%	8.70%	8.70%
7	**Interest on Working Capital**	1.36	2.11	**0.25**

The Commission approves the Interest on Working Capital as INR 0.25 crore in the True- up of FY 2018-19.

4.16. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner hasn't claimed any amount towards bad and doubtful debts for the year.

Commission's analysis

As per Regulation 29 of the MYT Regulations, 2014:

"Bad and Doubtful Debts shall be limited to 1% of receivables in the true up, subject to the condition that amount of bad and doubtful debts have actually been written off in the licensee books of accounts."

It is observed that as per the audited accounts, the licensee has not written off any amount in the FY 2017-18. Therefore, the Commission does not approve any amount under the provision for bad and doubtful debts.

4.17. Non-Tariff Income

Petitioner's submission

The Petitioner has claimed a Non-Tariff Income (NTI) of INR 1.11 crore as against the approved value of INR 0.47 crore in the tariff order.

Commission's analysis

The Commission has verified the submission of the Petitioner from the audited accounts and found the same to be correct. The NTI approved in the tariff Order, the Petitioner's submission and now trued-up by the Commission is shown in the following table:

Table 59: Non-Tariff Income approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued up by Commission
	Non-Tariff Income	**0.47**	**1.11**	**1.11**

The Commission approves Non-Tariff Income of INR 1.11 Crore in the True-up of FY 2018-19.

4.18. Incentive/Disincentive towards over/under-achievement of norms of distribution losses

Petitioner's submission

No submission has been made in this regard.

Commission's analysis

In the ARR of the FY 2018-19, the Commission had approved the distribution loss level of 12.25%. As discussed earlier, the Petitioner has only been able to achieve an Intra-State T&D Loss of 13.01%. Thus, there is an underachievement of the loss target. The Commission, in accordance with Regulations 10 & 11 of the MYT Regulations, 2014 (reproduced below) therefore has determined the disincentive towards underachievement of the target of Intra-State distribution loss for FY 2018-19.

"10. Mechanism for Sharing of Gains with Respect to Norms and Targets Mechanism for pass through of gains or losses:

10.1 The licensee shall pass on to the consumers, the 70% of the gain arising from over achievement of the norms laid down by the Commission in these Regulations or targets set by the Commission from time to time and retaining balance 30% with themselves.

10.2 The approved aggregate gain or loss to the Distribution Licensee on account of uncontrollable factors shall be passed through, as an adjustment in the tariff of the Distribution Licensee, as specified in these Regulations and as may be determined in the Order of the Commission passed under these Regulations.

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

10.4 Nothing contained in this Regulation 10 shall apply in respect of any gain or loss arising out of variations in the price of fuel and power purchase, which shall be dealt with as specified by the Commission from time to time.

11. Mechanism for Sharing of Losses with Respect to Norms and Targets

(1) the licensee shall bear the entire loss on account of its failure to achieve the norms laid down by the Commission or targets set by the Commission from time to time."

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 12.25% by the Petitioner, at the Average Power Purchase cost (APPC) of Rs. 17.05/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 (56.73 MU) with the approved Intra-State T&D Loss (13.01%).

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

Table 60: Disincentive towards underachievement of Intra-State distribution loss (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Retail Sales (MU)	67.50	48.90	48.90
2	T&D Loss	12.25%	12.25%	13.01%
3	Energy Requirement at Periphery (MU)		55.73	56.21
4	Gain/(Loss)			-0.49
5	Average Power Purchase Cost (INR/kWh)			17.05
6	Gain/(Loss)			-0.83
7	**Sharing (30% to LED in case of gain and 100% in case of loss)**			**-0.83**

The Commission approves INR 0.83 Crore as disincentive for under-achieving the Intra-State distribution loss target for FY 2018-19.

4.19. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the net aggregate revenue requirement of INR 131.67 Crore is submitted for approval in the True-up of FY 2018-19.

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 2018-19 as given in the following table:

Table 61: Aggregate Revenue Requirement approved by the Commission for FY 2018-19 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued up by Commission
1	Power Purchase Cost	8.63	0.00	0.00
2	Fuel Cost	79.94	95.84	95.84
3	Employee Expenses	14.03	19.98	25.96
4	R&M Expenses	1.94	4.67	8.28
5	A&G Expenses	5.33	12.19	2.60
6	Depreciation	7.19	6.68	7.14
7	Interest and Finance charges	8.76	2.44	2.38
8	Interest on Working Capital	1.36	2.11	0.25
9	Interest on Security Deposit	0.01	0.07	0.00
10	Return on Equity	6.31	8.24	8.24
11	Incentive/ (Disincentive)on achievement of norms	-	0.00	(0.83)
12	**Total Revenue Requirement**	**133.51**	**152.22**	**149.86**
13	Less: Non-Tariff Income	0.47	1.11	1.11
14	**Net Revenue Requirement**	**133.04**	**151.11**	**148.75**

The Commission approves net Aggregate Revenue Requirement of INR 148.75 Crore in the True-up of the FY 2018-19.

4.20. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the net actual revenue for the FY 2018-19 as INR 22.75 Crore against revenue of INR 37.95 Crore approved by the Commission in the ARR Order.

Commission analysis

The Commission has analysed 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 62: Revenue at existing tariff approved by the Commission for FY 2018-19 (INR Crore)

S. No.	Category	Approved in ARR order	Petitioner's submission	Trued up by Commission
1	Domestic	25.83	11.52	11.52
2	Commercial	2.65	9.48	9.48
3	Industrial	8.57	1.13	1.13
4	HT Industrial	0.29		
5	Public Lighting	0.18	0.37	0.37
6	Temporary	0.43	0.24	0.24
	TOTAL	**37.95**	**22.75**	**22.75**

The Commission approves the revenue from sale of power as INR 22.75 Crore in the True-up of the FY 2018-19.

4.21. Standalone Revenue Gap/Surplus

Petitioner's submission

Based on the ARR submitted and the revenue from retail tariff, the standalone revenue gap of INR 128.36 Crore is arrived at in the True-up of FY 2018-19.

Commission analysis

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

Table 63: Standalone Revenue Gap/ Surplus at existing tariff (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Net Revenue Requirement	133.04	151.11	148.75
2	Revenue from Retail Sales at Existing Tariff	37.95	22.75	22.75
3	**Net Gap /(Surplus)**	**95.09**	**128.36**	**126.00**

The Commission, in the True-up of FY 2018-19 approves a standalone gap of INR 126.00 Crore, to be met from the budgetary support by the Government.

5. Chapter 5: True-up of FY 2019-20 and FY 2020-21

5.1. Background

The True-up of FY 2019-20 and FY 2020-21 has to be carried out in accordance with Regulation 11 of the MYT Regulations, 2018, stated as follows:

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

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

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

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

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

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

5.2. Approach for True-up for FY 2019-20 and FY 2020-21

Petitioner's submission:

The Petitioner has not submitted the True-Up Petition for FY 2019-20 and FY 2020-21 as the accounts for FY 2019-20 and FY 2020-21 are under preparation.

Commission's analysis:

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

The Commission reiterates its direction to the Petitioner to prepare and submit the audited accounts for FY 2019-20 and FY 2020-21 based on commercial principles along with the True-up Petitions by 30th November 2022.

The True-up would therefore be taken up only after submission of the audited accounts. Accordingly, the Commission has decided not to take up True-up for FY 2019-20 and FY 2020-21 in the current Order. Any parameter considered for the determination of ARR and revenue gap/surplus in the subsequent chapters will be considered as per the Commission's Tariff Order for the FY 2021-22 dated 31st March 2021 and MYT Order dated 20th May 2019. Further, the Commission directs the Petitioner to submit the audited accounts for FY 2019-20 and FY 2020-21 along with Petition for determination of ARR for the FY 2023-24 latest by November 30, 2022.

6. Chapter 6: Annual Performance Review of FY 2021-22

6.1. Background

The Tariff Order for the FY 2021-22 was issued by the Commission on March 31, 2021 approving the ARR and Retail Tariff for the FY 2021-22. This Chapter covers the Annual Performance Review (APR) of the FY 2021-22 vis-à-vis the cost parameters approved by the Commission in the Tariff Order dated March 31, 2021. The Annual Performance Review for the FY 2021-22 is to be carried out as per provisions of Regulation 11 of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2018.

6.2. Approach for Review for the FY 2021-22

The review of the Aggregate Revenue Requirement requires assessment of the quantum of energy sales, energy loss as well as the various cost elements like Power Purchase Cost, O&M Expenses, interest on long-term loans, interest on working capital loans, depreciation etc. The Annual Performance Review for the FY 2021-22 has been done based on the actual data as provided by the Petitioner for the FY 2021-22 of the Power Purchase Quantum and the Cost, Energy Sales, Capitalisation etc. depending on which the estimates for the remaining months of the financial year have been made. The various cost elements constituting the Aggregate Revenue Requirement have been approved based on the actual information submitted by the Petitioner, the MYT Regulations, 2018 and on the basis of the norms approved in the MYT Order dated May 20, 2019 and Tariff Order dated March 31, 2021.

6.3. Energy Sales, Connected Load and Number of Consumers

Petitioner's Submission

The Petitioner has submitted a revised estimate of energy sales as 55.09 MU for the FY 2021-22, based on the actual energy sales of FY 2020-21 and sales during the first half of FY 2021-22 and CAGR for various categories as approved by the Commission in the MYT Order dated May 20, 2019. Similarly, the Petitioner has proposed the connected load and consumers of 120,432 kW and 26223 respectively for FY 2021-22.

Commission's Analysis

The Commission has considered the actual category wise data for FY 2020-21 and CAGR for various categories as per the actual data over the last 5 years for calculating the category wise sales, connected load and number of consumers respectively for FY 2021-22.

6.3.1. Energy Sales

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

Table 64: Sales projected for FY 2021-22 (MU)

S. No.	Category	Actual Sales FY 2020-21	CAGR considered	Projected Sales for FY 2021-22
1	Domestic	40.35	3.97%	41.95
2	Commercial	3.31	4.90%	3.47
3	Govt. Connection	7.28	0.00%	7.28
4	Industrial	0.37	4.25%	0.39
5	HT Consumers	0.88	9.10%	0.96
6	Public Lighting	0.82	6.02%	0.87
7	Temporary Connection	0.09	0.00%	0.09
8	**Total Sales**	**53.10**		**55.01**

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

Table 65: Energy Sales (MU) approved for FY 2021-22 by the Commission

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	39.75	41.73	41.95
2	Commercial	3.52	3.49	3.47
3	Govt. Connection	7.84	7.64	7.28
4	Industrial	0.37	0.39	0.39
5	HT Consumers	0.98	0.93	0.96
6	Public Lighting	0.85	0.82	0.87
7	Temporary Connection	0.14	0.09	0.09
8	**Total Sales**	**53.44**	**55.09**	**55.01**

6.3.2. Number of Consumers

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

Table 66: Number of Consumers projected for FY 2021-22 (MU)

S. No.	Category	Actual Consumers FY 2020-21	CAGR considered	Projected Consumers for FY 2021-22
1	Domestic	20,254	1.64%	20587
2	Commercial	3,422	11.23%	3806
3	Govt. Connection	1,173	0.00%	1173
4	Industrial	352	1.06%	356
5	HT Consumers	9	14.47%	10
6	Public Lighting	76	0.33%	76
7	Temporary Connection	136	0.00%	136
8	**Total Consumers**	25,422		**26144**

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

Table 67: Number of Consumers approved for FY 2021-22 by the Commission

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	20891	20587	20587
2	Commercial	3161	3850	3806
3	Govt. Connection	1471	1209	1173
4	Industrial	359	364	356
5	HT Consumers	9	11	10
6	Public Lighting	75	76	76
7	Temporary Connection	184	136	136
8	**Total Consumers**	**26,150**	**26,233**	**26144**

6.3.3. Connected Load

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

Table 68: Connected Load projected for FY 2021-22 (kW)

S. No.	Category	Actual Connected Load FY 2020-21	CAGR considered	Projected Connected Load for FY 2021-22
1	Domestic	92,032	2.46%	94296
2	Commercial	8,213	0.00%	8213
3	Govt. Connection	12,026	11.27%	13381
4	Industrial	3,658	1.17%	3701
5	HT Consumers	923	15.35%	1065
6	Public Lighting	284	0.00%	284
7	Temporary Connection	273	0.00%	273
8	**Total Consumers**	**117,409**		**121213**

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

Table 69: Connected Load approved by the Commission for FY 2021-22 (kW)

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	94094	94297	94296
2	Commercial	12905	8726	8213
3	Govt. Connection	8253	12156	13381
4	Industrial	3914	3730	3701
5	HT Consumers	787	967	1065
6	Public Lighting	287	284	284
7	Temporary Connection	305	273	273
8	**Total Connected Load**	**120,545**	**120,432**	**121,213**

The Commission approves energy sales of 55.01 MU, connected load of 121,213 kW and number of consumers as 26,144 in the APR of FY 2021-22.

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

Petitioner's submission

The Petitioner has proposed Intra-State T&D loss level at 11.50% against an approved loss of 12.25% in the Tariff Order. Further, the Petitioner has submitted the actual T&D loss achieved for initial six months as 6.22%.

Commission's analysis

The Commission had approved loss level of 12.25% for FY 2021-22 in the MYT Order dated May 20, 2019 and subsequently, in the Tariff Order dated March 31, 2021 while determining ARR for the FY 2021-22. The Commission, in the Business Plan Order dated December 21, 2018, had set the loss trajectory for the 2nd Control Period considering the actual loss of 13.03% in FY 2017-18. The Commission in the APR of FY 2021-22 finds it appropriate to consider the loss level of 12.25% as approved in the MYT Order for FY 2020-21. The following table provides the Intra-State distribution loss approved in the Tariff Order, the Petitioners submission and now approved by the Commission.

Table 70: Intra-State distribution loss (%)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Intra-State distribution loss	12.25%	11.50%	12.25

The Commission approves Intra-State T&D loss of 12.25% in the APR of FY 2021-22.

6.5. Energy Balance

Petitioner's submission

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

Table 71: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	55.09
2	Transmission and Distribution losses (%)	11.50%
	Transmission and Distribution losses (MU)	7.16
3	**Total Energy Requirement (for sale to retail consumers)**	**62.25**
B	**Energy Availability at Periphery**	
1	Power Purchase	0.00
2	Own Generation	62.25
3	**Total Energy Availability**	**62.25**
C	**Total shortfall/(Surplus)**	**0.00**

Commission's analysis

The Commission has determined the Energy Balance based on the revised estimates of energy sales. The table below provides the Energy Balance as approved by the Commission in the Tariff Order of FY 2021-22, the Petitioner's submission and the Energy Balance now approved by the Commission.

Table 72: Energy Balance (MU) approved by the Commission for FY 2021-22

S. No.	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**			
1	Total Sales within the UT	53.44	55.09	55.01
2	Transmission and Distribution losses (%)	12.25%	11.50%	12.25%
	Transmission and Distribution losses (MU)	7.46	7.16	7.68
3	**Total Energy Requirement (for sale to retail consumers)**	**60.90**	**62.25**	**62.69**
B	**Energy Availability at Periphery**			
1	Power Purchase	0.00	0.00	0.00
2	Own Generation	60.90	62.25	62.69
3	**Total Energy Availability**	**60.90**	**62.25**	**62.69**
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**0.00**

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

6.6. Power Purchase Quantum & Cost

Petitioner's submission

The Petitioner has submitted that the energy requirement of LED is met through its own generation with a mix of renewable and diesel generation as there is no availability of power from Central Generating Stations or from other sources/ open market/ power exchanges etc. Accordingly, the Petitioner has claimed the fuel cost of INR 141.97 crore (HSD Cost – INR 141.06 crore and Lube Cost – INR 0.90 crore) as against the approved cost of INR 110.47 crore (HSD Cost – INR 109.37 crore and Lube Cost – INR 1.10 crore) in the Tariff Order.

Commission's Analysis

As per Regulation 12.1 of the MYT Regulations, 2018, 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 2021-22 as Diesel generation is the main source of power in Lakshadweep Islands and shall be available as per the consumers need.

The Commission has observed that the Petitioner has not provided the methodology to compute the fuel cost for the Diesel generation. The Commission has considered the Specific Fuel Consumption (SFC) for HSD and Lube oil as approved by the Commission in the MYT Order dated May 20, 2019 for projecting the fuel cost for the FY 2021-22. Further, the per litre cost of HSD and Lube Oil has been considered based on the actual cost of fuel procurement for FY 2021-22 based on the invoices submitted by the Petitioner.

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 73: Fuel Cost approved by the Commission for FY 2021-22

S. No.	Particulars	Petitioner's Submission	Commission's Analysis
1	Total Gross Generation (MUs)		62.69

S. No.	Particulars	Petitioner's Submission	Commission's Analysis
2	Less: Solar Generation (MUs)		0.45
3	Total DG Generation (MUs) (1 - 2)		62.24
4	Specific HSD Consumption (ml per kWh) as approved in MYT Tariff order		266.12
5	Average Cost of HSD per litre as per bills submitted		77.21
6	**Cost of HSD [(3 X 4/1000 X 5)/10] (INR crores)**	**141.06**	**127.88**
7	Specific Lube oil consumption (ml per kWh) as approved in MYT Tariff order		0.99
8	Average Cost of Lube Oil per as per bills submitted		144.55
9	**Cost of Lube Oil [(3 X 7/1000 X 8)/10] (INR crores)**	**0.90**	**0.89**
10	**Total Fuel Cost (6+9) (INR crores)**	**141.97**	**128.77**

The Commission approves power purchase quantum of 62.69 MU and cost of INR 128.77 Crore in the APR of FY 2021-22.

6.7. Renewable Purchase Obligations (RPOs)

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

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

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and revised the RPO targets, according to which the Petitioner had to purchase 14.10% of its total consumption (including 6.10% from Solar) from renewable sources for the FY 2021-22.

For the FY 2021-22, the Commission approves the RPO target of 7.17 MU comprising of 3.10 MU Solar and 4.07 MU Non-Solar. Out of which, the Petitioner has only claimed to purchase the solar energy of around 0.64 MU, thereby resulting in a shortfall in RPO compliance. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2021-22:

Table 74: Cumulative RPO compliance till FY 2021-22

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22
Solar Target	1.65%	2.50%	3.60%	4.70%	6.10%	8.00%
Non-Solar Target	3.20%	4.20%	5.40%	6.80%	8.00%	9.00%
Total Target	**4.85%**	**6.70%**	**9.00%**	11.50%	14.10%	17.00%
Sales Within UT	50.13	48.50	48.90	48.42	53.10	55.01
RPO Target						
Solar	0.83	1.21	1.76	2.28	3.24	4.40
Non-Solar	1.60	2.04	2.64	3.29	4.25	4.95
Total RPO Target	**2.43**	**3.25**	**4.40**	**5.57**	**7.49**	**9.35**
RPO Compliance (Own Generation)						

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22
Solar	1.59	1.79	1.18	0.64	0.45	0.45
Non-Solar	0.00	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance (Actual Purchase)	**1.59**	**1.79**	**1.18**	**0.64**	**0.45**	**0.45**
RPO Compliance (REC Certificate Purchase)						
Solar	0.00	0.00	0.00	0.00	0.00	0.00
Non-Solar	0.00	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance (REC Certificate)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
RPO Compliance (REC+ Actual)						
Solar	1.59	1.79	1.18	0.64	0.45	0.45
Non-Solar	0.00	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance	**1.59**	**1.79**	**1.18**	**0.64**	**0.45**	**0.45**
Net Shortfall/(Surplus) for this year	0.84	1.46	3.22	4.92	7.04	8.90
Cumulative Shortfall in RPO Compliance till current year	**1.58**	**3.04**	**6.25**	**11.18**	**18.21**	**27.12**

The Commission notes that there is a net shortfall in RPO compliance for FY 2021-22 (8.90 MU) and cumulative shortfall of 27.12 MU till FY 2021-22. The Commission also directs the Petitioner to complete the RPO obligation on priority.

6.8. Operation & Maintenance Expenses

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

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

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

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

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

c) Repairs and Maintenance expenses.

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

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

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

Where,

R&Mn = K x GFAn-1 x (WPI inflation)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

6.8.1. Employee Expenses

Petitioner's submission

The Petitioner has submitted employee expenses of INR 24.37 Crore against the approved expenses of INR 28.09 Crore in the Tariff Order.

Commission's analysis

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

"*6. Values for Base Year*

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

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

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

In accordance with MYT Regulations, the Employee expenses shall be revised to the extent of change in inflation and growth rate during the control period. Accordingly, the Commission has considered the approved value of employee expenses for FY 2018-19 for computation of revised employee expenses of FY 2021-22. The Commission has considered the employee growth rate for FY 2019-20, FY 2020-21 and FY 2021-22 as submitted by the Petitioner along with the average CPI of previous three years to arrive at the employee expenses for FY 2021-22.

The CPI Inflation has been computed as follows:

Table 75: Computation of CPI Inflation (%)

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

Table 76: Employee recruitment plan as submitted by the Petitioner

S. No	Particulars	FY 2018-19 (Base Year)	FY 2019-20	FY 2020-21	FY 2021-22
1	Opening Employee	385	385	336	336
2	Recruitment	-	-	-	13
3	Retirement	-	49	-	13
4	Closing Employee	385	336	336	336
5	Growth rate	0.00%	-12.73%	0.00%	0.00%

Table 77: Employee Expenses approved for FY 2021-22 (INR Crore)

S. No	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	EMPn-1 (INR Crore)	21.98	19.99	26.46
2	Gn (%)	-12.73%	-0.00%	0.00%
3	CPIinflation (%)	4.22%	5.35%	6.00%
4	**Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)**	**19.99**	**21.06**	**22.33**

Table 78: Employee Expenses approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	EMPn-1 (INR Crore)	25.25	**24.37**	**22.33**
2	Gn (%)	5.60%		
3	CPIinflation (%)	5.35%		
4	**Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)**	**28.09**		

The Commission now approves employee expenses of INR 22.33 Crore in the APR of the FY 2021-22.

6.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted a revised estimate of A&G expenses of INR 2.49 crore as against the approved value of INR 3.09 crore in Tariff Order.

Commission's analysis

In accordance with MYT Regulations, the A&G expenses shall be revised to the extent of change in inflation during the control period. Accordingly, the Commission has considered the approved value of A&G expenses for FY 2018-19 for computation of revised A&G expenses of FY 2021-22. The A&G expenses for FY 2018-19 has been escalated with the average CPI of previous three years as computed above to arrive at the A&G expenses for FY 2019-20 and subsequently, for FY 2021-22.

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

Table 79: A&G Expenses approved for FY 2021-22 (INR Crore)

S. No	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	A&Gn-1 (INR Crore)	2.67	2.78	2.93
2	CPIinflation (%)	4.22%	5.35%	6.00%
3	Provision (INR Crore)	0.00	0.00	0.00
4	**Gross A&G Expenses = (A&Gn-1) x (CPIinflation)**	**2.78**	**2.93**	**3.11**

Table 80: A&G Expenses approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	A&Gn-1 (INR Crore)	2.93	**2.49**	**3.11**
2	CPI inflation (%)	5.35%		
3	Provision (INR Crore)	0.00		
4	**Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)**	**3.09**		

The Commission now approves the Administrative & General (A&G) expenses of INR 3.11 Crore in the APR of the FY 2021-22.

6.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has submitted a revised estimate of R&M expenses of INR 13.21 crore as against the approved value of INR 8.72 crore in the Tariff Order dated March 31, 2021.

Commission's analysis

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

The WPI Inflation has been computed as follows:

Table 81: Computation of WPI Inflation (%)

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

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

Table 82: R&M Expenses approved by Commission for FY 2021-22 (INR Crore)

S. No	Particulars	FY 2021-22
1	Opening GFA (GFAn-1)	188.09
2	K factor approved (K) (%)	4.26%
3	Avg. WPI Inflation (%)	2.42%
4	**R&M Expenses = K* (GFAn-1)* (1+ WPIinflation)**	**8.21**

Table 83: R&M Expenses approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	**Repair & Maintenance Expenses (R&M)**	**8.72**	**13.21**	**8.21**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 8.21 Crore in the APR of FY 2021-22.

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

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

Table 84: O&M Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	28.09	24.37	22.33
2	Administrative & General Expenses (A&G)	3.09	2.49	3.11
3	Repair & Maintenance Expenses	8.72	13.21	8.21
	Total Operation & Maintenance Expenses	**39.91**	**40.06**	**33.64**

The Commission approves the Operation & Maintenance (O&M) Expenses of INR 33.64 Crore in the APR of FY 2021-22.

6.9. Capital Expenditure & Capitalisation

Petitioner's submission

The Petitioner has submitted revised capitalisation of INR 9.50 Crore as against the approved capitalisation of INR 7.75 Crore in the Tariff Order dated March 31, 2021.

Commission's analysis

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

Table 85: Capitalisation approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Capitalisation	7.75	9.50	9.50

The Commission approves capitalisation of INR 9.50 Crore in the APR of FY 2021-22. The same shall be reviewed at the time of True-up.

6.10. 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 MYT Regulations, 2018 specifies the following:

"26. Debt to Equity Ratio

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

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

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

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

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

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

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

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

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

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

For the purpose of calculating the opening value of GFA in FY 2021-22, the Commission has considered the closing value of GFA for FY 2018-19 as approved in the true-up of FY 2018-19 in previous chapter and capitalisation for FY 2019-20 and FY 2020-21 as submitted by the Petitioner as shown in following table:

Table 86: Capitalisation considered for FY 2019-20 and FY 2020-21 (INR Crore)

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

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

Table 87: GFA addition approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	198.91	188.09	188.09
2	Addition During the FY	7.75	9.50	9.50
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	206.66	197.59	197.59

Table 88: Normative Loan addition approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	22.76	12.05	10.40
2	Add: Normative Loan During the year	5.43	6.65	6.65
3	Less: Normative Repayment equivalent to Depreciation	5.47	7.44	5.30*
4	Closing Normative Loan	22.71	11.26	11.75

**Depreciation calculated in next section*

Table 89: Normative Equity addition approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	59.67	56.43	56.42
2	Additions on account of new capitalisation	2.33	2.85	2.85
3	Closing Equity	62.00	59.28	59.27

6.11. Depreciation

Petitioner's submission

The Petitioner has submitted the depreciation of INR 7.44 crore as per MYT Regulations 2018 as against the approved depreciation of INR 5.47 crores in the Tariff Order dated March 31, 2021.

Commission's analysis

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

"30. Depreciation

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

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 90: Depreciation Rate (%)

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

The closing GFA of FY 2020-21 as approved in the previous section has been considered as opening GFA of FY 2021-22. Further, depreciation has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during the year. Further, as the latest Fixed Asset Register is available for FY 2018-19 only, therefore, the Commission has determined the depreciable GFA after deducting the value of assets that have achieved 90% depreciation as reflected in the FAR of FY 2018-19.

The following table provides the calculation of depreciation during the FY 2021-22.

Table 91: Depreciation approved by the Commission for FY 2021-22 (In INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	198.91	188.09	188.09
2	Less: Assets depreciated upto 90% till FY 2018-19	23.20	21.38	22.92
3	Net Gross Fixed Assets	175.71	166.71	165.17
4	Addition During the FY	7.75	9.50	9.50
5	Closing Net Fixed Assets	183.46	176.21	174.67
6	Average Net Fixed Assets	179.58	171.46	169.92
7	Weighted Average Depreciation rate (%)	3.04%	4.34%	3.12%
	Depreciation	**5.47**	**7.44**	**5.30**

The Commission now approves depreciation of INR 5.30 Crore in the APR of the FY 2021-22.

6.12. Interest and Finance Charges

Petitioner's submission

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

Commission's analysis

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

"28. Interest on Loan

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

As per the MYT Regulations, 2018, if the equity deployed is more than 30% of the capital cost, then equity in excess of 30% is considered as normative loan. The Interest on Loan has been has considered as the SBI 1 Year MCLR rate plus 100 basis points as Rate of Interest, in accordance with the MYT Regulations, 2018. Further, the opening loan balances has been considered equivalent to the closing loan balances of FY 2020-21 as derived in Section 6.10: Capital Structure above.

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

Table 92: Interest and Finance Charges approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	22.76	12.05	10.40
2	Add: Normative Loan During the year	5.43	6.65	6.65
3	Less: Normative Repayment equivalent to Depreciation	5.47	7.44	5.30
4	Closing Normative Loan	22.71	11.26	11.75
5	Average Normative Loan	22.73	11.65	11.00
6	Rate of Interest (%)	8.00%	8.00%	**8.00%**
7	**Interest on Loan**	**1.82**	**0.93**	**0.89**

The Commission approves Interest and Finance Charges of INR 0.89 Crore in the APR of the FY 2021-22

6.13. Return on Equity (RoE)

Petitioner's submission

Return on Equity (RoE) is computed in accordance with the MYT Regulations 2018, RoE is computed on 30% of the capital base. Opening equity is considered equivalent to closing equity for FY 2020-21 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

RoE has been calculated on normative basis on the average of opening and closing of equity during the year at the rate of 16% (on post-tax basis) with an opening equity considered equivalent to the closing equity of FY 2020-21 as derived in Section 6.10: Capital Structure above. Income Tax payable shall be considered taken on actual basis at the time of True-up. The following table provides the RoE approved in the ARR of FY 2021-22, the Petitioner's submission and RoE now approved by the Commission.

Table 93: RoE approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	59.67	56.43	56.42
2	Additions on account of new capitalisation	2.33	2.85	2.85
3	Closing Equity	62.00	59.28	59.27
4	Average Equity	60.83	57.85	57.85
5	Rate of Return	16.00%	16.00%	16.00%
6	**Return on Equity**	**9.73**	**9.26**	**9.26**

The Commission approves the Return on Equity of INR 9.26 Crore in the APR of the FY 2021-22.

6.14. Interest on Security Deposits

Petitioner's submission

The Petitioner has claimed an Interest on consumer security of INR 0.04 against INR 0.06 crore as approved by the commission in the ARR order.

Commission's analysis

Interest on Security Deposits has been calculated in accordance with the MYT Regulations, 2018 based on the average of opening and closing consumer security deposits during the year. Since, the annual audited accounts of FY 2019-20 and FY 2020-21 are still pending with the Petitioner, the opening security deposit has been considered as approved by the Commission in MYT order. The addition during the year has been considered the same as submitted by the Petitioner. The same shall be trued-up as per actuals in the True-up of FY 2021-22. 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 94: Interest on Security Deposits approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Security Deposit	1.20	0.93	0.93
2	Add: Deposits During the year	0.26	0.01	0.01
3	Less: Deposits refunded	0.00	0.00	0.00
4	Closing Security Deposit	1.46	0.94	0.94
5	Average Security Deposit	1.33	0.93	0.94
6	Rate of Interest (%)	4.25%	4.25%	4.25%
	Interest on Security Deposit (IoSD)	**0.06**	**0.04**	**0.04**

The Commission approves Interest on Security Deposit as INR 0.04 Crore in the APR of the FY 2021-22.

6.15. Interest on Working Capital

Petitioner's submission

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

The Petitioner has computed the Interest on Working Capital at rate of 9.00%.

Commission's analysis

The Commission has considered the receivables as proportionate revenue for 2 months as gap funding is done month on month basis from the Lakshadweep Administration, the revised power purchase cost of FY 2021-22 as determined above and the average consumer security deposit amount during the year for computing the Working Capital Requirement for the year. The maintenance spares have been considered @40% of R&M expenses for 1 month.

The Commission has considered the SBI Base rate as on 1st April 2021 for calculation of interest, as stipulated in the MYT Regulations, 2018.

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

Table 95: Interest on Working Capital approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	O&M Expense for 1 month	3.33	3.34	2.80
2	Maintenance spares at 40% of R&M expenses for one (1) month;	0.29	0.44	0.27
3	Receivables equivalent to two (2) months of the expected revenue at the prevailing tariff	4.26	4.67	4.23
4	Less: Amount held as security deposits	1.46	0.94	0.94
5	Net Working Capital	6.42	7.51	6.37
6	Rate of Interest (%)	9.75%	9.00%	9.00%
7	**Interest on Working Capital**	**0.63**	**0.68**	**0.57**

The Commission approves the Interest on Working Capital as INR 0.57 Crore in the APR of the FY 2021-22.

6.16. Provision for Bad & Doubtful Debts

Petitioner's submission

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

Commission's analysis

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

6.17. Non-Tariff Income

Petitioner's submission

The Petitioner has submitted the Non-Tariff Income of INR 1.28 Crore against INR 1.31 Crore as approved by the Commission in the MYT Order.

Commission's analysis

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

Table 96: Non-Tariff Income approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
	Non-Tariff Income	**1.31**	**1.28**	**1.28**

The Commission approves Non-Tariff Income of INR 1.28 crore in the APR of FY 2021-22. The same shall be considered at actuals at the time of True-up of FY 2021-22.

6.18. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the Petitioner has submitted the net aggregate revenue requirement of INR 199.08 Crore after adjusting the Non -Tariff Income for FY 2021-22.

Commission's analysis

On the basis of the detailed analysis of the cost parameters of the ARR, the Commission has considered and approved the revenue requirement in the APR of the FY 2021-22 as provided in the table below:

Table 97: Aggregate Revenue Requirement approved by the Commission for FY 2021-22 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost	-	-	-
2	Fuel Cost	110.47	141.97	128.77
3	O&M Expenses	39.91	40.06	33.64
4	Depreciation	5.47	7.44	5.30
5	Interest and Finance charges	1.82	0.93	0.89
6	Interest on Working Capital	0.63	0.68	0.58
7	Return on Equity	9.73	9.26	9.26
8	Interest on Security Deposit	0.06	0.04	0.04
9	Income Tax	0.00	0.00	0.00
10	**Total Revenue Requirement**	**168.08**	**200.37**	**178.46**
11	Less: Non-Tariff Income	1.31	1.28	1.28
12	**Net Revenue Requirement**	**166.77**	**199.08**	**177.18**

The Commission now approves the net ARR of INR 177.18 crore in the APR of FY 2021-22.

6.19. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the revenue from the sale of power at existing tariff as INR 27.99 crore determined on the basis of energy sales in the territory for FY 2021-22.

Commission analysis

The category wise revenue at existing retail tariff is calculated as per the tariff rates applicable for FY 2021-22 as per tariff order dated March 31, 2021. The revenue from demand charges and the energy charges have been projected for each category. The Commission has considered number of single phase and three phase consumers in the ratio of 70%-30% and has considered the power factor of 0.9 for computing fixed charges (specified in kVA) linked with connected load as projected load is in kW terms. The revenue from category tariff as computed by the Commission for the FY 2021-22 has been shown in the following table:

Table 98: Revenue at existing tariff computed by the Commission for FY 2021-22 (INR Crore)

S. No.	Category	Sales (MUs)	Revenue from Energy Charges	Revenue from Fixed charges	Total	ABR (INR/unit)
1	Domestic	41.95	12.37	0.72	13.09	3.12
2	Commercial	3.47	3.00	0.11	3.11	8.96
3	Government Connections	7.28	6.99	0.07	7.06	9.71
4	Industrial	0.39	0.25	0.21	0.46	11.81
5	HT Industrial	0.96	0.89	0.18	1.06	11.04
6	Public Lighting	0.87	0.52	0.02	0.54	6.18
7	Temporary	0.09	0.07	0.00	0.07	6.92
	TOTAL	**55.01**			**25.38**	

The Commission has determined revenue from the sale of power at existing tariff as INR 25.38 Crore in the APR of FY 2021-22.

6.20. Standalone Revenue Gap/Surplus

Petitioner's submission

Based on the ARR and the revenue from Retail tariff, the standalone revenue gap of INR 171.09 Crore is arrived at in the APR of FY 2021-22.

Commission analysis

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

Table 99: Standalone Revenue Gap/ Surplus at existing tariff (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Net Revenue Requirement	166.77	199.08	177.18
2	Revenue from Retail Sales at Existing Tariff	25.58	27.99	25.38
3	**Net Gap /(Surplus)**	**141.19**	**171.09**	**151.80**

The Commission approves the standalone gap at INR 151.80 Crore in the APR of FY 2021-22, to be met from the budgetary support by the Government. The Petitioner has submitted a letter vide

Reference No. 67/2/2/2021-Ele/418 dated February 17, 2022 towards meeting the gap of FY 2021-22 as approved by the Commission through Budgetary support. The same has been considered by the Commission and accordingly, this gap is not being carried forward to next year for the purpose of tariff determination.

7. Chapter 7: Determination of Aggregate Revenue Requirement for the 3rd MYT Control Period (FY 2022-23 to FY 2024-25)

7.1. Background

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

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

The Commission has approved the Business Plan for the third Control for the Petitioner for period from FY 2022-23 to FY 2024-25 in the order dated March 31, 2022. In this section the Commission had approved Capital investment Plan, Power Procurement Plan, Sales and Demand Projection, trajectory for certain variable for FY 2022-23 to FY 2024-25. Accordingly, as per the provision of the MYT Regulations, 2021, the Commission has approved various components of ARR based on the approved Business Plan in this chapter.

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

Petitioner's Submission

The Petitioner has projected the number of consumers, connected load and the category wise sales as submitted in the Business Plan petition for FY 2022-23 to FY 2024-25.

Commission's Analysis

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

Table 100: Number of consumers approved by the Commission for FY 2022-23 to FY 2024-25

S. No.	Particulars	CAGR Approved	Revised Estimate for Base Year FY 2021-22	Approved FY 2022-23	Approved FY 2023-24	Approved FY 2024-25
1	Domestic	1.64%	20587	20925	21269	21618
2	Commercial	11.23%	3806	4233	4708	5237
3	Govt. Connection	0.00%	1173	1173	1173	1173
4	Industrial	1.06%	356	360	364	368
5	HT Consumers	14.47%	10	11	13	15

S. No.	Particulars	CAGR Approved	Revised Estimate for Base Year FY 2021-22	Approved FY 2022-23	Approved FY 2023-24	Approved FY 2024-25
6	Public Lighting	0.33%	76	76	76	76
7	Temporary Connection	0.00%	136	136	136	136
	Total		**26144**	**26914**	**27739**	**28623**

Table 101: Connected Load approved by the Commission for FY 2022-23 to FY 2024-25

S. No.	Particulars	CAGR Approved	Revised Estimate for Base Year FY 2021-22	Approved FY 2022-23	Approved FY 2023-24	Approved FY 2024-25
1	Domestic	2.46%	94296	96616	98993	101428
2	Commercial	0.00%	8213	8213	8213	8213
3	Govt. Connection	11.27%	13381	14889	16567	18434
4	Industrial	1.17%	3701	3744	3788	3832
5	HT Consumers	15.35%	1065	1228	1416	1633
6	Public Lighting	0.00%	284	284	284	284
7	Temporary Connection	0.00%	273	273	273	273
	Total		**121213**	**125247**	**129534**	**134097**

Table 102: Category wise Sales approved by the Commission for FY 2022-23 to FY 2024-25

S. No.	Particulars	CAGR Approved	Revised Estimate for Base Year FY 2021-22	Approved FY 2022-23	Approved FY 2023-24	Approved FY 2024-25
1	Domestic	3.97%	41.95	43.61	45.35	47.15
2	Commercial	4.90%	3.47	3.64	3.82	4.01
3	Govt. Connection	0.00%	7.28	7.28	7.28	7.28
4	Industrial	4.25%	0.39	0.40	0.42	0.44
5	HT Consumers	9.10%	0.96	1.05	1.15	1.25
6	Public Lighting	6.02%	0.87	0.92	0.97	1.03
7	Temporary Connection	0.00%	0.09	0.09	0.09	0.09
	Total		**55.01**	**57.00**	**59.08**	**61.25**

7.4. Intra-State Distribution Loss

Petitioner's submission

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

Commission's analysis

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

Table 103: T&D Losses approved by the Commission for FY 2022-23 to FY 2024-25 (%)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	T&D loss trajectory	11.25%	10.25%	9.25%

7.5. Energy Requirement

Petitioner's submission

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

Commission's analysis

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

Table 104: Energy Requirement approved by the Commission for FY 2022-23 to FY 2024-25

S. No.	Particulars	Revised Estimate for Base Year FY 2021-22	Approved FY 2022-23	Approved FY 2023-24	Approved FY 2024-25
1	**Energy Sales**	55.01	57.00	59.08	61.25
2	Overall T&D losses (%)	12.25%	11.25%	10.25%	9.25%
3	Overall T&D losses (MU)	7.68	7.23	6.75	6.24
4	**Total Energy Requirement (MU)**	**62.69**	**64.23**	**65.83**	**67.49**

In view of the sales projections approved by the Commission in Section 3.2.5, the Commission approves the RPO obligation for each year of the Control Period based on the JERC (Procurement of Renewable Energy) Regulations, 2010 and subsequent amendments thereof, as shown below:

Table 105: RPO target approved by the Commission for FY 2022-23 to FY 2024-25

Energy Balance	FY 2022-2023 (Projected) MU's	FY 2023-24 (Projected) MU's	FY 2024-25 (Projected) MU's
Total RPO Obligation	18.35%	19.91%	21.58%
Solar Obligation			
Solar RPO (%)	9.00%	10.00%	11.00%
Projected Sales (MU)	57.00	59.08	61.25
Total power to be procured to meet solar obligation (MU)	5.13	5.91	6.74
Non-Solar Obligation			
Non- Solar RPO (%)	9.35%	9.91%	10.58%
Total power to be procured to meet non- solar obligation (MU)	5.33	5.85	6.48
Total power to be procured to meet solar and non-solar RPO	**10.46**	**11.76**	**13.22**

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

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

Table 106: Details of Source wise Energy Requirement approved by the Commission for FY 2022-23 to FY 2024-25

S. No.	Particulars	Approved FY 2022-23	Approved FY 2023-24	Approved FY 2024-25
1	**Total Energy Requirement**	**64.23**	**65.83**	**67.49**
2	Solar Power plants	10.46	11.76	13.22
3	Diesel Power plants	53.77	54.06	54.27

7.6. Power Purchase Quantum & Cost

Petitioner's submission

The Petitioner has submitted that there is no availability of power from Central Generating Stations or from other sources/ open market/ power exchanges etc. and therefore the entire energy requirement is met by own generation for FY 2022-23 to FY 2024-25. The expected energy generation for FY 2022-23 to FY 2024-25 from existing and upcoming power generating station is as follows:

Table 107: Details of Power generation as submitted by the Petitioner Commission for FY 2022-23 to FY 2024-25

Particulars	Approved FY 2022-23	Approved FY 2023-24	Approved FY 2024-25
Units Generated (MU)	**64.95**	**67.39**	**69.92**
Auxiliary Consumption (MU)	0.36	0.38	0.39
Net Energy Sent out (MU)	64.59	67.01	69.53

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

Table 108: Projected Fuel Cost proposed by the Petitioner for FY 2022-23 to FY 2024-25

S. No.	Type of Fuel	FY 2022-23	FY 2023-24	FY 2024-25
1	HSD	146.40	151.93	157.68
2	Lubricant	0.98	1.07	1.17
3	**Total**	**147.38**	**153.01**	**158.86**

Commission's Analysis

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

The Commission vide deficiency note sought island wise actual generation, Actual consumption of HSD and Lubricant oil and Cost of HSD and Lubricant for FY 2017-18 to FY 2021-22 (till January). The Petitioner in its reply has submitted the details but failed to submit the data for Lubricant oil for FY 2019-20.

Based on the information provided by the Petitioner the Commission has considered the actuals of the average of the last 3 years to compute the SFC for HSD and the SFC for Lube oil as shown below:

Table 109: SFC for HSD and Lube oil as proved by the Commission

S. No.	Type of Fuel	FY 2018-19	FY 2019-20	FY 2020-21	Average
1	Energy Generated (kWh)	55549873	56267906	59983710	
2	HSD (ltr)	15660728	16808000	18080134	
3	Lubricant oil (ltr)	53520	-	55038	
4	SFC for HSD (ml/kWh)	281.92	298.71	301.42	**294.02**
5	SFC for Lube oil (ml/kWh)	0.96	-	0.91	**0.94**

The Commission does not have details of DG set wise SFC requirements, in absence of which the Commission has considered the SFC as computed above for projecting the fuel cost for the 3rd control period. The Commission directs the Petitioner to provide the DG set wise HSD and Lube oil SFC while filing the tariff petition for next year, based on which the Commission may revisit the same.

Further, the cost of fuel for the Third Control Period from FY 2022-23 to FY 2024-25 has been projected based on the projected fuel cost of FY 2021-22 escalated by 5% year on year basis. Accordingly, the projected cost of fuel for FY 2022-23 to FY 2024-25 is as follows:

Table 110: Projected Fuel Cost approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

S. No.	Type of Fuel	FY 2022-23	FY 2023-24	FY 2024-25
1	Total Gross Generation (MUs)	64.23	65.83	67.49
2	Less: Solar Generation (MUs)	10.46	10.46	11.76
3	Total DG Generation (MUs) (1 - 2)	53.77	55.37	55.73
4	Specific HSD Consumption per kWh (ml)	294.02	294.02	294.02
5	Average Cost of HSD per litre	77.21	81.07	85.12
6	Average Cost of HSD per litre considered for FY 2021-22 escalated by 5% Y-o-Y	81.07	85.12	89.38
7	**Cost of HSD [(3 X 4/1000 X 6)/10]**	**128.16**	**138.57**	**146.44**
8	Specific Lube oil consumption per kWh (ml)	0.94	0.94	0.94
9	Average Cost of Lube Oil per litre	144.55	151.78	159.37
10	Average Cost of Lube oil per litre considered for FY 2021-22 escalated by 5% Y-o-Y	151.78	159.37	167.33
11	**Cost of Lube Oil [(3 X 8/1000 X 10)/10]**	**0.77**	**0.83**	**0.88**
12	**Total**	**128.92**	**139.40**	**147.32**

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

7.7. Operation & Maintenance Expenses

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

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

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

Where,

JERC Order on Multi-Year Tariff for Lakshadweep Electricity Department (LED) 35

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

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

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

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

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

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

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

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

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

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

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

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

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

7.7.1. Employee Expenses

Petitioner's submission

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

Table 111: Employee Expenses projected by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

FY	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening no. of employees	336	336	336	344
Closing no. of employees	336	336	344	344
Employee cost of previous year	23.13	24.37	25.67	27.69
Gn (%)	0.00%	0.00%	2%	0.00%
CPI Inflation (%)	5.35%	5.35%	5.35%	5.35%
Employee Expenses	**24.37**	**25.67**	**27.69**	**29.17**

Commission's analysis

The Commission has averaged the actual employee expenses for FY 2018-19 to FY 2020-21 to arrive at the employee expenses for the median year FY 2019-120 Thereafter, the employee expenses, thus, arrived for FY 2019-20 have been escalated by the CPI inflation twice to arrive at employee expenses for the base year, FY 2021-22. The resultant employee expenses have been escalated by Growth Rate determined based on the manpower plan approved in the Business Plan Order and CPI Inflation to arrive upon the employee expenses for each year of the Control Period.

The CPI Inflation has been computed as follows:

Table 112: Computation of CPI Inflation (%)

FY	Increase in CPI Index	Average increase in CPI Index over 3 years	Average increase in CPI Index over 3 years
2017-18	3.08%	5.35%	
2018-19	5.45%		6.00%
2019-20	7.53%		
2020-21	5.02%		

Table 113: Employee Expenses as approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

FY	Average of the preceding 3 years	Base Year	FY 2022-23	FY 2023-24	FY 2024-25
EMPn-1	23.69		26.46	28.04	30.43
Gn (%)			0.00%	2.38%	0.00%
CPI Inflation (%) (Average of FY 2017-18 to FY 2019-20)		5.35%			
CPI Inflation (%) (Average of FY 2018-19 to FY 2020-21)		6.00%	6.00%	6.00%	6.00%
Gross Employee Expense EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation)	**23.69**	**26.46**	**28.04**	**30.43**	**32.26**

7.7.2. Administrative and General (A&G) Expenses

Petitioner's submission

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

Table 114: A&G Expenses projected by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

FY	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
A&G expenses of previous year	2.36	2.49	2.62	2.76
CPI Inflation (%)	5.35%	5.35%	5.35%	5.35%
A&G Expenses	**2.49**	**2.62**	**2.76**	**2.91**

Commission's analysis

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

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

Table 115: A&G Expenses as approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

FY	Average of the preceding 3 years	Base Year	FY 2022-23	FY 2023-24	FY 2024-25
A&Gn-1	4.44		4.96	5.26	5.57
CPI Inflation (%) (Average of FY 2017-18 to FY 2019-20)		5.35%			
CPI Inflation (%) (Average of FY 2018-19 to FY 2020-21)		6.00%	6.00%	6.00%	6.00%
Provision		-	-	-	-
Gross A&Gn = A&Gn-1 x (1+CPIinflation)	**4.44**	**4.96**	**5.26**	**5.57**	**5.91**

7.7.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has submitted that the R&M Expenses for the control period has been projected in accordance with Regulation 61.4 of the MYT Regulations, 2021 considering K factor as per Regulation 61.4 of the MYT Regulations, WPI as per average increase in FY 2018-19 to FY 2020-21. Accordingly, the proposed R&M Expenses for the Control period is as follows:

Table 116: R&M Expenses projected by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

FY	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	188.09	197.59	225.59	240.09
Addition during the year	9.50	28.00	14.50	15.00
Closing GFA	197.59	225.59	240.09	255.09
Average GFA		211.59	232.84	247.59
K factor (%)		6.86%	6.86%	6.86%
WPI Inflation (%)		2.42%	2.42%	2.42%
R&M Expenses		**13.88**	**15.84**	**16.86**

Commission's analysis

The Commission has computed the K factor considering the % of actual R&M expense to actual opening GFA for FY 2018-19 to FY 2020-21 as follows:

Table 117: Computation of K factor approved by the Commission for FY 2022-23 to FY 2024-25

FY	FY 2018-19	FY 2019-20	FY 2020-21
Actual R&M Expense	2.60	7.65	11.30
Opening GFA	168.74	174.40	186.40
Actual R&M Expense as % of Opening GFA	1.54%	4.39%	6.06%
K Factor (Average of Actual R&M Expense as % of Opening GFA)	4.00%		

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

The WPI Inflation has been computed as follows:

Table 118: Computation of WPI Inflation (%)

FY	Increase in WPI Index	Average increase in WPI Index over 3 years
2018-19	4.32%	2.42%
2019-20	1.62%	
2020-21	1.31%	

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

Table 119: R&M Expenses as approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

FY	FY 2022-23	FY 2023-24	FY 2024-25
K-Factor	4.00%	4.00%	4.00%
Opening GFA	197.59	218.09	229.09
WPI Inflation	2.42%	2.42%	2.42%
R&Mn = K x (GFAn-1) x (1+WPIinflation)	**8.09**	**8.92**	**9.37**

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

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

Table 120: O&M Expenses approved by the Commission for FY 2022-23 to FY 2024-25 (In INR Cr)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Employee Expenses	28.04	30.43	32.26
2	Administrative & General Expenses (A&G)	5.26	5.57	5.91
3	Repair & Maintenance Expenses	8.09	8.92	9.37
	Total Operation & Maintenance Expenses	**41.39**	**44.93**	**47.55**

7.8. Gross Fixed Assets (GFA) and Capitalization

Petitioner's submission

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

Table 121: GFA details as proposed by the Petitioner (INR Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	186.41	188.09	197.59	225.59	240.09
Assets Capitalised	1.68	9.50	28.00	14.50	15.00
Closing GFA	188.09	197.59	225.59	240.09	255.09

Commission's analysis

In the absence of the audited account of FY 2019-20 to FY 2020-21, the Commission has considered the closing GFA for FY 2020-21 as per revised estimate based on provisional accounts and Fixed Asset Register. The capitalization amount has been taken as allowed by the Commission in the Business Plan order. Accordingly, the approved GFA and capitalisation for the control period is as follows:

Table 122: GFA and capitalisation approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	197.59	218.09	229.09
Capitalisation	20.50	11.00	11.50
Closing GFA	218.09	229.09	240.59

7.9. 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, 2021 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."

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

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

Table 123: Funding plan approved by the Commission (INR Crore)

Particulars	FY 2022-23 (INR Crore)	FY 2023-24 (INR Crore)	FY 2024-25 (INR Crore)
Actual Capitalisation	20.50	11.00	11.50
Actual Funding			
Equity from Central Govt.	20.50	11.00	11.50

In accordance with the JERC MYT Regulations, 2021, the Commission has determined the Capital Structure for FY 2020-21 as follows:

Table 124: GFA addition approved by the Commission (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Gross Fixed Assets	197.59	218.09	229.09
2	Addition During the FY	20.50	11.00	11.50
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	218.09	229.09	240.59

Table 125: Normative Loan addition approved by the Commission (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Normative Loan	11.75	19.91	20.89
2	Add: Normative Loan During the year	14.35	7.70	8.05
3	Less: Normative Repayment equivalent to Depreciation	6.19*	6.72*	7.10*

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
4	Closing Normative Loan	19.91	20.89	21.84

**Depreciation calculated in next section*

Table 126: Normative Equity addition approved by the Commission (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Equity	59.27	65.42	68.72
2	Additions on account of new capitalisation	6.15	3.30	3.45
3	Closing Equity	65.42	68.72	72.17

7.10. Depreciation

Petitioner's submission

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

Table 127: Depreciation submitted by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Gross Opening GFA	197.59	225.59	240.09
Less: Assets depreciated upto 90%	21.38	21.38	21.38
Net Opening GFA	176.21	204.21	218.71
Addition	28.00	14.50	15.00
Closing GFA	204.21	218.71	233.71
Average GFA	190.21	211.46	226.21
Depreciation Rate	4.34&	4.34%	4.34%
Depreciation	**8.25**	**9.18**	**9.82**

Commission's analysis

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

"31. Depreciation

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

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

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

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

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

31.4 In case of existing assets, the balance depreciable value as on April 1, 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."

The Commission has determined the depreciation for the third control period from FY 2022-23 to FY 2024-25 based on the approved GFA and depreciation rates specified in JERC MYT Regulations, 2021. As the latest Fixed Asset Register is available for FY 2018-19 only, therefore, the Commission has determined the depreciable GFA after deducting the value of assets that have achieved 90% depreciation as reflected in the FAR of FY 2018-19. Further, it is observed that the entire assets have been funded through equity only, hence the petitioner is not eligible for AAD (Advance Against Depreciation). Accordingly, the approved depreciation for FY 2022-23 to FY 2024-25 is as follows:

Table 128: Depreciation approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Gross Opening GFA	197.59	218.09	229.09
Less: Assets depreciated upto 90% till FY 2018-19	22.92	22.92	22.92
Net Opening GFA	174.67	195.17	206.17
Addition	20.50	11.00	11.50
Closing GFA	195.17	206.17	217.67
Average GFA	184.92	200.67	211.92

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Depreciation Rate	3.35%	3.35%	3.35%
Depreciation	**6.19**	**6.72**	**7.10**

7.11. Interest on Loan

Petitioner's submission

The LED being a Government Department, the entire capital employed till date has been funded through equity infusion by the Central Government through budgetary support without any external borrowings. The interest on debt/loan has been calculated considering debt to be 70% of GFA. Repayment of loan has been considered equivalent to the depreciation of the respective years.

Interest on loan for the control period FY 2022-23, FY 2023-24 and FY 2024-25 has been calculated on the average loan for the respective year at SBI MCLR for 1 year tenor as on 1st April, 2021 plus 100 basis points as provided in Regulation 29.4 of MYT Regulations, 2021. The SBI MCLR for 1 year tenor as on 1st April,2021 was 7.00%, hence rate of interest considered for calculating interest on loan is 8.00%. The proposed interest on loan for the control period is as follows:

Table 129: Interest on loan proposed by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Normative Loan	11.26	22.60	23.58
2	Add: Normative Loan During the year	19.60	10.15	10.50
3	Less: Normative Repayment equal to Depreciation	8.25	9.18	9.82
4	Closing Normative Loan	22.60	23.58	24.26
5	Average Normative Loan	16.93	23.09	23.92
6	Rate of Interest (%)	8.00%	8.00%	8.00%
7	**Interest on Loan**	**1.35**	**1.85**	**1.92**

Commission's analysis

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

"29. Interest on Loan

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

29.2 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 130: Interest on loan as approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Normative Loan	11.75	19.91	20.89
2	Add: Normative Loan During the year	14.35	7.70	8.05
3	Less: Normative Repayment equal to Depreciation	6.19	6.72	7.10
4	Closing Normative Loan	19.91	20.89	21.84
5	Average Normative Loan	15.83	20.40	21.37
6	Rate of Interest (%)	**8.00%**	**8.00%**	**8.00%**
7	**Interest on Loan**	**1.27**	**1.63**	**1.71**

7.12. Return on Equity (RoE)

Petitioner's submission

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

Table 131: Return on equity as submitted by the Petitioner (INR Crore)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Equity Amount	59.28	67.68	72.03
2	Equity Addition during year (30% of Capitalization)	8.40	4.35	4.50
3	Closing Equity Amount	67.68	72.03	76.53
4	Average Equity Amount	63.48	69.85	74.28
5	Return on Equity (%)	16.00%	16.00%	16.00%
6	**Total Return on Equity**	**10.16**	**11.18**	**11.88**

Commission's analysis

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

"28.2 The return on equity for the Distribution Wires Business shall be allowed on the equity capital determined in accordance with Regulation 26 for the assets put to use at post-tax rate of return on equity specified in the prevalent CERC Tariff Regulations for transmission system.

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

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

Table 132: Return on equity as approved by the Commission (INR Crore)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Equity Amount	59.27	65.42	68.72
2	Equity Addition during year (30% of Capitalization)	6.15	3.30	3.45
3	Closing Equity Amount	65.42	68.72	72.17
4	Average Equity Amount	62.35	67.07	70.45
5	Return on Equity (%)	16.00%	16.00%	16.00%
6	**Total Return on Equity**	**9.98**	**10.73**	**11.27**

7.13. Interest on Security Deposits

Petitioner's submission

The Petitioner has submitted that the Interest on Security Deposits has been calculated on the projected average balance of Security Deposit from the consumers during the respective financial year. The rate of interest on security deposit has been calculated at the bank rate as on 1st April, 2021 in accordance with Regulation 29.11 of MYT Regulations, 2021. The bank rate as on 1st April, 2021 was 4.25%. The proposed interest on security deposit for FY 2022-23, FY 2023-24 and FY 2024-25 is as follows:

Table 133: Interest on Security Deposits proposed by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Security Deposit	0.94	0.96	0.96
2	Net addition during the year	0.01	0.01	0.01
3	Refund during the year	0.00	0.00	0.00
3	Closing Security Deposit	0.95	0.96	0.96
4	Average Security Deposit	0.94	0.96	0.96
5	Rate of Interest (%)	4.25%	4.25%	4.25%
6	**Interest on Security Deposit**	**0.04**	**0.04**	**0.04**

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 Commission in accordance with the Regulation has considered bank rate as on 1st April 2021 of 4.25% for computation of Interest on Security Deposit which is as follows:

Table 134: Interest on Security Deposits approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Security Deposit	0.94	0.95	0.96
2	Net addition during the year	0.01	0.01	0.01
3	Refund during the year	0.00	0.00	0.00
3	Closing Security Deposit	0.95	0.96	0.97
4	Average Security Deposit	0.95	0.96	0.97
5	Rate of Interest (%)	4.25%	4.25%	4.25%
6	**Interest on Security Deposit**	**0.04**	**0.04**	**0.04**

7.14. Interest on Working Capital

Petitioner's submission

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

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

Table 135: Interest on Working Capital proposed by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	O&M Expense - 1 month	3.51	3.86	4.08
2	Maintenance Spare @ 40% of R&M Exp - one month	0.46	0.53	0.56
3	Two Months Receivables	4.88	5.08	5.29
4	Less : Amount held as Security Deposit	0.95	0.96	0.97
5	Total Working Capital	7.91	8.51	8.96
6	Interest Rate	9.00%	9.00%	9.00%
7	**Interest on Working Capital**	**0.71**	**0.77**	**0.81**

Commission's analysis

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

"32. Interest on Working Capital

.....

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

32.3 The interest on working capital shall be a payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures.

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

"64. Norms of Working Capital for Retail Supply Business

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

(a) O&M Expenses for one (1) month; plus

(b) Maintenance spares at 40% of repair and maintenance expenses for one (1) month; plus

(c) Receivables equivalent to two (2) months of the expected revenue from charges for use of distribution wires at the prevailing tariff Consumers at the prevailing tariff;

Less

(d) 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."

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

Table 136: Interest on Working Capital approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	O&M Expense - 1 month	3.45	3.74	3.96
2	Maintenance Spare @ 40% of R&M Exp - one month	0.27	0.30	0.31
3	Two Months Receivables	5.00	5.17	5.35
4	Less : Amount held as Security Deposit	0.95	0.96	0.97
5	Total Working Capital	7.78	8.26	8.66
6	Interest Rate	9.00%	9.00%	9.00%
7	**Interest on Working Capital**	**0.70**	**0.74**	**0.78**

7.15. Income Tax

Petitioner's submission

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

Commission's analysis

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

"33. Tax on Income

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

33.2 The Commission in its MYT Order shall provisionally approve Income Tax payable for each Year of the Control Period, if any, based on the actual income tax paid, including cess and surcharge on the same, if any, as per latest audited accounts available for the Distribution Licensee, subject to prudence check.

33.3 Variation between Income Tax actually paid, including cess and surcharge on the same, if any, and approved, if any, on the income stream of the Licensed business of the Distribution Licensees shall be reimbursed to/recovered from the Distribution Licensees, based on the documentary evidence submitted at the time of truing up of each Year of the Control Period, subject to prudence check.

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

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

It is observed that the Petitioner has not made any claim towards the tax on income, therefore the Commission has not approved any income tax for the third control period. The Commission will review the same at the time of truing up.

7.16. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner has not projected provision for bad debts for the control period. It has submitted that claim towards bad debts shall be made at the time of true-up based on the audited accounts of the respective years.

Commission's analysis

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

"63. Provision for bad and doubtful debts

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

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

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

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

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

7.17. Non-Tariff Income

Petitioner's submission

The Petitioner has submitted that the Non-tariff income for the FY 2022-23, FY 2023-24 and FY 2024-25 has been projected by escalating the actual Non-tariff income of FY 2020-21 by 5% YOY. The table below provides the Non-Tariff Income as projected by the Petitioner for the 3rd Control period:

Table 137: Non -tariff Income as projected by the Petitioner for FY 2022-23 to FY 2024-25 (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Non- Tariff Income	1.35	1.42	1.49

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 considers the projected Non-Tariff Income as reasonable and accordingly, approves the same for the MYT Control Period. The Non-Tariff Income approved by the Commission is tabulated below:

Table 138: Non -tariff Income approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

S. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Non- Tariff Income	1.34	1.41	1.48

7.18. Aggregate Revenue Requirement (ARR)

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

Table 139: Aggregate Revenue Requirement approved by the Commission for FY 2022-23 to FY 2024-25 (INR Crore)

S. No	Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
		Claimed	Approved	Claimed	Approved	Claimed	Approved
1	Power Purchase Cost						
2	Fuel Cost	147.38	128.92	153.01	139.40	158.85	147.32
3	O&M Expenses	42.17	41.39	46.28	44.93	48.93	47.54
4	Depreciation	8.25	6.19	9.18	6.72	9.82	7.10
5	Interest and Finance charges	1.35	1.27	1.85	1.63	1.91	1.71
6	Interest on Working Capital	0.71	0.70	0.77	0.74	0.81	0.78
7	Return on Equity	10.16	9.98	11.18	10.73	11.88	11.27
8	Interest on Security Deposit	0.04	0.04	0.04	0.04	0.04	0.04
9	Income Tax	0.00	0.00	0.00	0.00	0.00	0.00
10	**Total Revenue Requirement**	**210.07**	**188.49**	**222.30**	**204.20**	**232.24**	**215.76**
11	Less: Non-Tariff Income	1.35	1.34	1.42	1.41	1.49	1.48

S. No	Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
		Claimed	Approved	Claimed	Approved	Claimed	Approved
12	**Net Revenue Requirement**	**208.72**	**187.14**	**220.88**	**202.79**	**230.75**	214.28

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

Petitioner's submission

The estimated revenue and gap for the control period at existing tariff for the second control period from FY 2022-23 to FY 2024-25 projected by the Petitioner is as follows:

Table 140: Revenue and gap at existing tariff proposed by the Petitioner for the FY 2022-23 to FY 2024-25 (INR Crore)

S. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Net Revenue Requirement	208.72	220.88	230.75
2	Revenue from Sale of Power	29.27	30.47	31.72
3	Net Gap during the year	179.45	190.41	199.03
4	Add: Previous year gap	0.00	0.00	0.00
5	**Total Gap**	**179.45**	**190.41**	**199.03**

Commission's analysis

In accordance with Regulation 9.1 of the JERC MYT Tariff Regulations, 2021, the Petitioner has proposed ARR for each year of the control period and tariff proposal for first year of the control period i.e. FY 2022-23. Accordingly, the Commission is of the view that since the tariff has to be approved for FY 2022-23 only, the revenue and revenue gap computations are accordingly required to be done for FY 2022-23 only. Based on the slab-wise information provided by the Petitioner and category-wise sales, connected load and number of consumers approved by the Commission, the computed revenue from sale of power for the FY 2022-23 by the Commission is as follows.

Table 141: Revenue at existing tariff computed by the Commission for the FY 2022-23 (INR Crore)

S. No.	Category	Sales (MUs)	Revenue from Energy Charges (INR Crore)	Revenue from Fixed charges (INR Crore.)	Total (INR Cr.)	ABR (INR/ unit)
1	Domestic	43.61	12.86	0.88	13.74	3.15
2	Commercial	3.64	3.14	0.15	3.30	9.05
3	Government Connections	7.28	6.99	0.09	7.08	9.73
4	Industrial	0.40	0.26	0.25	0.51	12.69
5	HT Industrial	1.05	0.97	0.25	1.21	11.54
6	Public Lighting	0.92	0.55	0.02	0.57	6.21
7	Temporary	0.09	0.07	0.00	0.07	6.97
	TOTAL	**57.00**	**24.84**	**1.63**	**26.47**	

The Commission has determined revenue from sale of power at existing tariff as INR 26.47 Crore in FY 2022-23.

7.20. Standalone Revenue Gap/ Surplus

Petitioner's submission

Based on the ARR and the revenue from retail tariff projected by the Petitioner, the Petitioner has submitted a standalone revenue gap of INR 179.45 Crore for the FY 2022-23.

Commission's analysis

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

Table 142: Standalone Revenue Gap/ Surplus approved at existing tariff for the FY 2022-23 (INR Crore)

S. No	Particulars	Petitioner's submission	Now Approved
1	Annual Revenue Requirement	208.72	187.14
2	Revenue from sale of power	29.27	26.47
	Revenue Gap/(Surplus)	**179.45**	**160.67**

The standalone revenue gap at existing retail tariff is INR 160.67 Crore for the FY 2022-23, to be met from the budgetary support by the Government. The Petitioner has submitted a letter vide Reference No. 67/2/2/2021-Ele/418 dated February 17, 2022 towards meeting the gap of FY 2021-22 as approved by the Commission through Budgetary support. The Commission has considered the same while approving the tariffs for FY 2022-23.

8. Chapter 8: Tariff Principles and Design

8.1. Overall Approach

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

The provision of supply of electricity to all the people is an essential driver for development, and also influences social and economic change. In this Tariff Order, the Commission has continued with its endeavor to meet the objectives of the EA 2003, as set out in its Preamble, including the protection of the interest of consumers, the supply of electricity to all areas and the rationalisation of tariffs. The EA, 2003 also mandates the Commission to strike a fine balance between the interests of various stakeholders including Utilities and consumers. Since the majority of the energy sales within 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. The Commission has also taken into consideration the Petitioner's submissions as well as the public responses in these proceedings.

8.2. Applicable Regulations

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

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

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

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

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

Further, Regulation 68 of the JERC MYT Regulations, 2021 states the following:

"68. Determination of Tariff

68.1 The Commission may categorize Consumers on the basis of their load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required and any other factor as considered appropriate by the Commission.

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

68.3 The Commission shall endeavour to reduce gradually the cross-subsidy between Consumer categories with respect to the cost of supply in accordance with the provisions of the Act.

68.4 The tariff proposal by Licensee and the tariff determination by the Commission shall be based on the following principles:

(a) The tariff for all categories shall preferably be two part, consisting of fixed and variable charges.

(b) The fixed charges in tariff shall progressively reflect actual fixed cost incurred by Distribution Licensee;

(c) The overall retail supply tariff for different Consumer categories shall progressively reflect the cost of supply for respective categories of Consumers;

(d) The tariff for residential Consumers shall be set considering the affordability of tariff for various class of Consumers;

(e) The tariff shall be set in such a manner that it may not present a tariff shock to any category of Consumers."

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

Considering the fact that almost all the sales is restricted to LT level, the Commission is of the view that the functional demarcation of costs will not be of substantial impact on the present tariff structure. Further, as every island of Lakshadweep has its own microgrid with very low peak demand, there are practically no options for open access available for the consumers of Lakshadweep. Therefore, the Commission has taken a considerate view in this regard balancing the interest of the utility and the consumer, thus compensating the department with additional revenue and providing a reasonable hike in consumer's tariff.

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

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

Petitioner's Submission

The Petitioner has proposed revenue gap of INR 179.45 Crore for FY 2022-23 at existing tariff. The revenue gap submitted by the Petitioner for FY 2022-23 is as follows:

Table 143: Revenue Gap at existing tariff submitted by the Petitioner for FY 2022-23 (INR Crore)

Sr. No.	Particulars	FY 2022-23
1	Net Revenue Requirement	208.72
2	Revenue from Sale of Power at existing Tariff	29.27
3	**Net Gap during the year**	**179.45**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**179.45**

Commission's View

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

Table 144: Revenue Gap determined by the Commission at existing tariff for FY 2022-23 (INR Crore)

Sr. No.	Particulars	FY 2022-23
1	Net Revenue Requirement	187.14
2	Revenue from Sale of Power at existing Tariff	26.47
3	**Net Gap during the year**	**160.67**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**160.67**

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

Accordingly, the Commission determined the revenue gap of INR 160.67 Crore for FY 2022-23 at existing tariff.

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

From above, it can be seen that at existing tariff, there is revenue gap of INR 160.67 Crore for FY 2022-23. However, the Commission has appropriately revised the tariffs for FY 2022-23 as compared to tariffs for FY 2021-22, in view of the budgetary support by the Government to meet the balance revenue gap.

8.4.1. Tariff Proposal

Petitioner Submission

1. The Petitioner has proposed that at existing tariff, the average cost of supply comes to INR 36.52 per unit, whereas the Average Billing Rate (ABR) is INR 5.12 per unit. Thus, there is a gap of INR 31.40 per unit.
2. The Petitioner has submitted that over 99% of power is generated from Diesel based generating stations. There is no other source of energy. Major component of cost of supply is cost of HSD and Lubricants. The above factors, apart from general rise in prices have necessitated the increase in tariff. However, the Petitioner has only proposed partial recovery of cost.
3. The Petitioner has proposed to increase energy charges by 24.24% while keeping the fixed charges at the same level.

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

Table 145: Tariff proposal submitted by the Petitioner for FY 2022-23

Existing			Proposed		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
Lifeline Connection	INR 10/- per service connection per month or part thereof	1.00	**Lifeline Connection**	INR 10/- per service connection per month or part thereof	1.05
Domestic Connection			**Domestic Connection**		
0 to 100 units	INR 20/- per connection per month or part thereof for single phase INR 70/- per connection per month or part thereof for three phase	1.35	0 to 100 units	INR 20/- per connection per month or part thereof for single phase INR 70/- per connection per month or part thereof for three phase	2.50
101 to 200 units		3.10	101 to 200 units		4.50
201 to 300 units		5.20	201 to 300 units		7.00
301 units & above		6.85	301 units & above		9.00

Existing			Proposed		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
Commercial			**Commercial**		
0-100 Units	INR 30/- per connection per month or part thereof for single phase INR 125/- per connection per month or part thereof for three phase	6.30	0-100 Units	INR 30/- per connection per month or part thereof for single phase INR 125/- per connection per month or part thereof for three phase	7.00
101 to 200 Units		7.65	101 to 200 Units		7.50
201 units & above		9.50	201 units & above		9.50
Govt. Connection			**Govt. Connection**		
0-200 Units	INR 35/- per connection per month or part thereof for single phase INR 125/- per connection per month or part thereof for three phase	8.00	0-200 Units	INR 35/- per connection per month or part thereof for single phase INR 125/- per connection per month or part thereof for three phase	8.50
201 units & above		9.70	201 units & above		10.00
Industrial	INR 50.00 per kVA connected load or part thereof	6.50	**Industrial**	INR 50.00 per kVA connected load or part thereof	8.00
HT Industrial	INR 150.00 per kVA connected load or part thereof	9.20	**HT Industrial**	INR 150.00 per kVA connected load or part thereof	10.00
Public Lighting	INR 50.00 per kVA connected load or part thereof per month	6.00	**Public Lighting**	INR 50.00 per kVA connected load or part thereof per month	6.50
EV Charging Stations	INR 100.00 per kVA connected load or part thereof per month	4.79	**EV Charging Stations**	INR 100.00 per kVA connected load or part thereof per month	5.00
	-				
Temporary Connections		5.53	**Temporary Connections**		10.42

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

Table 146: Average Tariff Hike for FY 2022-23 as submitted by the Petitioner (INR Crore)

Sr. No.	Particulars	Units	FY 2022-23	
			Existing	Proposed
1	Net ARR for FY 2022-23	INR Crore	208.72	208.72
2	Revenue for FY 2022-23	INR Crore	29.27	36.36
3	**Gap (1-2)**	**INR Crore**	**179.45**	**172.35**
4	Total Sales	MU	57.16	57.16
5	Average Cost of Supply	INR/kWh	36.52	36.52
6	Average Billing Rate	INR/kWh	5.12	6.36
7	Per Unit Gap	INR/kWh	31.40	30.15
8	Average Tariff Hike	INR/kWh		1.24
9	Tariff Hike in %	%		24.24%

Commission View

The Commission has determined the retail tariff for the FY 2022-23 in accordance with the principles stated in the Electricity Act, 2003 Tariff Policy, 2016, and the JERC MYT Regulations, 2021. The Tariff design in general is guided by the following principles:

1. Cost reflective: The tariffs determined should efficiently reflect the cost of supply for each consumer category.

2. Progressive tariffs: Ensuring progressivity among tariffs by having telescopic tariff slabs which encourages efficient consumption and at the same time allows intra-category cross-subsidy by way of charging higher tariff for higher consumption to subsidise the lower consumption consumers

3. Revenue neutrality: There should be no impact on the utility's yearly revenue due to rationalization of tariffs i.e. the overall status quo should be maintained.

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

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

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

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

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

9. Smart tariff design: Tariff rate design should take into consideration trends in electric power such as small-scale renewable generation by consumers, energy efficiency, electric vehicle charging, etc.

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

1. *Cost of Supply*

a) Context

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

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

b) Approach:

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

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

As a next logical step, the Voltage wise cost of supply (VCoS) method provides a better reflection of cost to supply to consumers at different voltage levels.

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

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

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

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

2. *Tariff Affordability*

a) Context

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

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

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

b) Approach

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

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

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

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

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

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

3. *Cross Subsidy*

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

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

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

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

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

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

Accordingly, in this Tariff Order, the Commission has designed tariff for various consumer categories considering the Average Cost of supply in line with the provisions of the Tariff Policy, 2016. However, The Commission, after analysis of the various components of the ARR for FY 2022-23, has come to the conclusion that the utility has to increase the average tariff from the existing level of INR 4.64 per unit to INR 32.83 per unit to recover the full amount of ARR as projected for FY 2022-23. Bringing the tariff to the prevalent Average Cost of Supply will cause the tariff shock to the consumers in the islands of 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. Further, the Commission has introduced the kW-based billing for the fixed charges for consumers under the Lifeline, Domestic, Commercial and Government Connections categories in the tariff schedule for FY 2022-23.

The approved tariff for FY 2021-22 is as follows:

Table 147: Existing vs. Tariff approved by the Commission for FY 2021-22

Existing			Approved		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
Lifeline Connection (Up to 100 units)	INR 10/- per service connection per month or part thereof	1.00	**Lifeline Connection (Up to 100 units)**	INR 10.00 per kW per month	1.25
Domestic Connection			**Domestic Connection**		
0 to 100 units	INR 20/- per connection per month or part thereof for single phase INR 70/- per connection per month or part thereof for three phase	1.35	0 to 100 units	INR 20.00 per kW per month	1.60
101 to 200 units		3.10	101 to 200 units		3.30
201 to 300 units		5.20	201 to 300 units		5.50
301 units & above		6.85	301 units & above		7.00
Commercial			**Commercial**		
0-100 Units	INR 30/- per connection per month or part thereof for single phase INR 125/- per connection per month or part thereof for three phase	6.30	0-100 Units	INR 30.00 per kW per month	7.00
101 to 200 Units		7.65	101 to 200 Units		8.20
201 units & above		9.50	201 units & above		10.00
Govt. Connection			**Govt. Connection**		
0-200 Units	INR 35/- per connection per month or part thereof for single phase INR 125/- per connection per month or part thereof for three phase	8.00	0-200 Units	INR 30.00 per kW per month	8.60
201 units & above		9.70	201 units & above		10.00
Industrial	INR 50.00 per kVA connected load or part thereof	6.50	**Industrial**	INR 50.00 per kVA per month	6.50

Existing			Approved		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
HT Industrial	INR 150.00 per kVA connected load or part thereof	9.20	**HT Industrial**	INR 150.00 per kVA per month	9.20
Public Lighting	INR 50.00 per kVA connected load or part thereof per month	6.00	**Public Lighting**	INR 75.00 per kVA per month	6.75
EV Charging Stations		4.79	**EV Charging Stations**		6.00*
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	

** For LT Supply, an additional INR 0.20/KWh will be charged*

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

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

Table 148: Revenue at tariff approved by the Commission for FY 2022-23

S. No.	Category	Sales (MUs)	Revenue from Energy Charges (INR Crore)	Revenue from Fixed charges (INR Crore.)	Total (INR Cr.)	ABR (INR/ unit)
1	Domestic	43.61	13.86	2.32	16.18	3.71
2	Commercial	3.64	3.34	0.30	3.64	9.99
3	Government Connections	7.28	7.22	0.54	7.76	10.66
4	Industrial	0.40	0.26	0.25	0.51	12.69
5	HT Industrial	1.05	0.97	0.25	1.21	11.54
6	Public Lighting	0.92	0.62	0.03	0.65	7.06
7	Temporary	0.09	0.07	0.00	0.07	7.90
	TOTAL	**57.00**	**26.35**	**3.67**	**30.02**	

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

Table 149: Revenue gap at tariff approved by the Commission for FY 2022-23 (in INR crore)

S. No.	Particulars	FY 2022-23	
		Claimed	**Approved**
1	Net Revenue Requirement	208.72	187.14
2	Revenue from Sale of Power at Revised Tariff	36.36	30.02
3	**Net Gap during the year**	**172.35**	**157.12**
4	Add: Previous Year Gap	0.00	0.00

S. No.	Particulars	FY 2022-23	
		Claimed	Approved
5	**Total Gap**	**172.35**	**157.12**

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

Table 150: Percentage recovery of ACOS at existing and approved tariffs for FY 2022-23

S. No.	Category	Average Cost of Supply (INR/unit) (With Fuel Cost)	Average Billing Rate at existing tariff (INR/unit)	Average Billing Rate at approved tariff (INR/unit)	ABR at existing tariff as % of AcoS	ABR at proposed tariff as % of AcoS
1	Life Line Connection (Upto 100 Units)*	32.83	0.00	0.00	0.00%	0.00%
2	Domestic	32.83	3.15	3.71	9.59%	11.30%
3	Commercial	32.83	9.05	9.99	27.57%	30.42%
4	Government Connection	32.83	9.73	10.66	29.63%	32.47%
5	Industrial	32.83	12.69	12.69	38.65%	38.65%
6	HT Industrial	32.83	11.54	11.54	35.14%	35.14%
7	Public Lighting	32.83	6.21	7.06	18.90%	21.50%
8	EV Charging Station	32.83	0.00	0.00	0.00%	0.00%
9	Temporary	32.83	6.97	7.90	21.22%	24.06%
10	**Overall**	**32.83**	**4.64**	**5.27**	**14.15%**	**16.04%**

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

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

Table 151: Percentage recovery of ACOS with and without fuel cost at approved tariffs for FY 2022-23

S. No.	Category	Average Cost of Supply (INR/unit) (With Fuel Cost)	Average Cost of Supply (INR/unit) (Without fuel cost)	Average Billing Rate at approved tariff (INR/unit)	ABR as % of AcoS with fuel cost	ABR as % of AcoS without fuel cost
1	Life Line Connection (Upto 100 Units)*	32.83	10.21	0.00	0.00%	0.00%
2	Domestic	32.83	10.21	3.71	11.30%	36.31%
3	Commercial	32.83	10.21	9.99	30.42%	97.79%
4	Government Connection	32.83	10.21	10.66	32.47%	104.37%
5	Industrial	32.83	10.21	12.69	38.65%	124.23%
6	HT Industrial	32.83	10.21	11.54	35.14%	112.97%
7	Public Lighting	32.83	10.21	7.06	21.50%	69.11%
8	EV Charging Station	32.83	10.21	0.00	0.00%	0.00%
9	Temporary	32.83	10.21	7.90	24.06%	77.34%
10	**Overall**	**32.83**	**10.21**	**5.27**	**16.04%**	**51.56%**

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

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

Table 152: Category wise cost coverage through the budgetary support at the existing and approved tariffs for FY 2022-23

S. No.	Category	Average Cost of Supply (INR/unit)	Average Billing Rate at existing tariffs (INR/unit)	Budgetary Support at existing tariffs (INR/unit)	Average Billing Rate at approved tariffs (INR/unit)	Budgetary Support at approved tariffs (INR/unit)
1	Life Line Connection (Upto 100 Units)*	32.83	0.00	32.83	0.00	32.83
2	Domestic	32.83	3.15	29.68	3.71	29.12
3	Commercial	32.83	9.05	23.78	9.99	22.84
4	Government Connection	32.83	9.73	23.10	10.66	22.17
5	Industrial	32.83	12.69	20.14	12.69	20.14
6	HT Industrial	32.83	11.54	21.29	11.54	21.29
7	Public Lighting	32.83	6.21	26.62	7.06	25.77
8	EV Charging Station	32.83	0.00	32.83	0.00	32.83
9	Temporary	32.83	6.97	25.86	7.90	24.93
10	**Overall**	**32.83**	**4.64**	**28.19**	**5.27**	**27.56**

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

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

Table 153: Approved ACoS and ABR by the Commission at approved tariff for FY 2022-23

Sr. No.	Particulars	FY 2022-23
1	Net Revenue Requirement (INR Crore)	187.14
2	Revenue from Revised Tariff (INR Crore)	30.02
3	Energy Sales (MU's)	57.00
4	Average cost of supply/unit (INR/kWh)	32.83
5	Average Billing Rate (INR/kWh)	5.27
6	**Gap (INR/kWh)**	**27.57**
7	**Tariff Hike (%)**	**13.40%**

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

1. The Commission has approved tariff hike of 13.40% for FY 2022-23 over FY 2021-22.
2. The Commission has introduced the kW-based billing for the fixed charges for consumers under the Lifeline, Domestic, Commercial and Government Connections categories in the tariff schedule for FY 2022-23.
3. The Commission has approved the average revenue for FY 2022-23 as INR 5.27/kWh as against the approved Average Cost of Supply of INR 32.83/kWh.

The Petitioner has submitted a letter vide Reference No. 67/2/2/2021-Ele/418 dated February 17, 2022 confirming that the Revenue Gap will be borne by the administration of Lakshadweep, with budgetary support from the Government of India.

9. Chapter 9: Tariff Schedule

9.1. Tariff Schedule

Sr. No.	Category	Fixed Charges	Energy Charge (INR/kWh)
1.	**Life Line Connection**		
	0 to 100 units	INR 10.00 per kW per month	1.25
2.	**Domestic Connection**		
	0 to 100 units	INR 20.00 per kW per month	1.60
	101 to 200 units		3.30
	201 to 300 units		5.50
	301 units & above		7.00
3.	**Commercial**		
	0-100 Units	INR 30.00 per kW per month	7.00
	101 to 200 Units		8.20
	201 and above		10.00
4.	**Govt. Connection**		
	0-200 Units	INR 30.00 per kW per month	8.60
	201 Units & above		10.00
5.	**Industrial**		
	All units	INR 50/- per KVA per month	6.50
6.	**HT Industrial**		
	All Units	INR 150/- per KVA per month	9.20
7.	**Public Lighting**		
	All Units	INR 75/- per KVA per month	6.75
8.	**Electric Vehicle Charging Station**		6.00*
9.	**Temporary supply**		
	All Units	1.5 times the rate applicable to the relevant category of consumers.	

** For LT Supply, an additional INR 0.20/KWh will be charged*

9.2. 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

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Sr. No.	Category	Applicability	Point of Supply news
			to the slabs defined under Domestic Category.
2	Domestic	Applicable to private houses, bungalows, hostels and hospitals run on non-commercial lines, charitable educational and religious institutions for lights, fans, radios, Government schools along with related facilities, domestic heating and other household appliances	
3	Commercial	This includes all categories which are not covered by other tariff categories i.e. Domestic Category, BPL, Industrial LT, HT Consumers and Public Lighting. Applicable for Shops, Offices, Restaurants, Bus Stations, Photo Studios, Laundries, Cinema Theatres, Industrial Lighting, clubs and other commercial installations.	
4	Government Connection	Applicable to all Government Connections except those connections specifically included in Industrial LT and Public Lighting.	
5	Industrial Supply	Applicable to all LowTension Industrial Connections including water works/pumps.	
6	HT Industrial	Applicable for the consumers connected with 11 KV.	Note: To be read with other Terms and Conditions for HT Supply mentioned separately.
7	Public Lighting	Applicable for lighting on public roads, footpaths, streets and fares in parks & markets.	
8	Electric Vehicle Charging Station	This tariff schedule shall apply to consumers that have set up Public Charging Stations (PCS) in accordance with the technical norms/ standards/specifications laid down by the Ministry of Power, GoI and Central Electricity Authority (CEA) from time to time. The tariff for domestic consumption shall be applicable for domestic charging (LT/HT)	
9	Temporary Supply	The supply may be given for a limited period as per the provisions of JERC Supply Code Regulations, 2018, and amendments thereon.	

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9.3. 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.

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.

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

11) **Delayed payment surcharge** shall be applicable to all categories of consumers. Delayed payment surcharge of 1.5% per month shall be levied on all arrears of bills. In case of delay less than a month, the surcharge will be levied at 1.5% 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.

9.4. 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.

9.5. Schedule of Miscellaneous Charges

S. No.	PARTICULARS	Charges (INR)
METER RENT CHARGES		
1	Single Phase Meter	INR 10 per month or part thereof
2.	Three Phase Meter	INR 25 per month or part thereof
3.	LT Meter with MD indicator	INR 200 per month or part thereof
4.	Tri-vector Meter	INR 500 per month or part thereof
Note: The type of meters to be installed in consumer premises will be decided by the department. Generally, the LT consumers having connected load above 50 HP will be provided with LT (Maximum Demand Indicator) meters. Considering the constraints prevailing in Lakshadweep Islands, the energy meters will be provided by the department only.		
RECONNECTION CHARGES AFTER TEMPORARY DISCONNECTION		
5.	Single Phase LT Connection	INR 50
6.	Three Phase LT Connection	INR 100
7.	HT Connection	INR 500
SERVICE CONNECTION CHARGES		
8.	Single Phase LT Connection	INR 250
9.	Three Phase LT Connection	INR 500
10.	HT Connection	INR 1,000
EXTRA LENGTH CHARGES		
11.	Single Phase	INR 50/meter
12.	Three Phase	INR 100/meter
***Note**: Extra length chargeable will be beyond permissible 30 meters free length from existing network for new connection for all categories*		
TESTING FEE FOR VARIOUS METERING EQUIPMENT		
13.	Single Phase	INR 100 per meter
14.	Three Phase Meter	INR 300 per meter
15.	Three Phase Tri-vector Meter (0.5 Class) Industrial LT Consumer	INR 500 per meter
16.	Three Phase Tri-vector Meter (0.5 Class)11 KV HT Consumer	INR 500 per meter
17.	Combined CT-PT Unit for 11 KV Consumer	INR 500 per unit
18.	Three Phase CT Block	INR 300 per block
19.	CT Coil	INR 100 per coil
FEES (NON-REFUNDABLE) FOR SUBMISSION OF TEST REPORT OF WIRING COMPLETION		
20.	Single Phase Lighting / Domestic Connection	INR 10 per test report

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S. No.	PARTICULARS	Charges (INR)
21.	Three Phase Lighting /Domestic Connection	INR 25 per test report
22.	Single Phase Lighting / Commercial Connection	INR 50 per test report
23.	Three Phase Lighting / Commercial Connection	INR 100 per test report
24.	Three Phase LT Industries	INR 250 per test report
25.	Single Phase / Streetlight / Public Lighting & others	INR 50 per test report
OTHER CHARGES		
26.	Meter shifting charges (within the premises on consumer request, if service cable is not required to be changed)	INR 100
27.	Meter shifting charges (within the premises on consumer request, if change in service cable required up to 30 metre)	INR 200
28.	Shifting of poles on consumer request	INR 1,500
29.	Diversion of HT/LT line on consumer request	INR 100/- per meter
30.	Penalty for tampering/damaging of supplier equipment	As per the relevant provisions of the JERC Supply Code Regulations, 2018

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10. Chapter 10: 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.

10.1. 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 appropriate action as per Electricity Act 2003, and the Regulations made thereunder.

10.1.1. Filing of Review and True up of previous years

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 31st March 2021 *The Commission directs the Petitioner to get the audited accounts of FY 2017-18 and FY 2018-19 and file the true up Petitions for FY 2017-18 to FY 2019-20 along with next tariff petition.*
Petitioner's response in the present Tariff Petition *It is submitted that Accounts for the FY 2017-18 and FY 2018-19 has been completed, audited. Further, True-up petitions FY 2017-18 and FY 2018-19 have also been filed for consideration & approval of the Hon'ble Commission. Proforma Accounts for the FY 2019-20 is under preparation. LED shall submit the True-up petitions on completion of the audit. Hon'ble Commission may please allow the same.*
Commission's response The Commission has noted the submission of the Petitioner. The Commission directs the Petitioner to get the accounts audited for FY 2019-20 and file the true up Petition for these years within two months from the issuance of this Tariff Order. Further, the Commission directs the Petitioner to prepare the accounts for FY 2020-21 and get the same audited to file the true up petitions along with the next tariff filing for FY 2023-24.

10.1.2. Capital Expenditure

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 31st March 2021 *The Commission vide letter no. JERC/RA-21/I have directed 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 *Department of Electricity being a distribution licensee is functioning as a Department under UT of Lakshadweep Administration. All the expenditures are met from the UTLA budgetary support. All the fund allotted for a particular year has to be utilized in the same year itself. Hence the department is facing difficulties in providing quarterly capitalization status and hence Hon'ble Commission may allow this department to submit the status on annual basis.*
Commission's response The Commission has noted the submission of the Petitioner; however, the difficulties have not been elaborated. Further, the Commission directs the Petitioner to submit the progress report of capitalisation on quarterly basis strictly in the format already shared.

10.1.3. Improvement of specific fuel consumption

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 31st March 2021 *The Commission directs the Petitioner to submit the progress report on quarterly basis.*
Petitioner's response in the present Tariff Petition *The detailed work undertaken for improvement of specific fuel consumption shall be submitted on quarterly basis.*
Commission's response The Commission has noted the submission of the Petitioner. The Commission has observed that the detailed work undertaken for improvement of specific fuel consumption is not being submitted on quarterly basis and accordingly, directs the Petitioner to submit the progress report on quarterly basis.

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

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 31st March 2021 *The Commission has noted the Petitioner's submission and directs the Petitioner to submit the quarterly status report on smart meter installation within three months of issuance of this order*
Petitioner's response in the present Tariff Petition *The progress on installation of smart Metering project shall be submitted to the Hon'ble Commission on quarterly basis.*
Commission's response The Commission has noted the Petitioner's submission and directs the Petitioner to submit the progress report on the quarterly basis.

10.1.5. Energy Audit Report

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 31st March 2021 *The Commission directs the Petitioner to submit the energy audit report within two months from the issuance of this order.*

Petitioner's response in the present Tariff Petition *It is submitted that LED has not been able completed the Energy Audit for the FY 2019-20 & FY 2020-21. LED shall get the Energy audit done for the 2019-20 & FY 2020-21 & submit the report along with the next tariff Petition. Hon'ble Commission may kindly allow the same.*
Commission's response The Commission has noted the submission of the Petitioner. The Commission directs the Petitioner to continue submitting the energy audit reports and accordingly, drops this directive.

10.1.6. State Load Despatch Centre

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 31st March 2021 *The Commission has noted the Petitioner's submission and directs the Petitioner to expedite the process of SLDC establishment and may seek help POSOCO in this regard.*
Petitioner's response in the present Tariff Petition *Department of Electricity vide letter dated 18-11-2021 wrote to POSOCO for extending their help for establishing State Load Despatch Centre in Lakshadweep. The copy of the same has also forwarded to Hon'ble JERC for information. However, no response has been received from POSOCO so far. Now UT of Lakshadweep administration had decided to undertake privatization entire electricity generation and distribution functions of Lakshadweep Electricity Department. The tender for the same has been floated on 03/01/2022 and the last date of bid submission is on 28/03/2022. Department is waiting for the reply from POSOCO.*
Commission's response The Commission directs the Petitioner to follow up the matter with POSOCO for the establishment of SLDC.

10.1.7. Slab wise details

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 31st March 2021 *The Commission has noted the Petitioner's submission and directs to provide island wise, 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 *Department shall furnish the island-wise, month-wise and slab-wise detailed break up of number of consumers, connected load and energy sales, etc. on quarterly basis.*
Commission's response The Commission again directs the Petitioner to provide the island-wise, month-wise and slab-wise detailed break up of number of consumers, connected load and energy sales under each consumer category for the last five years within three months of the issuance of this order. Further, the Commission also directs the Petitioner to maintain and submit month wise island-wise information for category-wise sales, number of consumers, connected load, T&D losses, plant-wise generation/purchase, fuel cost, etc. on quarterly basis within three months of the issuance of this order.

10.1.8. Details of upcoming power plants

Originally issued in Tariff Order dated 19th March 2018

Commission's latest directive in Tariff Order dated 31st March 2021 The Commission has noted the Petitioner's submission and directs the petitioner to submit the status of *procurement of power from the approved solar plants and details of ongoing and proposed installation of solar power plants.*
Petitioner's response in the present Tariff Petition *Now UT of Lakshadweep administration had decided to undertake privatization entire electricity generation and distribution functions of Lakshadweep Electricity Department. The tender for the same has been floated on 03/01/2022 and the last date of bid submission is on 28/03/2022. In light of the above, all the projects of M/S SECI are put on hold for the time being.*
Commission's response The Commission has noted the Petitioner's submission. The Commission directs the petitioner to submit quarterly the status of the upcoming projects.

10.1.9. Explore alternate sources of energy generation

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 31st March 2021 *The Commission has shared its concern with Hon'ble Administrator regarding dependence of very costly electricity supply as most of the power is sourced from diesel generation. The Hon'ble Administrator has also shared his concern for the high cost of diesel generation and has been personally pursuing the matter with Secretary MNRE. The Petitioner has also informed that they are in discussion with IIT Madras for Solar and Biomass hybrid Project for Androt, Agatti and Kavaratti. Further, non-availability of suitable land for Ground mounted Solar, environmental concerns for installing Floating Solar, commercially unviable wind power are the major challenges for LED in minimizing generation from diesel. The Commission directs the Petitioner to submit the status report on quarterly basis.*
Petitioner's response in the present Tariff Petition *It is submitted that, now UT of Lakshadweep administration had decided to undertake privatization entire electricity generation and distribution functions of Lakshadweep Electricity Department. The tender for the same has been floated on 03/01/2022 and the last date of bid submission is on 28/03/2022. One of the key requirement of privatization is the deployment of clean energy projects to the tune of 80% of total generation within a period of 3 years of handing over. Hence department is expecting that, the new entity shall be able to meet its 80% generation from Clean Energy sources there by reducing the usage of Diesel Generating sets*
Commission's response The Commission is concerned regarding the dependence on costly electricity supply as most of the power is sourced from diesel generation. The Commission directs the petitioner to explore alternate source of energy generation and submit an action plan within 6 months of issuance of this order, for utilizing the renewable generation sources for reducing the dependency on diesel based generation.

10.2. New Directives issued in this Order

10.2.1. Reliability Indices proposal for the control period

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.

Annexures

Annexure 1: List of Stakeholders who attended the Public hearing on 17th February 2022 through Video Conference

Table 154: List of Stakeholders

S.No.	Name of Person (Mr/Ms)
1	Mohammad Noufal K C (K Cheriyadam House, Androth Island)
2	Ajmeer Kalam K C (President NYC, Androth Unit, Androth Island)
3	Anwer Husain AB (VDP Member, Androth Island)
4	Mohammed Kasim UP (Ummathabiyyapura House, Androth Island)
5	A.K Abdul Gafoor (General Secretary, National Congress Party)
6	Dehlan C L (Chemmachery Lavanakkal, Androth Island)
7	Dr. Basheer PP (Puthiyaveed House, Secretary, NCP Androth unit, Androth Island)
8	Fathaudeen M (Mathail House, Androth Island)
9	Husain K (VDP Member, Androth Island)
10	Husain T (Thailath House, President, NCP, Androth Unit, Androth Island)
11	Koya P (Puthiyadam House, Androth Island)
12	Sayyid Liyauddeen P (Pattakal House, Androth Island)
13	Sayed Madani (Secretary NYC, Androth Unit, Androth Island)
14	Jalaludheen M L (District Pachayat Member, Androth Island)
15	Mukhtar A I (Aliyathammada Ishayyapura House, Androth Island)
16	Musthafa U P (Madani House, Androth Island)
17	A.Misbah (Ex- Member Home Ministers Advisory Committee for Lakshadweep, Kavaratti)
18	Shaams Shumoos PVP (PVP House, Androth Island)
19	Noorul Hakeem T P (Thattampokkada House, Androth Island)
20	K.N.Kasmikoya (District Panchayat, Member & State President, Bharathiya Janatha Party)
21	Abdul Kader. T (Chairperson, Village Panchayat, Kavaratti)
22	Abdul Razak. M (District Panchayat Member, Kavaratti)
23	Thaha Malika (District Panchayat Member, Kavaratti)