TARIFF ORDER

True-up for FY 2015-16 and FY 2016-17, Annual Performance Review for FY 2019-20 and Aggregate Revenue Requirement (ARR) and Determination of Retail Tariff for the FY 2020-21

Petition No. 24/2019

For

Lakshadweep Electricity Department (LED)

18th May 2020

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
JERC	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
kVA	Kilo Volt Ampere
kWh	Kilo Watt Hour
LED	Lakshadweep Electricity Department
LT	Low Tension
MoP	Ministry of Power
MU	Million Units
MW	Mega Watt
MYT	Multi Year Tariff
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance
PLF	Plant Load Factor
PPA	Power Purchase Agreement
REC	Renewable Energy Certificate
RPO	Renewable Purchase Obligation
SECI	Solar Energy Corporation of India Limited
SERC	State Electricity Regulatory Commission
T&D	Transmission & Distribution
TVS	Technical Validation Session
UI	Unscheduled Interchange
UT	Union Territory
YoY	Year on Year

Before the

Joint Electricity Regulatory Commission

For the State of Goa and Union Territories, Gurugram

QUORUM

Sh. M. K. Goel, Chairperson

Petition No. 24/2019

In the matter of

Approval for the True-up of the FY 2015-16 and FY 2016-17, Annual Performance Review for the FY 2019-20, Aggregate Revenue Requirement (ARR) and Retail Tariff for the FY 2020-21.

And in the matter of

Lakshadweep Electricity Department (LED)..Petitioner

ORDER

Dated: 18th May 2020

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 of the FY 2015-16 and FY 2016-17, Annual Performance Review for the FY 2019-20, Aggregate Revenue Requirement (ARR) and Retail Tariff for the FY 2020-21 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 31st December 2019. 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. A Public Hearing was also held on 12th and 13th February 2020, and all the Stakeholders/Electricity Consumers present in the Public Hearing were heard.

3) Ministry of Home Affairs (MHA), Govt. of India has imposed nationwide lockdown with certain exceptions in the entire country from 24th March 2020 onwards to contain Covid-19. The Commission acknowledges that the prevailing situation due to outbreak of Covid-19 has led to complete shutdown of a number of commercial, industrial and Institutional establishments. COVID-19 (Corona Virus) outbreak has posed an unprecedented and unconceivable situation which is causing wide spread concern and economic hardship for communities, businesses and consumers across the country. The delay in issuance of this Order is due to the above uncontrollable factor i.e. nationwide lockdown with effect from March 24, 2020 due to the pandemic COVID 19.

4) The Commission also recognises the fact that the lockdown announced in the country will certainly have impact on sales of Industrial and Commercial consumers, thereby impacting the computation of ARR. Even after the lockdown restrictions are lifted in entirety, it is going to take some time before the economic situation stabilises. Therefore, at this point of time it will not be possible to factor the impact of lockdown on sales and components of ARR for FY 2020-21 with desired accuracy and efficacy.

5) The Commission, vide its Order dated April 10, 2020 in SUO MOTU PETITION NO. JERC/LEGAL/SMP/27/2020 issued certain Directions to mitigate the hardship of Electricity consumers

and DISCOMS/EDs in view of nationwide lockdown due to COVID-19. The Commission, in the said Order, ruled that the additional expenses that are likely to be incurred by the Distribution Licensees on compliance with the directions issued in the said Order, will be taken into account while evaluating the APR of FY 2020-21.

6) The Commission is issuing this Order considering the "Business as Usual" scenario on the basis of the Petition submitted by the Lakshadweep Electricity Department after detailed analysis of submissions made by the Petitioner for FY 2020-21 and without factoring the impact of lockdown. The Commission will duly consider the impact of lockdown on sales and ARR of the Petitioner for FY 2020-21 at the time of evaluating APR of FY 2020-21 and thereafter True-up of FY 2020-21.

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

8) The Commission based on the Petitioner's submission, relevant MYT Regulations, facts of the matter and after proper due diligence and prudence check has approved the True-up of FY 2015-16 and FY 2016-17, APR of FY 2019-20 and ARR along with Retail Tariff for the FY 2020-21.

9) A Summary has been provided as follows:

(a) The following table provides ARR, Revenue and gap as submitted by the Petitioner and approved by the Commission in the True-up of FY 2015-16:

Table 1: Standalone Revenue Gap/ (Surplus) approved for FY 2015-16 (INR Crore)

S. No	Particulars	Petitioner's Submission	Approved by Commission
1	Net Revenue Requirement	106.63	105.35
2	Revenue from Retail Sales at Existing Tariff	16.74	16.74
	Net Gap /(Surplus)	**89.89**	**88.61**

(b) The following table provides ARR, Revenue and gap as submitted by the Petitioner and approved by the Commission in the True-up of FY 2016-17:

Table 2: Standalone Revenue Gap/ (Surplus) approved for FY 2016-17 (INR Crore)

S. No	Particulars	Petitioner's Submission	Approved by Commission
1	Net Revenue Requirement	115.83	115.60
2	Revenue from Retail Sales at Existing Tariff	19.51	19.51
	Net Gap /(Surplus)	**96.32**	**96.09**

(c) The following table provides ARR, Revenue and gap as submitted by the Petitioner and approved by the Commission in the APR of FY 2019-20:

Table 3: Standalone Revenue Gap/ (Surplus) approved for FY 2019-20 (INR Crore)

S. No	Particulars	Petitioners submission	Approved by Commission
1	Net Revenue Requirement	148.52	135.13
2	Revenue from Retail Sales at Existing Tariff	24.58	23.71
	Net Gap /(Surplus)	**123.94**	**111.42**

(d) The following table provides ARR, Revenue and gap as submitted by the Petitioner and approved by the Commission for FY 2020-21:

Table 4: Standalone Revenue Gap/ (Surplus) approved for FY 2020-21 (INR Crore)

S. No	Particulars	Petitioners submission	Approved by Commission
1	Net Revenue Requirement	164.12	146.48
2	Revenue from Retail Sales at Approved Tariff	25.68	25.01
	Net Gap /(Surplus)	**138.44**	**121.47**

(e) The Petitioner has proposed a hike of 10% in the energy charges and the remaining revenue gap shall be met through the budgetary support.

(f) However, the Commission has not approved any hike in the existing tariff for FY 2020-21.

(g) The Commission has approved the average revenue for FY 2020-21 as INR 4.76/kWh as against the approved Average Cost of Supply of INR 27.88/kWh.

(h) In order to promote the use of Electric Vehicles (E.V.), the Commission has introduced a single-part tariff for E.V. Charging Stations where the Fixed Charges have been removed and the Energy Charges have been rationalised based on ABR.

(i) The limit on monthly energy consumption for Lifeline Connection has been increased to 100 units/month and beyond it, the entire consumption for such consumers shall be charged at Domestic tariff.

(j) This Order shall come into force with effect from 1st June, 2020 and shall, unless amended or revoked, continue to be in force till further orders of the Commission. As the tariff is being implemented with effect from 1st June, 2020 instead of 1st April, 2020, the Commission will duly consider the impact of under recovery of ARR for FY 2020-21 at the time of evaluating APR of FY 2020-21 and thereafter True-up of FY 2020-21.

10) 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.

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

-Sd-

(M.K. Goel)

Chairperson

Place: Gurugram
Date: 18th May 2020

(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.

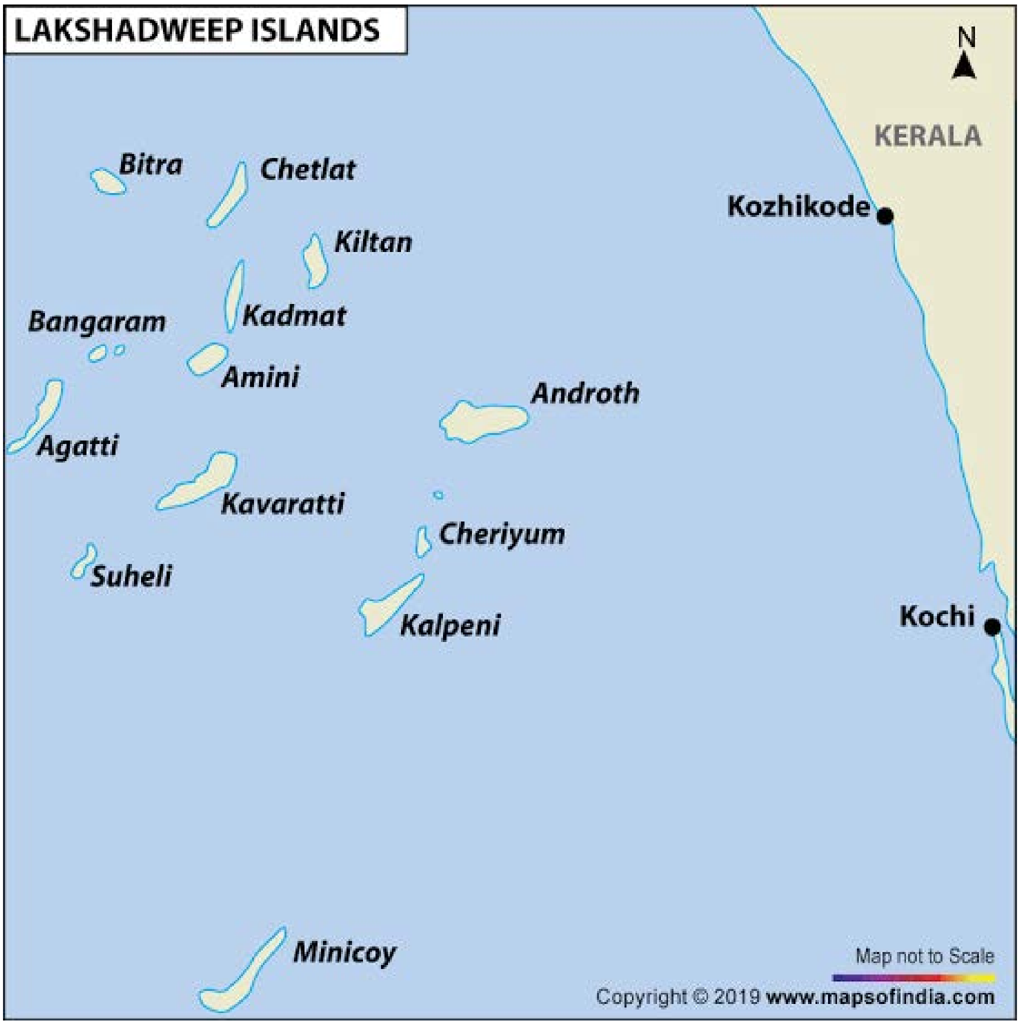
JERC is a statutory body responsible for regulation of the Power Sector in the State of Goa and the Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry, consisting of generation, transmission, distribution, trading and use of electricity. 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, along with one Assistant Executive Engineer, ten Assistant Engineers and around thirty-three Junior Engineers for carrying out the task of power generation, transmission & distribution to the general public including schemes under renewable energy sources.

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 2018-19)

S. No.	Particulars	Details
1	Total Installed Capacity	23.39 MW
1(a)	Diesel Generation	21.24 MW
1 (b)	Solar Generation	2.15 MW
2	No. of Power Houses	22 Nos (11 Nos of Diesel power plant, 11 Nos of solar power plant)
3	HT Line	111.95 kms
4	LT Line	321.86 kms
5	Distribution Transformer	106 Nos.
6	No. of consumers	24,303
7	Units Sold	48.90 MUs
8	T&D Loss	13.03%

1.4. Terms and Conditions for Determination of Tariff Regulations, 2009

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Terms and Conditions for Determination of Tariff) Regulations, 2009 (hereinafter referred to as Tariff Regulations, 2009) on February 9, 2010. These Regulations are applicable to all the generation companies, transmission and distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry.

1.5. Multi Year Distribution Tariff Regulations, 2014

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi-Year Distribution Tariff) Regulations, 2014 (hereinafter referred to as MYT Regulations, 2014) on June 30, 2014 applicable for a three-year Control period starting from FY 2015-16 till FY 2017-18. The

Commission subsequently notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi-Year Distribution Tariff) (First Amendment) Regulations, 2015 on August 10, 2015 shifting the MYT Control Period to FY 2016-17 to FY 2018-19. These Regulations are applicable to all the distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry.

1.6. 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, Daman & Diu, Dadra & Nagar Haveli and Puducherry.

1.7. Filing and Admission of the Present Petition

The present Petition was admitted on December 31, 2019 and marked as Petition No. 24/2019. The Commission and the Petitioner subsequently uploaded the Petition on their respective websites.

1.8. Interaction with the Petitioner

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

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

Table 6: List of interactions with the Petitioner

S. No	Subject	Date
1	Issue of First Discrepancy Note	09.12.2019
2	Public hearing	12.02.2020, 13.02.2020
3	Petitioner's reply to the Stakeholders' comments sought by the Commission	09.03.2020
4	Technical Validation Session	24.01.2020
5	Reply received from the Petitioner with regard to first discrepancy Note	24.12.2019
6	Issue of second Discrepancy Note	18.02.2020
7	Replies received from the Petitioner with regard to second Discrepancy note	21.02.2020

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 21, 2020	The Lakshadweep Times	English	Kavaratti, Kalpeni

In the absence of 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, time and venue.

The Petitioner uploaded the Petition on its website (http://lakpower.nic.in) for inviting objections and suggestions on the Petition. The Commission also uploaded the Tariff Petition and the Public Notice on its website www.jercuts.gov.in giving due intimation to stakeholders, consumers, objectors and the public at large about the Public Hearing to be conducted by the Commission on 12th February 2020 at Kalpeni and 13th February 2020 at Kavaratti.

1.10. Public Hearing

The Public Hearings were held on 12th February 2020 at Kalpeni, Lakshadweep, and on 13th February 2020 at Kavaratti, Lakshadweep to discuss the issues related to the Petition filed by the Petitioner. The list of the Stakeholders is attached as Annexure 1 to this Order. The major issues discussed, the responses of the Petitioner thereon and the views of the Commission, have been summarized in Chapter 2.

2. Chapter 2: Summary of Suggestions/ Comments received, Response from the Petitioner and the Commission's Views

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 MYT Regulations, 2014 and MYT Regulations, 2018.

The Public Hearings were held on February 12, 2020 at Seminar Hall, Department of Agriculture, Kalpeni and on February 13, 2020 at Seminar Hall, Office of the Village Dweep Panchayat, Kavaratti on the Petition for the True-up of the FY 2015-16 and FY 2016-17, APR of the FY 2019-20, Aggregate Revenue Requirement (ARR) and Tariff for the FY 2020-21. During the Public Hearing, a few of the 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. Increase in tariff for Government Connections

Stakeholders' Comments

Stakeholder submitted that supply to Government departments form a major part of energy sales. Given the amenities such as AC etc. in the Government departments and its irresponsible usage results in wastage of energy, hence requests the Commission to increase the tariff for Government department thereby not burdening the domestic and commercial consumers.

Petitioner's Response

It is submitting that at the proposed tariff only 17.15% of the ARR shall be recovered. The Revenue Gap of 82.85% is proposed to be funded through the budgetary support from the Lakshadweep Administration. The department is undertaking energy conservation & awareness campaigns to create the habit of conserving energy.

Commission's View

The Commission would like to clarify that the tariffs of the government connections are already on the higher side. However, the Commission has noted the submission of all the stakeholders. The Commission has discussed the principles adopted for approving the Tariff in Chapter 7 of the Tariff Order.

2.2.2. Feasibility study for alternate source of energy

Stakeholders' Comments

Stakeholder suggested to undertake a feasibility study for alternate source of energy in order to bring down the Power Purchase cost. Currently, most of the power requirement is met through Diesel Generation resulting in higher power purchase cost owing to rising Diesel Prices.

Petitioner's Response

The department is exploring alternative sources of energy, especially Solar to reduce the diesel-based energy generation.

Commission's View

The Commission appreciates the suggestion of the stakeholders, however, the generation of power from tidal energy is at nascent stage and is going through technological advancement and hence, the cost of power generation from tidal energy will be higher. The Central Government has decided to replace all the existing diesel generating stations with solar PV power plants which will lead to reduction in cost of generation and the benefit of which shall be passed onto the consumers. The Petitioner is also directed to encourage consumers to install solar rooftop wherever feasible.

2.2.3. Reduction in Domestic & Commercial tariffs

Stakeholders' Comments

Stakeholder requested the Hon'ble Commission to consider the socio-economic and financial conditions and employment status of the people of Lakshadweep while deciding the tariffs for the Domestic and Commercial category and requested to reduce the tariffs for Domestic and Commercial consumers. Further, the stakeholder requested to provide at least 50 units of free electricity in line with the Delhi Government's proposal to provide 200 units of free electricity.

Petitioner's Response

The department has submitted the category wise tariff proposal considering the ARR & current tariffs along with the justification for tariff hike. As submitted earlier, only 17.15% of ARR shall be recovered at the proposed tariff. Hon'ble Commission may kindly consider the submissions while deciding the tariff for the FY 2020-21.

Commission's View

The Commission has noted the submission of all the stakeholders. The Commission has increased the energy consumption limit for lifeline consumers up to 100 units per month @ INR 1.00/kWh. The Commission has discussed the principles adopted for approving the Tariff in Chapter 7 of the Tariff Order.

2.2.4. Renewable generation through PPP model

Stakeholders' Comments

Stakeholder requested the Hon'ble Commission to direct the Petitioner to commission more of the renewable power plants instead of Diesel generation plants, considering the higher cost of Diesel generation. Further, the stakeholder requested to explore the PPP model for renewable generation, which shall increase the competition and hence, bring down the overall cost of supply.

Petitioner's Response

The department is exploring alternative energy sources, especially Solar to reduce the diesel-based energy generation.

Commission's View

The Commission appreciates the suggestion of the stakeholders and directs the Petitioner to explore solar installation through PPP model, thereby reducing the power purchase cost.

2.2.5. Shifting of Powerhouse

Stakeholders' Comments

Stakeholder in Kalpeni requested the Hon'ble Commission to direct the Petitioner to shift the powerhouse to some other place as pollutants are being discharged from it in nearby areas causing inconvenience to the local people.

Petitioner's Response

The Petitioner has submitted that they have already initiated the process to shift the powerhouse, and the application for identification of land has already been submitted to the local administrator. Since, the working labour strength in Kalpeni is too low, the work shall be completed in around 5 years.

Commission's View

The Commission has noted the concerns of the stakeholders and suggests the Petitioner to complete the shifting of powerhouse as soon as possible.

2.2.6. New Category for people engaging in small business

Stakeholders' Comments

The Stakeholder requested the Hon'ble Commission to introduce new category for people engaging in small business such as poultry, carpentry etc. with tariffs higher than the domestic category and lower than the commercial category

Petitioner's Response

It is submitted that the Hon'ble Commission may decide on the issue based on the cost of supply & revenue projections submitted in the petition. The Commission would like to clarify that the consumption of small business consumes less energy and falls in first slab having lower tariffs.

Commission's View

The Commission has noted the submission of all the stakeholders. The Commission has discussed the principles adopted for approving the Tariff in Chapter 8 of the Tariff Order. The Commission would like to highlight that small businesses consume less energy and shall fall in first slab having lower tariffs.

2.2.7. Meter shifting charges within same premises

Stakeholders' Comments

The Stakeholder requested the Hon'ble Commission to allow shifting of meter within the same premises without any meter shifting charges. Currently, they are being charged INR 1000.00 for the same.

Petitioner's Response

The Hon'ble Commission may decide on the matter in view of the charges as applicable in other utilities across India.

Commission's View

The Commission has noted the submission of all the stakeholders. The Commission has reduced the meter shifting charges for same premises as discussed in Chapter 8 of the Tariff Order

2.2.8. Reduction in fixed charges for industrial category

Stakeholders' Comments

The Stakeholder requested the Hon'ble Commission to reduce the fixed charges for the industrial category as they are forced to pay fixed charges even when the powerhouse is unavailable or under maintenance, thus resulting in frequent power cuts.

Petitioner's Response:

Fixed charges have been proposed to recover the minimum fixed expenses to operate the activities for supply of electricity. The tariff proposed is much below the cost of supply and the revenue gap is funded through budgetary support from the Lakshadweep Administration. In view of the above, it is requested that the Hon'ble Commission may kindly approve the fixed charges as proposed.

Commission's View

The Commission has noted the submission of the stakeholders and the Petitioner. The Commission has discussed the principles adopted for approving the Tariff in Chapter 7 of the Tariff Order

2.2.9. Application for new connections

Stakeholders' Comments

The Stakeholder requested the Hon'ble Commission to allow an application for new connections without the ownership certificate for the premises.

Petitioner's Response:

It is submitted that the Hon'ble Commission may decide the same in accordance with the applicable Regulations.

Commission's View

The issue has already been addressed in the Joint Electricity Regulatory Commission for the State of Goa and UTs (Electricity Supply Code) Regulations, 2018 notified by the Commission. The Commission directed the Petitioner to widely publicize the salient features of new Supply Code 2018 which provide ease in taking new connections.

2.2.10. Safety Issues

Stakeholders' Comments

The Stakeholder requested the Hon'ble Commission to direct the Petitioner to keep safety of the general public as their prime responsibility. In past, there has been instances where uninsulated live wires were left open and low-quality wires has been used resulting in short circuits and fires.

Petitioner's Response:

The department shall take all efforts to ensure safety.

Commission's View

The Commission appreciates the suggestion of the stakeholders and directs the Petitioner to ensure safety at all times while working in an open environment. Appropriate PPE is to be made available to all the staff.

2.2.11. Reduction in T&D losses

Stakeholders' Comments

T&D loss percentage remained at 13% during the control period. It is the loss of energy from the total generation and could be more than 15% thus showing upward trend. It is requested to the commission to direct the Petitioner to decrease the T&D loss and justify the actions taken for the same.

Petitioner's Response:

The Department is taking all efforts to reduce the T&D loss and meet the loss reduction target determined by the Hon'ble Commission.

Commission's View

The Commission has set the T&D loss trajectory for the control period, thereby encouraging the Petitioner to share 50% of the efficiency gains by achieving the loss targets. Further, the Petitioner shall bear the entire loss if T&D loss targets are not achieved.

2.2.12. Poor Management of Diesel

Stakeholders' Comments

The stakeholder has pointed that most of the capital expenditure has been done for the procurement of DG sets and augmentation of existing Diesel plants, and the Petitioner has not made any efforts in enhancing the renewable capacity which shall bring down the ARR as the cost of diesel forms almost 80% of the ARR. Further, the Petitioner has claimed the cost of fuel more than as approved by the Commission in the MYT order which may be attributed to unscientific diesel management including poor measurement techniques and lots of spillage and transition losses. The Commission is requested to not allow such hikes in fuel prices when Petitioner is not managing the Diesel properly.

Petitioner's Response:

It is submitted that the department is making efforts to develop renewable capacity. LED is managing fuel efficiently and shall maintain the SFC approved by the Hon'ble Commission.

Commission's View

The Commission appreciates the suggestion of the stakeholders and directs the Petitioner to manage the Diesel in an efficient manner considering the cost of Diesel as the major component in the ARR.

2.2.13. Higher Repair& Maintenance expenses

Stakeholders' Comments

The stakeholder has pointed that the repair & maintenance cost in the past 4-5 years has been range of INR 12-15 crores and has been consistently higher than the approved R&M expenses. The Petitioner has undertaken most of the capital expenditure for purchase of new DG sets or augmentation of existing capacity, but still is unable to reduce the R&M expenses from the existing levels. The stakeholder has requested the Commission to not allow the hike in R&M expenses when the Petitioner doesn't show any fiscal prudence.

Petitioner's Response:

The Department has proposed the R&M expenses for the FY 2020-21 based on the actuals for the past years and estimated R&M expenditures for the FY 2019-20. The Hon'ble Commission may kindly consider the geographical and topographical constraints of the department while deciding on the same.

Commission's View

The Commission has approved the R&M expenses for second control period as per the terms and conditions of MYT Regulations, 2018.

2.2.14. Higher Employee expenses

Stakeholders' Comments

The stakeholder has pointed that the Petitioner has enough employees, but still has engaged around 103 labourers from outside. The technically qualified employees are not utilised for the repair & maintenance and outside agencies have been hired to perform the task. The stakeholder has requested the Commission to not allow the hike in Employee expenses when the Petitioner has idle employees.

Petitioner's Response:

It is submitted that the operations of the Department are spread across 10 islands which requires adequate number of manpower to provide reliable power supply. The Hon'ble Commission may kindly consider the geographical and topographical constraints of the department while deciding on the same.

Commission's View

The Commission has approved the Employee expenses for second control period as per the terms and conditions of MYT Regulations, 2018 after applying prudence check.

3. Chapter 3: True-up of FY 2015-16

3.1. Background

The Tariff Order on Aggregate Revenue Requirement (ARR) for FY 2015-16 was issued on April 17, 2015 (hereinafter referred to as the "ARR Order"). However, the Annual Performance Review (APR) for FY 2015-16 was not taken-up by the Commission as the Petitioner did not propose the review of FY 2015-16 along with the tariff petition for determination of ARR for FY 2016-17.

The Commission, now, in this Chapter carries out the True-up of FY 2015-16 in accordance with the principles laid down in the Tariff Regulations, 2009. The True up for the FY 2015-16 has to be carried out in accordance with Regulation 8 of the Tariff Regulations, 2009, which states as following:

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

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

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

(4) While approving such expenses/revenues 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/revenues. 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 necessary 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 change of consumer mix and additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such change of consumer mix and additional supply of power.

(7) The Commission may consider granting approval to such proposals provided the cost of additional supply is ordinarily met by the beneficiary category."

3.2. Approach for True-up for FY 2015-16

The Petitioner has requested for True-up of FY 2015-16 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 2015-16.

The Commission has analysed various elements of the actual revenue and expenses for the FY 2015-16 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, 2009 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 2015-16 as 50.66 MU as against an approved energy sales quantum of 50.31 MU in the ARR Order.

Commission's Analysis

The Commission has verified the category wise sales from the annual audited accounts and has found it to be in line with the Petitioner's submission. The following table provides the energy sales approved by the Commission in the ARR of FY 2015-16, the Petitioner's submission and quantum of energy sales now trued-up by the Commission.

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

S. No	Category	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Domestic	36.39	34.09	34.09
2	Commercial	12.28	15.17	15.17
3	Industrial	0.47	0.65	0.65
4	Public Lighting	1.12	0.61	0.61
5	Temporary	0.05	0.13	0.13
	Total	**50.31**	**50.65**	**50.65**

The Commission approves 50.65 MU as energy sales in the True-up of the FY 2015-16.

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)

Sr. No	Islands	Solar Generation	Diesel Generation	Total Generation
1	Minicoy	0.05	9.01	9.06
2	Kavaratti	0.57	13.07	13.64
3	Amini	-	5.89	5.89
4	Androth	0.21	8.13	8.35
5	Kalpeni	-	4.27	4.27
6	Agatti	0.07	7.23	7.30
7	Kadmat	0.16	5.32	5.48
8	Kiltan	-	3.02	3.02
9	Chetlat	-	1.90	1.90
10	Bitra	-	0.30	0.30
11	Bangram	-	0.08	0.08
12	**Grand Total**	**1.06**	**58.23**	**59.29**

The Petitioner has claimed a fuel cost of Rs 64.32 crore against Rs 77.16 crore as approved by the Commission in the Tariff Order dated April 17, 2015.

Commission's analysis

As per Regulation 18 of the Tariff Regulations, 2009 stipulates the following:

"18. Variation in Power Purchase Cost

Any power purchased by the licensee over and above the requirement of power approved by the Commission shall be considered by the Commission and if the variations are for reasons beyond the reasonable control of the licensee, the resultant additional cost due to purchase of such power shall be adjusted in next years' ARR"

The Commission has observed that the Petitioner has claimed the fuel cost as per the annual audited accounts of FY 2015-16 in regard to the Diesel generation only. Accordingly, the Commission approves the following power purchase quantum and cost for True-up of FY 2015-16:

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

Sr. No	Source	Quantum (MU)	Cost (INR Crore)
1	Diesel Generation	58.23	64.32
2	Solar Generation	1.06	0.00
3	**Grand Total**	**59.29**	**64.32**

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 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 59.29 MU and cost of INR 64.32 Crore in the True-up of the FY 2015-16.

3.5. Renewable Purchase Obligation (RPO)

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

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

In the 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***."**

The RPO at the time of approval of ARR for FY 2015-16 was 3.30%. However, the target was revised to 3.55% for FY 2015-16 as per the "The Joint Electricity Regulatory Commission for State of Goa & Union Territories (Procurement of Renewable Energy) First Amendment Regulations, 2014".

For the FY 2015-16, the Petitioner had a standalone target of 1.80 MU comprising of 0.43 MU Solar and 1.37 MU Non-Solar. Against the compliance target, the Petitioner has only been able to procure 1.06 MU of solar power, thereby resulting into a shortfall of 0.74 MU in achieving overall RPO target.

Based on the above, the Commission has computed the standalone RPO compliance for FY 2015-16 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	50.65
2.	RPO Obligation (in %)	3.55%
a)	Solar	0.85%
b)	Non-Solar	2.70%
3.	RPO Obligation	1.80
a)	Solar	0.43
b)	Non-Solar	1.37
4.	RPO Compliance (Actual Purchase)	1.06
a)	Solar	1.06
b)	Non-Solar	0.00
5.	RPO Compliance (REC Certificate Purchase)	0.00
6.	Total RPO Compliance	1.06
7.	**Shortfall/ (Surplus) in RPO Compliance**	**0.74**

The Commission notes that there is a net shortfall in RPO compliance for FY 2015-16 (0.74 MU) and cumulative shortfall of 0.74 MU till FY 2015-16. The same shall be dealt in accordance with the JERC (Procurement of Renewable Energy) Regulations, 2010 in addition to the penalty liable to be imposed by the Commission under Section 142 of the Act.

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

Petitioner's submission

The Petitioner has submitted that it has achieved an Intra-State T&D loss of 13.53% in FY 2015-16 against target of 13.57% in FY 2015-16.

Commission's analysis

As per Regulation 15 of the Tariff Regulations, 2009:

"*15. AT& C Losses*

1. *The licensee shall give information of total AT&C losses in Previous Year and Current Year and the basis on which such losses have been worked out.*
2. *The licensee shall also propose a loss reduction programme for the Ensuing Year as well as for the next three years giving details of the measures proposed to be taken for achieving the same.*
3. *Based on the information furnished and field studies carried out and the loss reduction program proposed by the licensee, the Commission shall fix separate targets for reduction of Transmission and Distribution losses and for commercial efficiency for the period specified by the Commission:*
4. *Provided further that in the event of unbundling of the integrated utility, the Commission may fix separate transmission and distribution loss targets and commercial efficiency targets, as the case may be, for each successor licensee taking into account its area of operation, its consumer mix, state of the network, level of metering, metering initiatives planned, etc.*
5. *The licensee shall conduct regular energy audit to substantiate its estimation of T&D losses. The licensee shall also furnish six monthly energy audit reports to the Commission.*

6. *The energy audit report for the first six months of the year shall be provided by November end of the same year. Similarly, energy audit report for the last six months of the year shall be provided by May end of the next year.*
7. ***In the absence of energy audit, the Commission may not accept the claim of the licensee and may proceed to fix the loss levels on the basis of any other information available and its own judgment**."*

For the purpose of True-up, the Commission has considered net generation/purchase as submitted by the Petitioner. Considering actual sales of 50.65 MU and actual generation of 59.29 MU as approved above, actual T&D loss comes to 14.57%. The table below provides the Intra-State T&D loss approved in the ARR of FY 2015-16, Petitioner's submission and as approved by the Commission now:

Table 12: Intra-State Transmission & distribution loss (%)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	T&D Losses (%)	13.75%	13.53%	14.57%

The Commission has considered the actual Intra-State T&D loss of 14.57% for the true-up of FY 2015-16.

3.7. Energy Balance

Petitioner's submission

The Petitioner has submitted the energy balance as shown in the following table.

Table 13: Energy Balance (MU) as submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within UT	50.66
2	Transmission & Distribution Losses (%)	13.53%
3	T&D Losses (MU)	7.92
	Total Energy Requirement (for sale to retail consumers)	**58.58**
B	**Energy Availability at Periphery**	
1	Power Purchase	0.00
2	Own Generation	58.58
	Total Energy Availability	58.58
9	**Energy Surplus/(Gap)**	**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 2015-16 is derived. The following table provides the energy balance approved in the ARR of the FY 2015-16, the Petitioner's submission and now trued-up by the Commission.

Table 14: Energy Balance (MU) approved by Commission

S. No	Particulars	Formula	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**				

S. No	Particulars	Formula	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Total Sales within the State/UT	a	50.31	50.65	50.65
	Transmission & Distribution losses				
2	%	b	13.75%	13.53%	14.57%
3	MU	c=d-a	8.02	7.93	8.64
	Energy required at UT Periphery	d=a/(1-b)	58.33	58.58	59.29
B	**Energy Available at Periphery**				
1	Own Generation	e	58.33	58.58	59.29
C	**Shortfall/(Surplus)**	**f = d-e**	**0.00**	**0.00**	**0.00**

3.8. Operation & Maintenance (O&M) Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). Regulation 27 of the Tariff Regulation, 2009 states the following:

"27(3) O&M expenses for distribution functions shall be determined by the Commission as follows:

(a) O&M expenses as approved by the Commission for the first time for a year shall be considered as base O&M expenses for determination of O&M expenses for subsequent years;

(b) Base O&M expenses as above shall be adjusted according to variation in the rate of WPI per annum to determine the O&M expenses for subsequent year, where WPI is the Wholesale Price Index on April 1 of the relevant year;

(c) In case of unbundling of the Electricity Department and formation of separate distribution companies, the Commission will make suitable assessment of base O&M expenses of individual distribution companies separately and allow O&M expenses for subsequent years for individual companies on the basis of such estimation and above principle.

(4) O&M expenses of assets taken on lease/hire-purchase and those created out of the consumers' contribution shall be considered in case the generating company or the licensee has the responsibility for its operation and

maintenance and bear O&M expenses.

(5) O&M expenses for gross fixed assets added during the year shall be considered from the date of commissioning on pro-rata basis.

(6) O&M expenses for integrated utility shall be determined by the Commission on the norms and principles indicated above."

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 claimed the employee expenses of INR 10.51 Crore as per the annual audited accounts of FY 2015-16. The Commission had approved the employee expenses of INR 11.20 Crore in the tariff order of FY 2015-16.

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 in the present petition viz-a-viz the audited accounts. The Commission observes that the Petitioner has wrongly classified following employee expenses towards the Repair and Maintenance (R&M) expenses:

Table 15: Employee expenses wrongly classified as R&M expenses

S. No	Particulars	Value (INR crore)
1	Wages & Gratuity of Labor (O&M)	3.61
2	Wages and Gratuities of Labor (Distribution)	3.60

The following table provides the employee expenses approved in the ARR Order, submission of the Petitioner and now trued-up by the Commission.

Table 16: Employee Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Total Employee Expenses	11.20	10.51	17.72

The Commission approves the Employee Expenses of INR 17.72 Crore in the True-up of the FY 2015-16.

3.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has claimed an A&G expenses of INR 3.04 Crore as against the approved expenses of INR 1.09 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 observes that the Petitioner has wrongly classified following A&G expenses towards the Repair and Maintenance (R&M) expenses:

Table 17: A&G expenses wrongly classified as R&M expenses

S. No	Particulars	Value (INR crore)
1	Conveyance and Misc. expenses	4.17
2	Freight charges and shipping bills	0.17

The following table provides the A&G expenses approved in the ARR Order, submission of the Petitioner and now trued-up by the Commission

Table 18: A&G Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Total A&G Expenses	1.09	3.04	7.39

The Commission approves the Administrative & General (A&G) expenses of INR 7.39 Crore in the True-up of FY 2015-16.

3.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has incurred R&M expenses of INR 14.68 Crore against the approved expenses of INR 2.47 Crore in the ARR 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 observes that the Petitioner has wrongly classified part of A&G expenses and employee expenses towards the Repair and Maintenance (R&M) expenses as discussed above. 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 19: R&M Expenses approved by Commission (In INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	**Repair & Maintenance Expenses (R&M)**	**2.47**	**14.68**	**3.13**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 3.13 Crore in the True-up of FY 2015-16.

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

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

Table 20: O&M Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Employee Expenses	11.20	10.51	17.72
2	Administrative & General Expenses (A&G)	1.09	3.04	7.39
3	Repair & Maintenance Expenses	2.47	14.68	3.13
	Total Operation & Maintenance Expenses	**14.76**	**28.23**	**28.23**

The Commission approves the Operation & Maintenance (O&M) Expenses of INR 28.23 Crore in the True-up of FY 2015-16.

3.9. Capitalisation

Petitioner's submission

The Petitioner submitted the actual capitalisation for the FY 2015-16 as INR 10.85 Crore against an approved capitalization of INR 13.95 Crore in the ARR of FY 2015-16.

Commission's analysis

The Commission has analysed the addition in gross fixed assets as per annual audited accounts and Fixed Asset Register and found the same in line with the Petitioner's claim. The table below provides the capitalisation approved in the ARR Order, the Petitioner's submission and the capitalisation approved by the Commission now:

Table 21: Capitalisation approved by the Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Capitalisation	13.95	10.85	10.85

The Commission approves the Capitalisation of INR 10.85 Crore in the True-up of FY 2015-16.

3.10. Capital Structure

Petitioner's Submission

The Petitioner has submitted that the majority of capital assets have been created out of equity infusion from the Lakshadweep Administration.

Commission's analysis

The Tariff Regulations, 2009 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 23 of the Tariff Regulations, states the following:

"(1) For the purpose of determination of tariff, debt-equity ratio in case of existing, ongoing as well as new projects commencing after the date of notification of these Regulations shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff:

Provided that the Commission may, in appropriate cases, consider equity higher than 30% for the purpose of determination of tariff, where the generating company or the licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of the general public: .

(2) The debt and equity amounts arrived at in accordance with sub-regulation (1) above shall be used for all purposes including for determining interest on loan, return on equity, Advance against Depreciation and Foreign Exchange Rate Variation.:

Provided that in the case of an Integrated Utility, till the time it remains Integrated Utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948"

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.

The Commission has considered the approved value of closing GFA for FY 2014-15 as the opening GFA for FY 2015-16. Accordingly, the Commission has determined the Capital Structure for FY 2015-16 as follows:

Table 22: GFA addition approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Gross Fixed Assets	73.52	145.45	145.45
2	Addition During the FY	13.95	10.85	10.85
3	Adjustment/Retirement During the FY	-	-	0.00
4	Closing Gross Fixed Assets	87.47	156.30	156.30

Table 23: Normative Loan addition approved by Commission (INR crore)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	41.80	22.07	22.07
2	Add: Normative Loan During the year	9.77	7.60	7.60
3	Less: Normative Repayment equivalent to Depreciation	4.60	5.96	5.37
4	Closing Normative Loan	46.96	23.71	24.30

Table 24: Normative Equity addition approved by Commission (INR Crore)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	22.06	43.64	43.64
2	Additions on account of new capitalisation	4.19	3.26	3.26
3	Closing Equity	26.24	46.89	46.89

3.11. Depreciation

Petitioner's submission

The Petitioner has submitted the actual depreciation of assets as per the audited annual accounts and fixed asset register of FY 2015-16. The depreciation as claimed by the Petitioner has been tabulated below:

Table 25: Depreciation submitted by Petitioner (INR Crore)

S. No	Particulars	Petitioner's Submission
1	Opening Gross Fixed Assets	145.45
2	Addition During the FY	10.85
3	Adjustment/Retirement During the FY	-
4	Closing Gross Fixed Assets	156.30
5	Average Gross Fixed Assets	150.88
6	Weighted Average Depreciation rate (%)	3.95%
	Depreciation	**5.96**

Commission's analysis

As per Regulation 26 of the Tariff Regulations 2009,

*"**26. Depreciation***

(1) For the purpose of tariff, depreciation shall be computed in the following manner:

(i) The value base for the purpose of depreciation shall be the historical cost of the assets, that is actual expenses limited to approved capital cost where such capital cost has been approved by the Commission:

Provided that land is not a depreciable asset and its cost shall be excluded from the capital cost while computing depreciation.

(ii) The historical cost of the asset shall include additional capitalization.

(iii) The historical cost shall include foreign currency funding converted into equivalent rupees at the exchange rate prevalent on the date when foreign currency was actually availed but not later than the date of commercial operation.

(iv) Depreciation for generation and transmission assets shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation specified by the Central Electricity Regulatory Commission from time to time.

Provided that the total depreciation during the life of the asset shall not exceed 90% of the original cost.

Depreciation for distribution and other assets not covered by CERC shall be as per Government of India norms of 1994 as may be revised by the Commission from time to time."

As per the norms specified in the Tariff Regulations, 2009 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 and as per Government of India norms of 1994 provided in the table below:

Table 26: Depreciation Rate (%)

Description	Rate
Plant & Machinery	4.66%
Buildings	3.15%
Furniture & Fixtures	1.56%
Land	0.00%
Vehicles	0.02%
Computers	4.66%

The Petitioner as part of this Petition has submitted the Fixed Asset Register (FAR) for FY 2015-16 which specifies the value of assets that have achieved 90% depreciation as of FY 2015-16. As the Tariff Regulations, 2009 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 2015-16 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 2015-16:

Table 27: Calculation of revised GFA (INR Crore)

Description	Opening GFA as per audited accounts	Less: Assets depreciated upto 90% till FY 2014-15	Revised Opening GFA	Addition/ Deletion during the year	Closing GFA	Depreciation Rate	Depreciation
Plant & Machinery	106.38	13.64	92.75	8.63	101.38	4.66%	4.52
Buildings	20.70	1.12	19.59	2.22	21.80	3.15%	0.65
Furniture & Fixtures	0.62	0.47	0.14	-	0.14	1.56%	0.00
Land	12.93	-	12.93	-	12.93	0.00%	-
Vehicles	0.76	-	0.76		0.76	0.02%	0.00
Computers	4.06	-	4.06		4.06	4.66%	0.19
Total	**145.45**	**15.23**	**130.22**	**10.85**	**141.07**		**5.37**

Therefore, it can be deduced that the depreciation rate as average of opening and closing GFA for FY 2015-16 is 3.56%. The following table provides the calculation of depreciation during the year FY 2015-16:

Table 28: Depreciation approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Gross Fixed Assets	73.52	145.45	145.45
2	Addition during FY	13.95	10.85	10.85
3	Adjustment/Retirement during FY	-	-	0.00
4	Closing Gross Fixed Assets	87.47	156.30	156.30
5	Average Gross Fixed Assets	80.50	150.88	150.88
6	Rate of Depreciation (%)	5.72%	3.95%	3.56%
7	**Depreciation**	**4.60**	**5.96**	**5.37**

The Commission approves depreciation of INR 5.37 Cr in the true-up of FY 2015-16.

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 2015-16 is considered as the closing balance of loans for FY 2014-15 as approved by the Commission in the true-up Order of FY 2014-15. The normative loan addition in FY 2015-16 has been computed as 70% of the actual capitalisation for FY 2015-16. Further, the Petitioner has also claimed certain expenses pertaining to the bank charges, finance costs etc. in addition to the Interest on Loan.

The repayment of loans has been considered equal to the depreciation during the FY 2015-16.

Further, the rate of interest has been considered as the State Bank of India Prime Lending Rate (SBI PLR) of 14.75% (rate as on 1st April 2015).

Commission's analysis

The Tariff Regulations, 2009 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 2 of the Tariff Regulations, states the following:

"25. Interest and Finance Charges on Loan

(1) For existing loan capital, interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreements.

(2) Interest and finance charges on loan capital for new investments shall be computed on the loans, duly taking into account the rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall, however, be restricted to the prevailing Prime Lending Rate of the State Bank of India.

(3) The interest rate on the amount of equity above 30% treated as loan shall be the weighted average rate of interest on loan capital of the generating company / licensee :

Provided that interest and finance charges of renegotiated loan agreements shall not be considered, if they result in higher charges:

Provided further that interest and finance charges on works in progress shall be excluded and shall be considered as part of the capital cost.

(4) Interest charges on security deposits, if any, made by the consumers with a generating company/licensee, shall be equivalent to the bank rate or at the rate , if any, specified by the Commission whichever is higher.

(5) In case any moratorium period is availed of, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

(6) The Commission shall allow obligatory taxes on interest, commitment charges, finance charges and any exchange rate difference arising from foreign currency borrowings, as finance cost.

(7) Any saving in costs on account of subsequent restructuring of debt shall be passed on to the consumers."

As per the Tariff Regulations 2009, 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 @ 14.75%, as on April 01, 2015. Further, in accordance with the Tariff Regulations 2009, the interest has been calculated on the average loan during the year with the opening loan considered equivalent to the opening loan approved in the ARR of FY 2015-16. The addition of loan has been considered as explained above and the repayment is considered same as per accrued depreciation during the year. Additionally, the Commission also allows expenditure towards financing charges as per actuals as reflected in the annual accounts.

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

Table 29: Interest and Finance charges approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	41.80	22.07	22.07
2	Add: Normative Loan During the year	9.77	7.60	7.60
3	Less: Normative Repayment= Depreciation	4.60	5.96	5.37
4	Closing Normative Loan	46.96	23.71	24.30
5	Average Normative Loan	44.38	22.89	23.18
6	Rate of Interest (%)	14.75%	14.75%	14.75%
7	**Interest on Loan**	**6.55**	**3.38**	**3.42**

The Commission approves the Interest and Finance Charges of INR 3.42 Crore in the True-up of the FY 2015-16.

3.13. Return on Capital Base

Petitioner's submission

The Petitioner has claimed a Return on capital base of INR 3.02 Cr as against the approved amount of INR 2.10 crore in the ARR Order.

Commission's analysis

"23(2) The debt and equity amounts arrived at in accordance with sub-regulation (1) above shall be used for all purposes including for determining interest on loan, 14 return on equity, Advance against Depreciation and Foreign Exchange Rate Variation.:

Provided that in the case of an Integrated Utility, till the time it remains Integrated Utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948.

24(1) Subject to the proviso to Regulation 23(2), Return on Equity shall be computed on the paid up equity capital determined in accordance with Regulation 23 and shall be guided by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 as amended by the CERC from time to time. The same principles will apply for distribution business also as far as possible."

As per proviso of Regulation 23(2) and Regulation 24 of Tariff Regulations 2009, the Petitioner is presently functioning as an integrated utility and is entitled for return on capital base. The Commission finds it appropriate to approve the return on capital base on the basis of GFA and cumulative depreciation, as on April 1, 2015 as given in the Table below:

Table 30: Return on Capital Base approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Gross block at beginning of the year	73.52	145.45	145.45
2	Less accumulated depreciation	3.66	44.84	44.84
3	Net block at beginning of the year	69.86	100.61	100.61
4	Less accumulated consumer contribution	0.00	0.00	0.00
5	Net fixed assets at beginning of the year	69.86	100.61	100.61
6	Rate of Reasonable Return	3.00%	3.00%	3.00%
7	**Reasonable Return**	**2.10**	**3.02**	**3.02**

The Commission approves a Return on Equity of INR 3.02 Crore in the True-up of FY 2015-16

3.14. Interest on Security Deposits

Petitioner's submission

The Petitioner has claimed the interest on security deposits of INR 0.02 crore as against the approved interest on security deposits of INR 0.01 crore in the ARR order.

Commission's analysis

As per Regulation 6.10 (8) of the JERC for the State of Goa and UTs (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 0.42 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 0.02 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 2015-16.

Therefore, the Commission has not approved any interest on security deposits of the consumers in the True-up of FY 2015-16.

3.15. Interest on Working Capital

Petitioner's submission

Interest on Working Capital has been claimed in accordance with Regulation 29 of the Tariff Regulations 2009. The State Bank of India's Prime Lending Rate as on 1st April 2015 is considered for computation of interest on Working Capital in line with the Provisions of the Tariff Regulations, 2009. Accordingly, the Petitioner has claimed INR 2.57 crore towards interest on Working Capital as against the Commission approved value of INR 2.07 crore. The following table provides the approach followed by the Petitioner for determination of interest on working capital:

Table 31: Interest on Working Capital submitted by Petitioner (INR Crore)

S. No	Particulars	Petitioner's Submission
1	Fuel cost (2 months)	10.72
2	Employee cost (1 month)	0.88
3	Administration & General expenses (1 month)	1.22
4	Repairs & Maintenance Expenses (1 month)	0.25
5	Less: Average Security Deposit expected to be held during the year	0.29
6	Working Capital Requirement	12.78
7	Rate of interest	14.75%
8	**Interest on Working Capital**	**2.57**

Commission's analysis

As per Regulation 29 of the Tariff Regulations 2009 states the following:

"(3) Subject to prudence check, the working capital for integrated utility shall be the sum of one month requirement for meeting:

- *a. Power purchase cost*
- *b. Employees cost*
- *c. Administration & general expenses*
- *d. Repair & Maintenance expenses.*
- *e. Sum of two month requirement for meeting Fuel cost.*

4) The rate of interest on working capital shall be equal to the short term Prime Lending Rate of 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 generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative Figures".

The Commission has determined the working capital in line with above norms. With regards to the interest rate, the Commission has considered the SBI Base rate as on 1st April 2016, as stipulated in the Tariff Regulations, 2009. Accordingly, the Interest on Working Capital has been calculated, as shown in the table below:

Table 32: Interest on Working Capital approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Fuel cost (2 months)	12.86	10.72	10.72
2	Employee cost (1 month)	0.93	0.88	1.48
3	Administration & General expenses (1 month)	0.21	1.22	0.62

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
4	Repairs & Maintenance Expenses (1 month)	0.09	0.25	0.26
5	Less: Average Security Deposit expected to be held during the year	0.09	0.29	0.29
6	Working Capital Requirement	14.00	12.78	12.78
7	Rate of interest	14.75%	14.75%	14.75%
8	**Interest on Working Capital**	**2.07**	**2.57**	**1.89**

The Commission approves the Interest on Working Capital as INR 1.89 crore in the True- up of FY 2015-16.

3.16. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner has not claimed any amount towards bad and doubtful debts for the year.

Commission's analysis

As per Regulation 28 of the Tariff Regulations, 2009:

"28. Bad and Doubtful Debts

The Commission may, after the generating company / licensee gets the receivables audited, allow a provision for bad debts up to 1% of receivables in the revenue requirement of the generating company / licensee."

It is observed that as per the audited accounts, the licensee has not written off any amount in the FY 2015-16. Therefore, the Commission does not approve any amount under the provision for bad and doubtful debts in the True- up of FY 2015-16.

3.17. Non-Tariff Income (NTI)

Petitioner's submission

The Petitioner has claimed a Non-Tariff Income of INR 0.89 Crore as against the approved NTI of INR 0.43 crore in the ARR 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 ARR Order, the Petitioner's submission and now trued-up by the Commission is shown in the following table:

Table 33: Non- Tariff Income approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	**Non-tariff Income**	**0.43**	**0.89**	**0.89**

The Commission approves Non-Tariff Income of INR 0.89 Crore in the True-up of FY 2015-16.

3.18. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the net aggregate revenue requirement of INR 105.92 Crore is submitted for approval in the True-up of FY 2015-16.

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 2015-16 as given in the following table:

Table 34: Aggregate Revenue Requirement approved by Commission for FY 2015-16 (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Fuel Cost	77.16	64.32	64.32
2	Cost of Power Purchase	0.00	0.00	0.00
3	Employee Expenses	11.20	10.51	17.72
4	Repair & Maintenance Expenses (R&M)	2.47	14.68	7.39
5	Administration & General Expenses (A&G)	1.09	3.04	3.13
6	Depreciation	4.60	5.96	5.37
7	Interest and Finance charges	6.55	3.38	3.42
8	Interest on Working Capital	2.07	2.57	1.89
9	Interest on Security Deposit	0.01	0.02	0.00
10	Return on Capital base	2.10	3.02	3.02
11	Provision for Bad Debt	0.00	0.00	0.00
12	**Total Revenue Requirement**	**107.24**	**107.52**	**106.24**
13	Less: Non-Tariff Income	0.43	0.89	0.89
14	**Net Revenue Requirement**	**106.81**	**106.63**	**105.35**

The Commission approves net Aggregate Revenue Requirement of INR 105.35 Crore in the True-up of the FY 2015-16.

3.19. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the net actual revenue for the FY 2015-16 as INR 16.74 Crore against revenue of INR 14.82 Crore approved by the Commission in the ARR Order.

Commission's 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 35: Revenue at existing tariff approved by Commission for FY 2015-16 (INR Crore)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Domestic	14.82	8.51	8.51
2	Commercial		7.06	7.06
3	Industrial		0.59	0.59

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
4	Public Lighting		0.28	0.28
5	Others Temporary Supply		0.29	0.29
6	**Total Revenue**	**14.82**	**16.74**	**16.74**

The Commission approves the revenue from sale of power as INR 16.74 Crore in the True-up of the FY 2015-16.

3.20. Standalone Revenue Gap/ Surplus

Petitioner's submission

Based on the ARR submitted and the revenue from retail tariff, the standalone revenue gap of INR 89.89 Crore is arrived at in the True-up of FY 2015-16.

Commission analysis

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

Table 36: Standalone Revenue Gap/ Surplus for FY 2015-16 (In INR Crore)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Net Revenue Requirement	106.81	106.63	105.35
2	Total Revenue	14.82	16.74	16.74
	Net Gap / (Surplus)	**91.99**	**89.89**	**88.61**

The Petitioner has not proposed to carry forward the gap of FY 2015-16 for recovery in FY 2020-21.

The Commission, in the True-up of FY 2015-16 approves a standalone gap of INR 88.61 Crore, to be met from the budgetary support by the Government.

4. Chapter 4: True-up of FY 2016-17

4.1. Background

Under the MYT regime, Order on Aggregate Revenue Requirement (ARR) for the 1st MYT Control Period (FY 2016-17 to FY 2018-19) and Retail Tariff for the FY 2016-17 was issued on March 31, 2016 (hereinafter referred to as the "MYT Order"). However, the Annual Performance Review (APR) for FY 2016-17 was not taken-up by the Commission as the Petitioner did not propose the review of FY 2016-17 along with the tariff petition for determination of ARR for FY 2017-18.

The Commission, now, in this Chapter carries out the True-up of FY 2016-17, being the first year of the Control Period in accordance with the principles laid down in the MYT Regulations, 2014. The True up for the FY 2016-17 has to be carried out in accordance to Regulation 8(2) of the MYT 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."

The True-up for FY 2016-17 was not carried along with the tariff determination of FY 2018-19, since the Petitioner had not submitted audited final accounts for the same. However, the Petitioner has now submitted its Audited Annual Accounts for FY 2016-17 duly audited by CAG of India. According to the Regulation 8(2) of the MYT Regulations, 2014 cited above the Truing-Up for any year is not ordinarily considered after more than one year of 'Review', but the Commission has considered Truing-up for FY 2016-17 so that the Tariff reflects a true picture in the subsequent years.

4.2. Approach for True-up for FY 2016-17

The Petitioner has requested for True-up of FY 2016-17 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 2016-17.

The Commission has analysed various elements of the actual revenue and expenses for the FY 2016-17 based on the audited accounts submitted by the Petitioner and has carried out the True-up exercise in in accordance with the principles laid down in the MYT 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 2016-17 as 50.13 MU as against an approved energy sales quantum of 54.54 MU in the MYT 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 2016-17, the Petitioner's submission and quantum of energy sales now trued-up by the Commission.

Table 37: Energy Sales (MU) trued-up by the Commission

S. No	Category	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Domestic	42.28	35.02	35.02
2	Commercial	11.03	13.51	13.51
3	Industrial	0.42	0.83	0.83
4	Public Lighting	0.81	0.62	0.62
5	Temporary	-	0.14	0.14
	Total	**54.54**	**50.13**	**50.13**

The Commission approves 50.13 MU as energy sales in the True-up of the FY 2016-17.

4.4. 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 38: Island wise power generation (MU)

Sr. No	Islands	Solar Generation	Diesel Generation	Total Generation
1	Minicoy	0.13	8.79	8.92
2	Kavaratti	0.70	12.82	13.52
3	Amini	-	5.81	5.81

Sr. No	Islands	Solar Generation	Diesel Generation	Total Generation
4	Androth	0.26	8.23	8.49
5	Kalpeni	0.08	4.05	4.13
6	Agatti	0.10	7.55	7.65
7	Kadmat	0.27	4.55	4.82
8	Kiltan	0.04	3.11	3.15
9	Chetlat	-	1.59	1.59
10	Bitra	-	0.27	0.27
11	Bangram	-	0.11	0.11
12	**Grand Total**	**1.59**	**56.88**	**58.47**

The Petitioner has claimed a fuel cost of Rs 68.40 crore against Rs 71.68 crore as approved by the Commission in the Tariff Order dated March 31, 2016.

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 2016-17 in regard to the Diesel generation. Accordingly, the Commission approves the following power purchase quantum and cost for True-up of FY 2016-17:

Table 39: Power Purchase cost and Quantum as approved by the Commission

Sr. No	Source	Quantum (MU)	Cost (INR Crore)
1	Diesel Generation	56.88	68.40
2	Solar Generation	1.59	0.00
3	**Grand Total**	**58.47**	**68.40**

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 58.47 MU and cost of INR 68.40 Crore in the True-up of the FY 2016-17.

4.5. Renewable Purchase Obligation (RPO)

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 4.85% of its total consumption (including 3.20% from Solar) from renewable sources for the FY 2016-17.

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 2016-17, the Petitioner had a standalone target of 2.43 MU comprising of 0.83 MU Solar and 1.60 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 1.25 MU in achieving overall RPO target.

Based on the above, the Commission has computed the standalone RPO compliance for FY 2016-17 as shown in the following table:

Table 40: Compliance status of Renewable Purchase Obligation (RPO) (In MU)

Sr. No.	Particulars	Value
1.	Sales Within the State	50.13
2.	RPO Obligation (in %)	4.85%
a)	Solar	1.65%
b)	Non-Solar	3.20%
3.	RPO Obligation	2.43
a)	Solar	0.83
b)	Non-Solar	1.60
4.	RPO Compliance (Actual Purchase)	1.59
a)	Solar	1.59
b)	Non-Solar	0.00
5.	RPO Compliance (REC Certificate Purchase)	0.00
6.	Total RPO Compliance	1.59
7.	**Shortfall/ (Surplus) in RPO Compliance**	**0.84**
7.	Cumulative Shortfall in RPO compliance till last year	0.74
7.	**Shortfall/ (Surplus) in RPO Compliance**	**1.58**

The Commission notes that there is a net shortfall in RPO compliance for FY 2016-17 (0.84 MU) and cumulative shortfall of 1.58 MU till FY 2016-17 to be complied in later years.

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

Petitioner's submission

The Petitioner has submitted that it has achieved an Intra-State T&D loss of 13.31% in the FY 2016-17 against target of 13.25% in FY 2016-17.

Commission's analysis

The Petitioner has not submitted the energy Audit report for FY 2016-17. 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 50.13 MU and actual generation of 58.47 MU as approved above, actual T&D loss comes to 14.26%.

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 2016-17, Petitioner's submission and as approved by the Commission now.

Table 41: Intra-State T&D loss (%)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	T&D Losses (%)	13.25%	13.31%	14.26%

The Commission, while truing up for FY 2016-17, has considered the actual Intra-State T&D loss of 14.26% for the FY 2016-17.

4.7. Energy Balance

Petitioner's submission

The Petitioner has submitted the energy balance as shown in the following table.

Table 42: Energy Balance (MU) as submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within UT	50.13
2	Transmission & Distribution Losses (%)	13.31%
3	T&D Losses (MU)	7.70
	Total Energy Requirement (for sale to retail consumers)	**57.83**
B	**Energy Availability at Periphery**	
1	Power Purchase	0.00
2	Own Generation	57.83
	Total Energy Availability	57.83
9	**Energy Surplus/(Gap)**	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 2016-17 is derived. The following table provides the energy balance approved in the ARR of the FY 2016, the Petitioner's submission and now trued-up by the Commission.

Table 43: Energy Balance (MU) approved by Commission

S. No	Particulars	Formula	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**				
1	Total Sales within the State/UT	a	54.54	50.13	50.13
	Transmission & Distribution losses				
2	%	b	13.25%	13.31%	14.26%
3	MU	c=d-a	8.33	7.70	8.34
	Energy required at UT Periphery	d=a/(1-b)	62.87	57.83	58.47
B	**Energy Available at Periphery**				
1	**Power Purchase**	e	1.65		
2	Own Generation	f	61.22	57.83	58.47
	Total Energy Availability	g=e+f	62.87	57.83	58.47
C	**Shortfall/(Surplus)**	**h= d-g**	**0.00**	**0.00**	**0.00**

4.8. Operation & Maintenance (O&M) 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 13.13 Cr against the approved expenses of INR12.70 Crore in the ARR of FY 2016-17.

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 following employee expenses towards the Repair and Maintenance (R&M) expenses:

Table 44: Employee expenses wrongly classified as R&M expenses

S. No	Particulars	Value (INR crore)
1	Wages & Gratuity of Labor (O&M)	3.41
2	Wages and Gratuities of Labor (Distribution)	3.41

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 45: Employee Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	**Total Employee Expenses**	**12.70**	**13.13**	**19.94**

The Commission approves the Employee Expenses of INR 19.94 Crore in the True-up of the FY 2016-17.

4.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has incurred A&G expenses of INR 4.09 Crore against the approved expenses of INR 1.73 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 observes that the Petitioner has wrongly classified following A&G expenses towards the Repair and Maintenance (R&M) expenses:

Table 46: A&G expenses wrongly classified as R&M expenses

S. No	Particulars	Value (INR crore)
1	Conveyance and Misc. expenses	3.95
2	Freight charges and shipping bills	0.16

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 47: A&G Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	**Total A&G Expenses**	**1.73**	**4.09**	**8.20**

The Commission approves the Administrative & General (A&G) expenses of INR 8.20 Crore in the True-up of FY 2016-17.

4.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has incurred R&M expenses of INR 13.88 Crore against the approved expenses of INR 3.76 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 observes that the Petitioner has wrongly classified part of A&G expenses and employee expenses towards the Repair and Maintenance (R&M) expenses as discussed above. 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 48: R&M Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	**Repair & Maintenance Expenses (R&M)**	**3.76**	**13.88**	**2.96**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 2.96 Crore in the True-up of FY 2016-17

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 49: 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	12.70	13.13	19.94
2	Administrative & General Expenses (A&G)	1.73	4.09	8.20
3	Repair & Maintenance Expenses	3.76	13.88	2.96

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
	Total Operation & Maintenance Expenses	**18.19**	**31.10**	**31.10**

The Commission approves the Operation & Maintenance (O&M) Expenses of INR 31.10 Crore in the True-up of FY 2016-17.

4.9. Capitalisation

Petitioner's submission

The Petitioner submitted the actual capitalisation for the FY 2016-17 as INR 6.00 Crore against an approved capitalization of INR 17.70 Crore in the ARR of FY 2016-17.

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 50: Capitalisation approved by the Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Capitalisation	17.70	6.00	6.00

The Commission approves the Capitalisation of INR 6.00 Crore in the True-up of FY 2016-17.

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 2016-17 as follows:

Table 51: GFA addition approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Opening Gross Fixed Assets	87.47	156.30	156.30
2	Addition During the FY	17.70	6.00	6.00
3	Adjustment/Retirement During the FY	0.00-	0.00	0.00
4	Closing Gross Fixed Assets	105.17	162.30	162.30

Table 52: Normative Loan addition approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	46.97	23.71	24.30
2	Add: Normative Loan During the year	12.39	4.20	4.20
3	Less: Normative Repayment equivalent to Depreciation	5.44	6.28	6.85*
4	Closing Normative Loan	53.92	21.63	22.00

**Depreciation has been calculated in the next section*

Table 53: Normative Equity addition approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	26.24	46.89	46.89
2	Additions on account of new capitalisation	5.31	1.80	1.80
3	Closing Equity	31.55	48.69	48.69

4.11. Depreciation

Petitioner's submission

The Petitioner has submitted the actual depreciation of assets as per the audited annual accounts of FY 2016-17. The depreciation as claimed by the Petitioner has been tabulated below:

Table 54: Depreciation submitted by Petitioner (INR Crore)

S. No	Particulars	Petitioner's Submission
1	Opening Gross Fixed Assets	156.30
2	Addition During the FY	6.00
3	Adjustment/Retirement During the FY	0.00
4	Closing Gross Fixed Assets	162.30
5	Average Gross Fixed Assets	159.30
6	Weighted Average Depreciation rate (%)	3.94%
	Depreciation	**6.28**

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 55: Depreciation Rate (%)

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

The Petitioner as part of this Petition has submitted the Fixed Asset Register (FAR) for FY 2016-17 which specifies the value of assets that have achieved 90% depreciation as of FY 2016-17. 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 2016-17 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 2016-17:

Table 56: Calculation of revised GFA (INR Crore)

Description	Opening GFA as per audited accounts	Less: Assets depreciated upto 90% till FY 2015-16	Revised Opening GFA	Addition/ Deletion during the year	Closing GFA	Depreciation Rate	Depreciation
Plant & Machinery	115.02	15.21	99.81	5.88	105.68	5.28%	5.42
Buildings	22.92	1.12	21.80	0.09	21.89	3.34%	0.73
Furniture & Fixtures	0.62	0.47	0.14	0.03	0.18	6.33%	0.01
Land	12.93	-	12.93	-	12.93	0.00%	-
Vehicles	0.76	-	0.76	-	0.76	9.50%	0.07
Computers	4.06	-	4.06	-	4.06	15.00%	0.61

Description	Opening GFA as per audited accounts	Less: Assets depreciated upto 90% till FY 2015-16	Revised Opening GFA	Addition/ Deletion during the year	Closing GFA	Depreciation Rate	Depreciation
Total	**156.30**	**16.80**	**139.50**	**6.00**	**145.50**		**6.85**

Therefore, it can be deduced that the depreciation rate as average of opening and closing GFA for FY 2016-17 is 4.08%. The following table provides the calculation of depreciation during the year FY 2016-17:

Table 57: Depreciation approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Gross Fixed Assets	87.47	156.30	156.30
2	Addition during FY	17.70	6.00	6.00
3	Adjustment/Retirement during FY	-	0.00	0.00
4	Closing Gross Fixed Assets	105.17	162.30	162.30
5	Average Gross Fixed Assets	96.32	159.30	159.30
6	Rate of Depreciation (%)	5.65%	3.94%	4.30%
7	**Depreciation**	**5.44**	**6.28**	**6.85**

The Commission approves depreciation of INR 6.85 Crore in the true-up of FY 2016-17

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 2016-17 is considered as the closing value of balance of loans for FY 2015-16. The normative loan addition in FY 2016-17 has been computed as 70% of the actual capitalisation for FY 2016-17.

The repayment of loans has been considered equal to the depreciation during the FY 2016-17.

Further, the rate of interest has been considered as the State Bank of India Prime Lending Rate (SBI PLR) of 14.05% (rate as on 1st April 2016).

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 @ 14.05%, as on 1st April 2016. 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 2015-16. 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 58: Interest and Finance charges approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	46.97	23.71	24.30
2	Add: Normative Loan During the year	12.39	4.20	4.20
3	Less: Normative Repayment= Depreciation	5.44	6.28	6.85
4	Closing Normative Loan	53.92	21.63	21.65
5	Average Normative Loan	50.44	22.67	22.98
6	Rate of Interest (%)	14.05%	14.05%	14.05%

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
7	**Interest on Loan**	**7.09**	**3.18**	**3.23**

The Commission approves the Interest and Finance Charges of INR 3.23 Crore in the True-up of the FY 2016-17

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 2016-17 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 59: RoE approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	26.24	46.89	46.89
2	Additions on account of new capitalisation	5.31	1.80	1.80
3	Closing Equity	31.55	48.69	48.69
4	Average Equity	28.90	47.79	47.79
5	Return on Equity (%)	16.00%	16.00%	16.00%
	Return on Equity	**4.62**	**7.65**	**7.65**

The Commission approves a Return on Equity of INR 7.65 Crore in the True-up of FY 2016-17

4.14. Interest on Security Deposits

Petitioner's submission

The Petitioner has claimed an Interest on the Consumer Security Deposits of INR 0.03 crore as against the approved value of INR 0.10 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 0.17 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 0.03 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 2016-17.

Therefore, the Commission has not approved any interest on security deposits of the consumers in the True-up of FY 2016-17.

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 60: Interest on Working Capital submitted by Petitioner (INR Crore)

S. No	Particulars	Petitioner's Submission
1	Receivables of two months of billing	11.40
2	Less: Power Purchase Cost for one month	0.00
3	Inventory Based on Annual Requirement for Previous FY for 2 months	0.00
4	Less: Security Deposit excluding BG/FDR	0.64
5	Total Working Capital Requirement	10.76
6	Rate of Interest (%)	9.30%
	Interest on Working Capital	**1.00**

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 2016-17.

With regards to the interest rate, the Commission has considered the SBI Base rate as on 1st April 2016, as stipulated in the MYT Regulations, 2014. Accordingly, the Interest on Working Capital has been calculated, as shown in the table below:

Table 61: Interest on Working Capital approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Receivables of two months of billing	11.95	11.40	11.40
2	Less: Power Purchase Cost for one month	6.11	0.00	0.00
3	Less: Security Deposit excluding BG/FDR	0.12	0.64	0.64
4	Add: Inventory Based on Annual Requirement for Previous FY for 2 months	0.00	0.00	0.00
5	Total Working Capital Requirement	5.72	10.76	10.76
6	Rate of Interest (%)	9.30%	9.30%	9.30%
	Interest on Working Capital	**0.53**	**1.00**	**1.00**

The Commission approves the Interest on Working Capital as INR 1.00 crore in the True- up of FY 2016-17.

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 2016-17. Therefore, the Commission does not approve any amount under the provision for bad and doubtful debts.

4.17. Non-Tariff Income (NTI)

Petitioner's submission

The Petitioner has claimed a Non-Tariff Income (NTI) of INR 1.83 crore as against the approved value of INR 0.53 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 62: Non- Tariff Income approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Non-Tariff Income	0.43	1.83	1.83

The Commission approves Non-Tariff Income of INR 1.83 Crore in the True-up of FY 2016-17.

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 2016-17, the Commission had approved the distribution loss level of 13.25%. As discussed earlier, the Petitioner has only been able to achieve an Intra-State T&D Loss of 14.26%. 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 2016-17.

"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 13.25% by the Petitioner, at the Average Power Purchase cost (APPC) of Rs. 11.70/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 (50.13 MU) with the approved Intra-State T&D Loss (14.26%).

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

Table 63: Disincentive towards underachievement of Intra-State distribution loss (INR Crore)

S. No	Particulars	As per Approved Intra-State T&D Loss	Trued-up by Commission
1	Retail Sales	50.13	50.13
2	T&D Loss (%)	13.25%	14.26%
3	Power Purchase at State/UT Periphery	57.79	58.47
4	Gain/(Loss) (MU)		-0.68
5	Average Power Purchase Cost (APPC)		11.70
6	Gain/ (Loss) (INR Crore)		-0.80
	Sharing (30% to LED in case of gain and 100% in case of loss) (INR Crore)		-0.80

The Commission approves INR 0.80 Crore as disincentive for under-achieving the Intra-State distribution loss target for FY 2016-17.

4.19. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the net aggregate revenue requirement of INR 115.83 Crore is submitted for approval in the True-up of FY 2016-17.

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 2016-17 as given in the following table:

Table 64: Aggregate Revenue Requirement approved by Commission for FY 2016-17 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Power Purchase Cost	1.60	0.00	0.00
2	Fuel Cost	71.68	68.40	68.40
3	Employee Expenses	12.70	13.13	19.94
4	Administration & General Expenses (A&G)	1.73	4.09	8.20
5	Repair & Maintenance Expenses (R&M)	3.76	13.88	2.96
6	Depreciation	5.44	6.28	6.85

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
7	Interest and Finance charges	7.09	3.18	3.23
8	Interest on Working Capital	0.53	1.00	1.00
9	Interest on Security Deposit	0.01	0.03	0.00
10	Return on Equity	4.62	7.65	7.65
11	Incentive/ (Disincentive)on achievement of norms	-	0.00	(0.80)
12	**Total Revenue Requirement**	**109.16**	**117.66**	**117.43**
13	Less: Non-Tariff Income	0.43	1.83	1.83
14	**Net Revenue Requirement**	**108.73**	**115.83**	**115.60**

The Commission approves net Aggregate Revenue Requirement of INR 115.60 Crore in the True-up of the FY 2016-17.

4.20. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the net actual revenue for the FY 2016-17 as INR 19.51 Crore against revenue of INR 27.82 Crore approved by the Commission in the ARR Order.

Commission's 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 65: Revenue at existing tariff approved by Commission for FY 2016-17 (INR Crore)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Domestic	18.56	9.65	9.65
2	Commercial	8.44	8.42	8.42
3	Industrial	0.28	0.78	0.78
4	HT Industrial	0.15		
5	Public Lighting	0.39	0.30	0.30
6	Others Temporary Supply	0.00	0.36	0.36
7	**Total Revenue**	**27.82**	**19.51**	**19.51**

The Commission approves the revenue from sale of power as INR 19.51 Crore in the True-up of the FY 2016-17.

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 96.32 Crore is arrived at in the True-up of FY 2016-17.

Commission analysis

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

Table 66: Standalone Revenue Gap/ Surplus for FY 2016-17 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Trued-up by Commission
1	Net Revenue Requirement	108.73	115.83	115.60
2	Total Revenue	27.82	19.51	19.51
	Net Gap / (Surplus)	**80.91**	**96.32**	**96.09**

The Commission, in the True-up of FY 2016-17 approves a standalone gap of INR 96.09 Crore, to be met from the budgetary support by the Government.

5. Chapter 5: Annual Performance Review of FY 2019-20

5.1. Background

The Tariff Order for the FY 2019-20 was issued by the Commission on May 20, 2019 approving the ARR for the 2nd MYT Control Period and Retail Tariff for the FY 2019-20. This Chapter covers the Annual Performance Review (APR) of the FY 2019-20 vis-à-vis the cost parameters approved by the Commission in the Tariff Order the 2nd MYT Control Period. The Annual Performance Review for the FY 2019-20 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.

5.2. Approach for Review for the FY 2019-20

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 2019-20 has been done based on the actual data as provided by the Petitioner for the FY 2019-20 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 of FY 2019-20.

5.3. Energy Sales, Connected Load and Number of Consumers

Petitioner's Submission

The Petitioner has submitted a revised estimate of energy sales as 51.36 MU for the FY 2019-20, based on the actual energy sales of FY 2018-19 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 119635 kW and 25240 respectively for FY 2019-20.

Commission's Analysis

The Commission has considered the actual category wise sales data, connected load and number of consumers as submitted by the Petitioner for initial six months of FY 2019-20 for calculating the category wise sales, connected load and number of consumers respectively for FY 2019-20. Hence, the Commission has computed the sales data for FY 2019-20 from the actual category wise sales figure of initial six month for FY 2019-20 by linear extrapolation as shown in table below:

Table 67: Sales projected for FY 2019-20 (MU)

S. No.	Category	Actual Sales Apr'19 – Sept'19	Projected Sales for FY 2019-20
1	Domestic	18.59	37.18
2	Commercial	1.53	3.06
3	Govt. Connection	3.78	7.56
4	Industrial	0.17	0.34
5	HT Consumers	0.47	0.94
6	Public Lighting	0.40	0.80
7	Temporary Connection	0.06	0.12
10	**Total Sales**	**24.99**	**50.00**

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

Table 68: Energy Sales (MU) approved for FY 2019-20 by the Commission

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	40.1	38.01	37.18
2	Commercial	3.24	3.28	3.06
3	Govt. Connection	8.26	8.13	7.56
4	Industrial	0.45	0.39	0.34
5	HT Consumers	0.64	0.76	0.94
6	Public Lighting	0.67	0.68	0.80
7	Temporary Connection	0.09	0.11	0.12
8	**Total Sales**	**53.45**	**51.36**	**50.00**

The Commission has considered the category wise number of consumers for FY 2019-20 as per the number of consumers in initial six months of FY 2019-20 as shown in table below:

Table 69: Number of Consumers projected for FY 2019-20 (MU)

S. No.	Category	Actual Consumers Apr'19 – Sept'19	Projected Number of Consumers for FY 2019-20
1	Domestic	19810	19810
2	Commercial	2888	2888
3	Govt. Connection	1185	1185
4	Industrial	347	347
5	HT Consumers	7	7
6	Public Lighting	75	75
7	Temporary Connection	193	193
10	**Total Consumers**	**24,505**	**24,505**

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

Table 70: Number of Consumers approved for FY 2019-20 by the Commission

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	21294	20449	19810
2	Commercial	2626	2892	2888
3	Govt. Connection	1284	1210	1185
4	Industrial	381	361	347
5	HT Consumers	7	7	7
6	Public Lighting	78	76	75
7	Temporary Connection	160	246	193
8	**Total Consumers**	**25,830**	**25,240**	**24,505**

Similarly, the Commission has considered the category wise connected load for FY 2019-20 as per the connected load for initial six months of FY 2019-20 as shown in table below:

Table 71: Connected Load projected for FY 2019-20 (kW)

S. No.	Category	Actual Connected Load Apr'19 – Sept'19	Projected Connected Load for FY 2019-20
1	Domestic	88819	88819

S. No.	Category	Actual Connected Load Apr'19 – Sept'19	Projected Connected Load for FY 2019-20
2	Commercial	16299	16299
3	Govt. Connection	8183	8183
4	Industrial	3813	3813
5	HT Consumers	645	645
6	Public Lighting	308	308
7	Temporary Connection	201	201
10	**Total Connected Load**	**118269**	**118269**

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

Table 72: Connected Load approved by the Commission for FY 2019-20 (kW)

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	89754	89771	88819
2	Commercial	16916	16520	16299
3	Govt. Connection	8561	8370	8183
4	Industrial	4024	3944	3813
5	HT Consumers	608	562	645
6	Public Lighting	318	319	308
7	Temporary Connection	66	147	201
8	**Total Connected Load**	**120,247**	**119,633**	**118269**

The Commission approves energy sales of 50.00 MU, connected load of 118,269 kW and number of consumers as 24,505 in the APR of FY 2019-20.

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

Petitioner's submission

The Petitioner has proposed Intra-State T&D loss level at 12.75% against an approved loss of 12.75% in the MYT Order. Further, the Petitioner has submitted the actual T&D loss achieved for initial six months as 12.15%.

Commission's analysis

The Commission had approved loss level of 12.75% for FY 2019-20 in the MYT Order dated May 20, 2019 while determining ARR for the FY 2019-20. 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 2019-20 finds it appropriate to consider the loss level of 12.75% as approved in the MYT Order for FY 2019-20. The following table provides the Intra-State distribution loss approved in the MYT Order, the Petitioners submission and now approved by the Commission.

Table 73: Intra-State distribution loss (%)

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

The Commission approves Intra-State T&D loss of 12.24% in the APR of FY 2019-20.

5.5. Energy Balance

Petitioner's submission

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

Table 74: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	51.36
2	Distribution losses (%)	12.75%
	Distribution losses (MU)	7.50
3	**Energy Requirement @ periphery**	**58.86**
B	**Energy Availability**	
1	Renewable Generation	1.18
2	Diesel Generation	57.68
3	**Total Energy Availability**	**58.86**
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 2019-20, the Petitioner's submission and the Energy Balance now approved by the Commission.

Table 75: Energy Balance (MU) approved by Commission

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**			
1	Total Sales within the UT	53.45	51.36	50.00
2	Distribution losses (%)	12.75%	12.75%	12.75%
	Distribution losses (MU)	7.81	7.50	7.31
3	**Energy Requirement @ periphery**	**61.26**	**58.86**	**57.31**
B	**Energy Availability**			
1	Renewable Generation	3.95	1.18	1.18
2	Diesel Generation	57.31	57.68	56.12
3	**Total Energy Availability**	**61.26**	**58.86**	**57.31**
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**0.00**

In the APR of FY 2019-20, the Commission has estimated a shortfall/(surplus) quantum of 0.00 MU.

5.6. Power Purchase Quantum & Cost

Petitioner's submission

The Petitioner has submitted that the energy requirement of LED is met through its own generation with a mix of renewable and diesel generation as there is no availability of power from Central Generating Stations or from other sources/ open market/ power exchanges etc. Accordingly, the Petitioner has claimed the fuel cost of INR

89.27 crore (HSD Cost – INR 88.24 crore and Lube Cost – INR 1.04 crore) as against the approved cost of INR 80.68 crore (HSD Cost – INR 79.70 crore and Lube Cost – INR 0.98 crore) in the MYT 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 2019-20 as Diesel generation is the main source of power in Lakshadweep Islands and shall be available as per the consumers need. 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 76: Fuel Cost approved by the Commission for FY 2019-20

S. No.	Particulars	Petitioner's Submission	Commission's Analysis
1	Total Gross Generation (MUs)	59.28	57.31
2	Less: Solar Generation (MUs)	1.18	1.18
3	Total DG Generation (MUs) (1 - 2)	58.10	56.12
4	Specific HSD Consumption (ml per kWh) as approved in MYT Tariff order	266 .12	266 .12
5	Average Cost of HSD per litre from 01/04/2019 to 31/08/2019 (INR)	57.07	57.07
6	**Cost of HSD [(3 X 4/1000 X 5)/10] (INR crores)**	**88.24**	**85.23**
7	Specific Lube oil consumption (ml per kWh) as approved in MYT Tariff order	0.99	0.99
8	Average Cost of Lube Oil per litre from 01/04/2019 to 31/08/2019 (INR)	180	180
9	**Cost of Lube Oil [(3 X 7/1000 X 8)/10] (INR crores)**	**1.04**	**1.00**
10	**Total Fuel Cost (6+9) (INR crores)**	**89.28**	**86.23**

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

The Commission approves power purchase quantum of 57.31 MU and cost of INR 86.23 Crore in the APR of FY 2019-20.

5.7. 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 11.50% of its total consumption (including 4.70% from Solar) from renewable sources for the FY 2019-20.

For the FY 2019-20, the Commission approves the RPO target of 5.75 MU comprising of 2.35 MU Solar and 3.40 MU Non-Solar. Out of which, the Petitioner has only claimed to purchase the solar energy of around 1.18 MU, thereby resulting in a shortfall in RPO compliance. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2019-20:

Table 77: Cumulative RPO compliance till FY 2019-20

Particulars	FY 16	FY 17	FY 18	FY 19	FY 20
Solar Target	0.85%	1.65%	2.50%	3.60%	4.70%
Non-Solar Target	2.70%	3.20%	4.20%	5.40%	6.80%
Total Target	**3.55%**	**4.85%**	**6.70%**	**9.00%**	11.50%
Sales Within UT	50.65	50.13	48.50	48.91	50.00
RPO Target					
Solar	0.43	0.83	1.21	1.76	2.35
Non-Solar	1.37	1.60	2.04	2.64	3.40
Total RPO Target	**1.80**	**2.43**	**3.25**	**4.40**	**5.75**
RPO Compliance (Actual Purchase)					
Solar	1.06	1.59	1.79	1.18	1.18
Non-Solar	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance (Actual Purchase)	**1.06**	**1.59**	**1.79**	**1.18**	**1.18**
RPO Compliance (REC Certificate Purchase)					
Solar	0.00	0.00	0.00	0.00	0.00
Non-Solar	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance (REC Certificate)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
RPO Compliance (REC+ Actual)					
Solar	1.06	1.59	1.79	1.18	1.18
Non-Solar	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance	**1.06**	**1.59**	**1.79**	**1.18**	**1.18**
Net Shortfall/(Surplus) for this year	0.74	0.84	1.46	3.22	4.57
Cumulative Shortfall in RPO Compliance till current year	**0.74**	**1.58**	**3.04**	**6.26**	**10.83**

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

5.8. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). Regulation 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.

5.8.1. Employee Expenses

Petitioner's submission

The Petitioner has submitted employee expenses of INR 24.16 Crore against the approved expenses of INR 24.34 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 2019-20. The Petitioner has not proposed any growth in the number of employees for FY 2019-20. Thus, the approved employee expenses for FY 2018-19 has been escalated with the average CPI of previous three years and growth rate to arrive at the employee expenses for FY 2019-20.

The CPI Inflation has been computed as follows:

Table 78: Computation of CPI Inflation (%)

FY	Increase in CPI Index	Average increase in CPI Index over 3 years
2016-17	4.12%	**4.22%**
2017-18	3.08%	
2018-19	5.45%	

Table 79: Employee Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	EMPn-1 (INR Crore)	21.98	**24.16**	21.98
2	Gn (%)	6.10%		0.00%
3	CPIinflation (%)	4.34%		4.22%
4	**Employee Expenses**	**24.34**		**22.91**

The Commission now approves employee expenses of INR 22.91 Crore in the APR of the FY 2019-20.

5.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted a revised estimate of A&G expenses of INR 3.30 crore as against the approved value of INR 2.79 crore in MYT 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 2019-20. 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.

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

Table 80: A&G Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	A&Gn-1 (INR Crore)	2.67	3.30	2.67
2	CPIinflation (%)	4.34%		4.22%
3	Provision (INR Crore)	0.00		0.00
4	**Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)**	**2.79**		**2.78**

The Commission now approves the Administrative & General (A&G) expenses of INR 2.78 Crore in the APR of the FY 2019-20.

5.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has submitted a revised estimate of R&M expenses of INR 14.75 crore as against the approved value of INR 7.90 crore in MYT Order

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 2019-20. The resultant amount is then escalated by average WPI Inflation of previous three years to arrive at the R&M expenses for FY 2019-20.

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
2016-17	1.73%	**2.99%**
2017-18	2.92%	
2018-19	4.32%	

The R&M expenses as approved by the Commission for FY 2019-20 have been provided in the following table:

Table 82: R&M Expenses approved by Commission (INR Crore)

S. No	Particulars	FY 2019-20
1	Opening GFA (GFA_{n-1})	174.41
2	K factor approved (K) (%)	4.26%
3	Avg. WPI Inflation (%)	2.99%
4	**R&M Expenses = K x (GFA $_{n-1}$) x (1+WPI$_{inflation}$)**	**7.65**

Table 83: R&M Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	**Repair & Maintenance Expenses (R&M)**	**7.90**	**14.75**	**7.65**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 7.65 Crore in the APR of FY 2019-20.

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

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

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

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	24.34	24.16	22.91
2	Administrative & General Expenses (A&G)	2.79	3.30	2.78

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
3	Repair & Maintenance Expenses	7.90	14.75	7.65
	Total Operation & Maintenance Expenses	**35.03**	**42.21**	**33.34**

The Commission approves the Operation & Maintenance (O&M) Expenses of INR 33.34 Crore in the APR of FY 2019-20.

5.9. Capital Expenditure & Capitalisation

Petitioner's submission

The Petitioner has submitted revised capitalisation of INR 13.00 Crore as against the approved capitalisation of INR 10.00 Crore in the MYT Order.

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 (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Capitalisation	10	13	13

The Commission approves capitalisation of INR 13.00 Crore in the APR of FY 2019-20. The same shall be trued up at the time of True-up.

5.10. Capital Structure

Petitioner's Submission

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

Commission's analysis

Regulation 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 2019-20, the Commission has considered the closing value of GFA for FY 2016-17 as approved in previous sections and capitalisation for FY 2017-18 and FY 2018-19 as submitted by the Petitioner as shown in following table:

Table 86: Capitalisation for FY 2017-18 and FY 2018-19 as submitted by the Petitioner (INR Crore)

Particulars	FY 2017-18	FY 2018-19
Opening GFA	162.30	168.74
Additions during the FY	6.44	5.66
Adjustment/Retirement During the FY	-	0.00
Closing GFA	168.74	174.41

In accordance with the MYT Regulations, 2018, the Commission has determined the Capital Structure for FY 2019-20 as follows:

Table 87: GFA addition approved by Commission (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	184.74	174.41	174.41
2	Addition During the FY	10	1.37	13.00
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	194.74	175.78	187.41

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

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	63.86	16.73	15.64
2	Add: Normative Loan During the year	7.00	9.10	9.10
3	Less: Normative Repayment equivalent to Depreciation	7.36	7.02	5.69*
4	Closing Normative Loan	63.50	18.81	19.05

**Depreciation calculated in next section*

Table 89: Normative Equity addition approved by Commission (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	41.62	52.32	52.32
2	Additions on account of new capitalisation	3.00	3.90	3.90
3	Closing Equity	44.62	56.22	56.22

5.11. Depreciation

Petitioner's submission

The Petitioner has submitted the depreciation of INR 7.02 crore as per MYT Regulations 2018 as against the approved depreciation of INR 7.36 crores in MYT Order.

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: In the ARR Order, the Commission approved the following asset wise depreciation rate as per the CERC Tariff Regulations, 2014:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The Commission has derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in 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 overall depreciation rate is considered as the weighted average depreciation rate calculated based on the asset wise depreciation rates and asset classification as per the true-up of FY 2016-17. The opening and closing GFA has been considered as approved in the *Section 5.10: Capital Structure* of this Order. Further, depreciation has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during each year.

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

Table 91: Depreciation approved by Commission (In INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	184.74	174.41	174.41
2	Addition During the FY	10	13.00	13.00
3	Closing Gross Fixed Assets	194.74	187.41	187.41
4	Average Gross Fixed Assets	189.74	180.91	180.91
5	Weighted Average Depreciation rate (%)	3.88%	3.88%	3.15%
	Depreciation	**7.36**	**7.02**	**5.69**

The Commission now approves depreciation of INR 5.69 Crore in the APR of the FY 2019-20.

5.12. 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 2019-20. The Petitioner has submitted that the majority of capital assets are created out of the equity contribution from Lakshadweep Administration only. The rate of interest considered is SBI MCLR as on 1st April of that relevant year plus 100 basis points.

Commission's analysis

Regulation 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[1] plus 100 basis points as Rate of Interest, in accordance with the MYT Regulations, 2018.

[1] SBI 1 Year MCLR rate as on 10th March 2019

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.

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

Table 92: Interest and Finance Charges approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	63.86	16.73	15.64
2	Add: Normative Loan During the year	7.00	9.10	9.10
3	Less: Normative Repayment equivalent to Depreciation	7.36	7.02	5.69
4	Closing Normative Loan	63.50	18.81	19.05
5	Average Normative Loan	63.68	17.77	17.34
6	Rate of Interest (%)	9.15%	9.55%	9.55%
7	**Interest on Loan**	**5.83**	**1.70**	**1.66**

The Commission approves Interest and Finance Charges of INR 1.66 Crore in the APR of the FY 2019-20

5.13. 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 2018-19 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 2018-19 as derived in Section 5.10: 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 2019-20, the Petitioner's submission and RoE now approved by the Commission.

Table 93: RoE approved by Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	41.62	52.32	52.32
2	Additions on account of new capitalisation	3.00	3.90	3.90
3	Closing Equity	44.62	56.22	56.22
4	Average Equity	43.12	54.27	54.27
5	Rate of Return	16.00%	16.00%	16.00%
6	**Return on Equity**	**6.90**	**8.68**	**8.68**

The Commission approves the Return on Equity of INR 8.68 Crore in the APR of the FY 2019-20.

5.14. Interest on Security Deposits

Petitioner's submission

The Petitioner has claimed an Interest on consumer security of INR 0.05 crore in line with the Interest on consumer security as approved by the commission in the MYT 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 2017-18 and FY 2018-19 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 2019-20. 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 Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Security Deposit	0.68	0.68	0.68
2	Add: Deposits During the year	0.26	0.26	0.26
3	Less: Deposits refunded	0.00	0.00	0.00
4	Closing Security Deposit	0.94	0.94	0.94
5	Average Security Deposit	0.81	0.81	0.81
6	Rate of Interest (%)	6.25%	6.25%	6.25%
	Interest on Security Deposit (IoSD)	**0.05**	**0.05**	**0.05**

The Commission approves Interest on Security Deposit as INR 0.05 Crore in the APR of the FY 2019-20.

5.15. 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 10.55%.

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 2019-20 as determined above and the average consumer security deposit amount during the year for computing the Working Capital Requirement for the year. The inventory for two months has been considered on the same levels as per the audited annual accounts of FY 2016-17.

The Commission has considered the SBI Base rate as on 1st April 2019 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 Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	O&M Expense for 1 month	2.92	3.52	2.78
2	Maintenance spares at 40% of R&M expenses for one (1) month;	0.26	0.49	0.26
3	Receivables equivalent to two (2) months of the expected revenue at the prevailing tariff	3.99	4.10	3.95
4	Less: Amount held as security deposits	0.94	0.94	0.81
5	Net Working Capital	6.23	7.17	6.17
6	Rate of Interest (%)	10.15%	10.55%	10.55%
7	**Interest on Working Capital**	**0.63**	**0.76**	**0.65**

The Commission approves the Interest on Working Capital as INR 0.65 Crore in the APR of the FY 2019-20.

5.16. 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 2019-20.

5.17. Non-Tariff Income

Petitioner's submission

The Petitioner has submitted the Non-Tariff Income of INR 1.18 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 Commission (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
	Non-Tariff Income	**1.18**	**1.18**	**1.18**

The Commission approves Non-Tariff Income of INR 1.18 crore in the APR of FY 2019-20. The same shall be considered at actuals at the time of True-up of FY 2019-20.

5.18. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the Petitioner has submitted the net aggregate revenue requirement of INR 148.52 Crore after adjusting the Non -Tariff Income for FY 2019-20.

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 2019-20 as provided in the table below:

Table 97: Aggregate Revenue Requirement approved by the Commission for FY 2019-20 (INR Crore)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost	0.40	0.00	0.00
2	Fuel Cost	80.68	89.28	86.23
3	Employee Expenses	24.34	24.16	22.91
4	Administration & General Expenses (A&G)	2.79	3.30	2.78
5	Repair & Maintenance Expenses (R&M)	7.90	14.75	7.65
6	Depreciation	7.36	7.02	5.69
7	Interest and Finance charges	5.83	1.70	1.66
8	Interest on Working Capital	0.63	0.76	0.65
9	Return on Equity	6.90	8.68	8.68
10	Interest on Security Deposit	0.05	0.05	0.05
12	Income Tax	0.00	0.00	0.00
13	Total Revenue Requirement	**136.88**	**149.70**	**136.31**
14	Less: Non-Tariff Income	1.18	1.18	1.18
15	Net Revenue Requirement	**135.70**	**148.52**	**135.13**

The Commission now approves the net ARR of INR 135.13 crore in the APR of FY 2019-20.

5.19. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the revenue from the sale of power at existing tariff as INR 25.43 crore determined on the basis of energy sales in the territory for FY 2019-20.

Commission analysis

The category wise revenue at existing retail tariff is calculated as per the tariff rates applicable for FY 2018-19 for initial 2 months and as per tariff rates applicable for FY 2019-20 from June 2019 onwards as per tariff order dated May 20, 2019. 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 linked with connected load as projected load is in kW terms. The revenue from category tariff as computed by the Commission for the FY 2020-21 has been shown in the following table:

Table 98: Revenue at existing tariff computed by Commission (INR Crore)

S. No.	Category	Sales (MUs)	Apr'19 – May '19		Jun'19 – Mar'20		Total	ABR (INR/ unit)
			Revenue from Energy Charges	Revenue from Fixed charges	Revenue from Energy Charges	Revenue from Fixed charges		
1	Domestic	37.18	1.79	0.10	9.13	0.69	11.72	3.15
2	Commercial	3.06	0.41	0.01	2.20	0.09	2.71	8.86
3	Government Connections	7.56	1.12	0.01	6.05	0.07	7.25	9.60
4	Industrial	0.34	0.03	0.03	0.18	0.21	0.46	13.52
5	HT Industrial	0.94	0.14	0.01	0.72	0.11	0.98	10.41
6	Public Lighting	0.80	0.07	0.00	0.40	0.02	0.49	6.14
7	Temporary	0.12	0.02	0.00	0.07	0.00	0.09	7.74
	TOTAL	**50.00**	**3.58**	**0.17**	**18.76**	**1.19**	**23.71**	**4.74**

The Commission has determined revenue from the sale of power at existing tariff as INR 23.71 Crore in the APR of FY 2019-20.

5.20. Standalone Revenue Gap/Surplus

Petitioner's submission

Based on the ARR and the revenue from Retail tariff, the standalone revenue gap of INR 123.93 Crore is arrived at in the APR of FY 2019-20.

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 ARR Order	Petitioner's Submission	Now Approved by Commission
1	Net Revenue Requirement	135.70	148.52	135.13
2	Revenue from Retail Sales at Existing Tariff	25.43	24.58	23.71
	Net Gap /(Surplus)	**110.30**	**123.94**	**111.42**

The Commission approves the standalone gap at INR 111.42 Crore in the APR of FY 2019-20.

6. Chapter 6: Determination of Aggregate Revenue Requirement for the FY 2020-21

6.1. Background

In this Chapter, the Commission has determined the Aggregate Revenue Requirement (ARR) for the FY 2020-21. The determination of Aggregate Revenue Requirement has been done in accordance with the MYT Regulations, 2018.

6.2. Approach for determination of ARR for each year of the FY 2020-21

The Commission has computed the individual elements constituting the Aggregate Revenue Requirement for each year based on figures approved in the Business Plan Order dated December 21, 2018, the actual available information of various parameters for the FY 2016-17, FY 2017-18, FY 2018-19 and the first half of FY 2019-20.

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

Petitioner's Submission

The Petitioner has revised the number of consumers, connected load and energy sales considering the actual figures of FY 2018-19 and the CAGR for various categories as approved by the Commission in the Business Plan Order.

Table 100: Number of consumers, Connected Load, and Energy Sales submitted by the Petitioner for the FY 2020-21

S. No.	Particulars	No. of Consumers	Connected Load	Energy Sales (MU)
1	Domestic	21244	91923	40.17
2	Commercial	3024	17083	3.48
3	Govt. Connection	1242	8648	8.25
4	Industrial	374	4108	0.40
5	HT Consumers	7	608	0.84
6	Public Lighting	77	331	0.70
7	Temporary Connection	246	147	0.11
	Total	**26214**	**122,848**	**53.95**

Commission's Analysis

The Commission has considered the category wise sales data, connected load and number of consumers as approved for FY 2019-20 in APR and CAGR for various categories as approved in Business Plan order dated December 21, 2018 for calculating the category wise sales, connected load and number of consumers respectively for FY 2020-21. Hence, the Commission has extrapolated the approved sales data from the category wise sales figure of FY 2019-20 using the approved CAGR for each category of sales as shown in the following table:

Table 101: Sales projected for FY 2020-21 (MU)

S. No.	Category	Approved Sales for FY 2019-20	CAGR as approved in MYT Order	Projected Sales for FY 2020-21
1	Domestic	37.18	5.68%	39.29
2	Commercial	3.06	6.27%	3.25
3	Govt. Connection	7.56	1.54%	7.68
4	Industrial	0.34	1.97%	0.35
5	HT Consumers	0.94	10.00%	1.03
6	Public Lighting	0.80	2.43%	0.82
7	Temporary Connection	0.12	0.00%	0.12
8	**Total Sales**	**50.00**		**52.54**

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

Table 102: Energy Sales (MU) approved by the Commission

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	42.38	40.17	39.29
2	Commercial	3.44	3.48	3.25
3	Govt. Connection	8.39	8.25	7.68
4	Industrial	0.46	0.40	0.35
5	HT Consumers	0.71	0.84	1.03
6	Public Lighting	0.69	0.70	0.82
7	Temporary Connection	0.09	0.11	0.12
8	**Total Sales**	**56.16**	**53.95**	**52.54**

Similarly, the Commission has extrapolated the category wise number of consumers for FY 2018-19 using the approved CAGR for each category for number of consumers as shown in table below:

Table 103: Number of Consumers projected for FY 2020-21 (MU)

S. No.	Category	Approved Number of consumers for FY 2019-20	CAGR as approved in MYT Order	Projected Number of Consumers for FY 2020-21
1	Domestic	19810	3.89%	20581
2	Commercial	2888	4.56%	3020
3	Govt. Connection	1185	2.68%	1217
4	Industrial	347	3.51%	359
5	HT Consumers	7	10.00%	8
6	Public Lighting	75	1.35%	76
7	Temporary Connection	193	0.00%	193
8	**Total Consumers**	**24,505**		**25,453**

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

Table 104: Number of Consumers approved by the Commission

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	22122	21244	20581
2	Commercial	2746	3024	3020
3	Govt. Connection	1319	1242	1217
4	Industrial	395	374	359

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
5	HT Consumers	8	7	8
6	Public Lighting	79	77	76
7	Temporary Connection	160	246	193
8	**Total Consumers**	**26,829**	**26214**	**25,453**

Similarly, the Commission has extrapolated the approved category wise connected load for FY 2019-20 using the approved CAGR for each category for connected load as shown in table below:

Table 105: Connected Load projected for FY 2020-21 (kW)

S. No.	Category	Actual Connected Load for FY 2018-19	CAGR as approved in MYT Order	Projected Connected Load for FY 2020-21
1	Domestic	88819	2.40%	90951
2	Commercial	16299	3.41%	16855
3	Govt. Connection	8183	3.32%	8455
4	Industrial	3813	4.17%	3972
5	HT Consumers	645	8.16%	698
6	Public Lighting	308	3.67%	319
7	Temporary Connection	201	0.00%	201
8	**Total Connected Load**	**118,268**		**121,450**

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

Table 106: Connected Load approved by the Commission (kW)

S. No.	Category	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	91906	91923	90951
2	Commercial	17493	17083	16855
3	Govt. Connection	8845	8648	8455
4	Industrial	4191	4108	3972
5	HT Consumers	658	608	698
6	Public Lighting	330	331	319
7	Temporary Connection	66	147	201
8	**Total Connected Load**	**123,489**	**122,848**	**121,450**

The Commission approves energy sales of 52.54 MU, connected load of 121,450 kW and number of consumers as 25,453 in the ARR of FY 2020-21.

6.4. Intra-State Distribution Loss

Petitioner's submission

The Petitioner has proposed the T&D loss as approved by the Commission in the Business Plan Order i.e. at 12.50%.

Commission's analysis

The Commission, in the Business Plan Order, had set the loss trajectory for the 2nd Control Period considering the actual loss of 13.03% in FY 2017-18. The Commission approves the T&D loss for FY 2020-21 as approved in the Business Plan Order. The table below provides the T&D loss approved by the Commission in the MYT Order, the Petitioner's submission and as now approved by the Commission

Table 107: Intra-State Distribution Loss (%)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Intra-State Distribution Loss	12.50%	12.50%	12.50%

The Commission approves the Intra-State Distribution Loss of 12.50% for the FY 2020-21.

6.5. Energy Balance

Petitioner's submission

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

Table 108: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	**Energy Requirement**	
1	Total Sales within the UT	53.95
2	Distribution losses (%)	12.50%
	Distribution losses (MU)	7.71
3	**Energy Requirement @ periphery**	**61.66**
B	**Energy Availability**	
1	Renewable Generation	1.18
2	Diesel Generation	60.47
3	**Total Energy Availability**	**61.66**
C	**Total shortfall/(Surplus)**	**0.00**

Commission's analysis

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

Table 109: Energy Balance (MU) approved by Commission

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
A	**Energy Requirement**			
1	Total Sales within the UT	56.16	53.95	52.54
2	Distribution losses (%)	12.50%	12.50%	12.50%
	Distribution losses (MU)	8.02	7.71	7.51
3	**Energy Requirement @ periphery**	**64.18**	**61.66**	**60.05**
B	**Energy Availability**			
1	Power Purchase	7.92		
2	Renewable Generation		1.18	1.18
3	Diesel Generation	56.25	60.47	58.86
4	**Total Energy Availability**	**64.17**	**61.66**	**60.05**
C	**Total shortfall/(Surplus)**	**0.00**	**0.00**	**0.00**

In the ARR of FY 2020-21, the Commission has estimated a shortfall/(surplus) quantum of 0.00 MU considering all the demand net of renewable generation shall be met by the Diesel generation.

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 98.27 crore (HSD Cost – INR 97.13 crore and Lube Cost – INR 1.14 crore) as against the approved cost of INR 82.35 crore (HSD Cost – INR 81.35 crore and Lube Cost – INR 1 crore) in the MYT Order.

Commission's Analysis

As per Regulation 12.1 of the MYT Regulations, 2018, power purchase and fuel cost are uncontrollable parameters. Thus, the power purchase and fuel cost have to be revisited every year by the Commission based on the audited accounts. The Commission has considered the energy demand net of renewable generation shall be met from the Diesel Generation based on sales projected for FY 2020-21 as Diesel generation is the main source of power in Lakshadweep Islands and may vary as per the demand. Accordingly, the Commission has computed the cost of fuel for Diesel generation considering the approved values of specific fuel consumption in MYT order as shown in table below:

Table 110: Fuel Cost approved by the Commission for FY 2020-21

S. No.	Particulars	Petitioner's Submission	Now Approved by Commission
1	Total Gross Generation (MUs)	62.09	60.05
2	Less: Solar Generation (MUs)	1.18	1.18
3	Total DG Generation (MUs) (1 - 2)	60.91	58.86
4	Specific HSD Consumption (ml per kWh) as approved by JERC MYT Tariff order Dated 20.05.2019	266.12	266.12
5	Average Cost of HSD per litre from 01/04/2019 to 31/08/2019 (INR)	57.07	57.07
6	Average Cost of HSD per litre considered for FY 2019-20 escalated by 5% (5*105%) (INR)	59.92	59.92
7	**Cost of HSD [(3 X 4/1000 X 6)/10] (INR crores)**	**97.13**	**93.87**
8	Specific Lube oil consumption (ml per kWh) as approved by JERC MYT Tariff order Dated 20.05.2019	0.99	0.99
9	Average Cost of Lube Oil per litre from 01/04/2019 to 31/08/2019 (INR)	180	180
10	Average Cost of Lube oil per litre considered for FY 2019-20 escalated by 9% (5*105%) (INR)	189	189
11	**Cost of Lube Oil [(3 X 8/1000 X 10)/10] (INR crores)**	**1.14**	**1.10**
12	**Total Fuel Cost (INR crores)**	**98.27**	**94.97**

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

The Commission approves power purchase quantum of 60.05 MU and cost of INR 94.97 Crore in the ARR of FY 2020-21.

6.7. Renewable Purchase Obligation (RPO)

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

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

The Commission notified the JERC (Procurement of Renewable Energy), (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 2020-21.

For the FY 2020-21, the Commission approves the RPO target of 7.41 MU comprising of 3.20 MU Solar and 4.20 MU Non-Solar. Out of which, the Petitioner has only claimed to purchase the solar energy of around 1.18 MU, thereby resulting in a shortfall in RPO compliance. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2019-20:

Table 111: Cumulative RPO compliance till FY 2020-21

Particulars	FY 16	FY 17	FY 18	FY 19	FY 20	FY21
Solar Target	0.85%	1.65%	2.50%	3.60%	4.70%	6.10%
Non-Solar Target	2.70%	3.20%	4.20%	5.40%	6.80%	8.00%
Total Target	**3.55%**	**4.85%**	**6.70%**	**9.00%**	**11.50%**	**14.10%**
Sales Within UT	50.65	50.13	48.50	48.91	50.00	52.54
RPO Target						
Solar	0.43	0.83	1.21	1.76	2.35	3.20
Non-Solar	1.37	1.60	2.04	2.64	3.40	4.20
Total RPO Target	**1.80**	**2.43**	**3.25**	**4.40**	**5.75**	**7.41**
RPO Compliance (Actual Purchase)						
Solar	1.06	1.59	1.79	1.18	1.18	1.18
Non-Solar	0.00	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance (Actual Purchase)	**1.06**	**1.59**	**1.79**	**1.18**	**1.18**	**1.18**
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	1.06	1.59	1.79	1.18	1.18	1.18

Particulars	FY 16	FY 17	FY 18	FY 19	FY 20	FY21
Non-Solar	0.00	0.00	0.00	0.00	0.00	0.00
Total RPO Compliance	**1.06**	**1.59**	**1.79**	**1.18**	**1.18**	**1.18**
Net Shortfall/(Surplus) for this year	0.74	0.84	1.46	3.22	4.57	6.23
Cumulative Shortfall in RPO Compliance till current year	**0.74**	**1.58**	**3.04**	**6.26**	**10.83**	**17.06**

The Commission notes that there is a net shortfall in RPO compliance for FY 2020-21 (6.23 MU) and cumulative shortfall of 17.06 MU till FY 2020-21. The Commission also directs the Petitioner to complete the RPO obligation through physical power purchase failing which it shall be fulfilled by REC purchase and the cost of same shall be approved at the time of true-up.

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 nthYear of the Control Period shall be approved based on the formula given below:

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

Where,

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

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

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

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

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

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

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

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

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

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

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

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

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

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."

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 determined the revised estimates of the employee cost for the FY 2020-21 based on the actual expenses for the FY 2018-19 & 1st Half (April 19 to September 19) of the FY 2019-20. Accordingly, the Petitioner has claimed the employee expenses of INR 26.06 crore as against the approved employee expenses of INR 26.05 crore.

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. 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 2019-20 for computation of revised employee expenses of FY 2020-21. The Petitioner has not proposed any growth in the number of employees for FY 2020-21. Thus, the approved employee expenses for FY 2019-20 has been escalated with the average CPI of previous three years and growth rate to arrive at the employee expenses for FY 2019-20

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
2016-17	4.12%	**4.22%**
2017-18	3.08%	
2018-19	5.45%	

Table 113: Employee Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	EMPn-1 (INR Crore)	24.34	26.06	22.91
2	Gn (%)	2.59%		0.00%
3	CPIinflation (%)	4.34%		4.22%
4	Employee Expenses	**26.05**		**23.87**

The Commission approves Employee Expenses of INR 23.87 Cr for FY 2020-21.

6.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted the Administrative & General Expenses of INR 3.76 Crore as against the approved figure of INR 2.91 crore in the MYT 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 2019-20 for computation of revised A&G expenses of FY 2020-21. The A&G expenses for FY 2019-20 has been escalated with the average CPI of previous three years to arrive at the A&G expenses for FY 2020-21.

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

Table 114: A&G Expenses approved by Commission (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	A&Gn-1 (INR Crore)	2.79	**3.76**	2.78
2	CPIinflation (%)	4.34%		4.22%
3	Provision (INR Crore)	0.00		0.00
4	**Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)**	**2.91**		**2.90**

The Commission approves the Administrative & General (A&G) expenses of INR 2.90 Crore for FY 2020-21.

6.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has submitted the Repair & Maintenance Expenses of INR 17.85 Crore as against the approved figure of INR 8.32 crore in the MYT Order.

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 2020-21. The resultant amount is then escalated by average WPI Inflation of previous three years to arrive at the R&M expenses for FY 2020-21.

The WPI Inflation has been computed as follows:

Table 115: Computation of WPI Inflation (%)

FY	Increase in WPI Index	Average increase in WPI index over 3 years
2016-17	1.73%	**2.99%**
2017-18	2.92%	
2018-19	4.32%	

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

Table 116: R&M Expenses approved by Commission (INR Crore)

S. No	Particulars	FY 2020-21
1	Opening GFA (GFA_{n-1})	187.41
2	K factor approved (K) (%)	4.26%
3	Avg. WPI Inflation (%)	2.99%
4	**R&M Expenses =** **K x (GFA_{n-1}) x (1+$WPI_{inflation}$)**	**8.22**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 8.22 Crore for the FY 2020-21

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

The following table provides the total O&M expenses approved by the Commission for the FY 2020-21:

Table 117: O&M Expenses approved by Commission (In INR Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	26.05	26.06	23.87
2	Administrative & General Expenses (A&G)	2.91	3.76	2.90
3	Repair & Maintenance Expenses	8.32	17.85	8.22
	Total Operation & Maintenance Expenses	**37.28**	**47.67**	**35.00**

The Commission approves Operation & Maintenance (O&M) expenses of INR 35.00 Crore in FY 2020-21

6.9. Gross Fixed Assets (GFA) and Capitalization

Petitioner's submission

The Petitioner has claimed the capitalisation of INR 10.35 crore as approved in MYT order for FY 2020-21. The opening value of GFA has been considered as the closing value of FY 2019-20.

Commission's analysis

The Commission has considered the approved closing value of the GFA for FY 2019-20 as the opening value of GFA for FY 2020-21. The Commission has considered the capitalisation for FY 2020-21 as approved in the MYT order. Accordingly, the Commission has arrived at the closing value of GFA for FY 2020-21. The following table provides the summary of capitalization now approved by the Commission vis-à-vis the capitalisation approved by the Commission in the MYT Order:

Table 118: Capitalisation now approved by the Commission (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	**Capitalisation**	**10.35**	**10.35**	**10.35**

The Commission approves the capitalisation of INR 10.35 crore for FY 2020-21.

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 2020-21, the Commission has considered the closing value of GFA for FY 2019-20 as approved in previous chapter.

Therefore, in accordance with the MYT Regulations, 2018, the Commission has determined the Capital Structure for the FY 2020-21 as follows:

Table 119: GFA addition approved by the Commission (INR Crore)

S. No	Particulars	FY 2020-21
1	Opening Gross Fixed Assets	187.41
2	Addition During the FY	10.35
3	Adjustment/Retirement During the FY	0
4	Closing Gross Fixed Assets	197.76

Table 120: Loan addition approved by the Commission (INR Crore)

S. No	Particulars	FY 2020-21
1	Opening Loan	19.05
2	Additions during the year	7.25
3	Less: Normative Repayment equivalent to Depreciation	6.06
4	Closing Loan	20.24

Table 121: Normative Equity addition approved by the Commission (INR Crore)

S. No	Particulars	FY 2020-21
1	Opening Equity	56.22
2	Additions during the year	3.11
3	Closing Equity	59.33

6.11. Depreciation

Petitioner's submission

The Petitioner has submitted the depreciation of INR 7.47 crore as per MYT Regulations 2018 as against the approved depreciation of INR 7.76 crores in MYT Order.

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 122: 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 overall depreciation rate is considered as the weighted average depreciation rate calculated based on the asset wise depreciation rates and asset classification as per the true-up of FY 2016-17. The closing GFA of the FY 2019-20 as approved in the APR has been considered as opening GFA of the FY 2020-21. Further, depreciation has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during each year. The following table provides the calculation of depreciation as approved in the MYT order, Petitioner's submission and now approved by the Commission.

Table 123: Depreciation approved by Commission (In INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	194.74	187.41	187.41
2	Addition During the FY	10.35	10.35	10.35
3	Closing Gross Fixed Assets	205.09	197.76	197.76
4	Average Gross Fixed Assets	199.92	192.59	192.59
5	Weighted Average Depreciation rate (%)	3.88%	3.88%	3.15%
	Depreciation	**7.76**	**7.47**	**6.06**

The Commission approves a depreciation of INR 6.06 Crore for the FY 2020-21.

6.12. Interest on Loan

Petitioner's submission

The petitioner has estimated the Interest and Finance charges as per the JERC MYT Regulations, 2018 for the year FY 2019-20. 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 the 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[2] 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 calculated on the average loan during the year with the opening loan for the first year of the Control Period considered equivalent to the closing loan approved in the APR for the FY 2019-20.

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

Table 124: Interest on loan approved by Commission (INR Crore)

S. No	Particulars	FY 2020-21
1	Opening Normative Loan	19.05
2	Add: Normative Loan During the year	7.25
3	Less: Normative Repayment equal to Depreciation	6.06
4	Closing Normative Loan	20.24
5	Average Normative Loan	19.64
6	Rate of Interest (%)	8.85%
	Interest on Loan	**1.74**

The Commission approves Interest on Loan as INR 1.74 Crore for the FY 2020-21.

6.13. Return on Equity (RoE)

Petitioner's submission

The Return on Equity (RoE) is computed in accordance with the MYT Regulations, 2018, wherein RoE is computed on 30% of the capital base if the actual equity deployed is more than 30% and the actual equity base if the equity deployed is less than 30%. Accordingly, the Petitioner has computed the Return on Equity at 16% on post-tax basis. The following table summarizes Petitioner's submission:

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

Table 125: Return on equity as submitted by the Petitioner (INR Crore)

S. No.	Particulars	FY 2020-21
1	Opening Equity Amount	56.22
2	Equity Addition during year (30% of Capitalization)	3.11
3	Closing Equity Amount	59.33
4	Average Equity Amount	57.77
5	Return on Equity (%)	16.00%
6	**Total Return on Equity**	**9.24**

Commission's analysis

Regulations 27.2 and 27.3 of the MYT Regulations, 2018 stipulate the following:

"27.2 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.

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

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 2019-20 as approved in the APR. Income Tax payable shall be considered taken on actual basis at the time of True-up. The following table provides the RoE approved in the ARR of FY 2020-21, the Petitioner's submission and RoE now approved by the Commission.

Table 126: RoE approved by Commission (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	44.62	56.22	56.22
2	Additions on account of new capitalisation	3.11	3.11	3.11
3	Closing Equity	47.73	59.33	59.33
4	Average Equity	46.17	57.77	57.77
5	Rate of Return	16.00%	16.00%	16.00%
6	**Return on Equity**	**7.39**	**9.24**	**9.24**

The Commission approves Return on Equity of INR 9.24 Crore for the FY 2020-21.

6.14. Interest on Security Deposits

Petitioner's submission

The Petitioner has proposed to consider the same figures as proposed by the Commission in the MYT order and they shall submit the actual figures at the time of true-up. Accordingly, the Petitioner has claimed an interest on Security Deposits of INR 0.07 crore.

Commission's analysis

Regulation 28.11 of the MYT Regulations, 2018 stipulates the following:

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

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

The Interest on security deposits has been calculated in accordance with the MYT Regulations 2018, based on the average of the opening and closing consumer security deposits during the year. The rate of interest has been considered equivalent to the prevailing RBI Bank rate. The Commission proposes to approve the interest on security deposits in line with the approved figures of MYT Order and the same shall be trued up at the time of true up of FY 2020-21.

The following table provides the interest on consumer security deposits approved in MYT Order, Petitioner's Submission and now approved by the Commission for FY 2020-21:

Table 127: Interest on Security Deposits approved by Commission (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Security Deposit	0.94	0.94	0.94
2	Net addition during the year	0.26	0.26	0.26
3	Refund during the year	0.00	0.00	0.00
3	Closing Security Deposit	1.20	1.20	1.20
4	Average Security Deposit	1.07	1.07	1.07
5	Rate of Interest (%)[3]	6.25%	6.25%	6.25%
6	**Interest on Security Deposit**	**0.07**	**0.07**	**0.07**

The Commission approves Interest on Security Deposit as INR 0.07 Crore for the FY 2020-21.

6.15. Interest on Working Capital

Petitioner's submission

The interest on working capital has been calculated based on the normative principles outlined in the MYT Regulations, 2018.

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

- Receivable of two months of billing
- O&M Expenses of one month
- Maintenance Spares at 40% of repair and maintenance expenses for one month
- Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt

The SBI 1 year MCLR as on 1st April 2019 plus 200 basis points i.e. 10.55% (8.55% + 2%) has been considered for computation of interest on working capital. The following table provides the Interest on working Capital proposed for each year of the Control Period.

[3] Bank Rate as on 1st April 2019

Table 128: Interest on Working Capital submitted by the Petitioner (INR Crore)

S. No.	Particulars	FY 2020-21
1	O&M Expense - 1 month	3.97
2	Maintenance Spare @ 40% of R&M Exp - one month	0.60
3	Two Months Receivables	4.69
4	Less : Amount held as Security Deposit	1.20
5	Total Working Capital	8.06
6	Interest Rate	10.55%
7	**Interest on Working Capital**	**0.85**

Commission's analysis

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

"52. Norms of Working Capital for Distribution Wires Business

52.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Distribution Wires Business for the Financial Year, computed as follows:

(a) O&M Expenses for one (1) month; plus

(b) Maintenance spares at 40% of repair and maintenance expenses for one (1) month; plus

(c) Receivables equivalent to two (2) months of the expected revenue from charges for use of distribution

wires at the prevailing tariff;

Less:

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

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

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

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

The Commission has computed the Interest on Working Capital for FY 2020-21 in accordance with the MYT Regulation, 2018. The interest rate has been considered as 10.55% (1 year MCLR as on 1st April 2019 i.e. 8.55% + 200 basis points). The computation of interest on working capital is shown in the following table:

Table 129: Interest on Working Capital approved by Commission (INR Cr)

S. No	Particulars	FY 2020-21
1	O&M Expense for 1 month	2.92
2	Maintenance spares at 40% of R&M expenses for one (1) month;	0.27

S. No	Particulars	FY 2020-21
3	Receivables equivalent to two (2) months of the expected revenue from charges for use of distribution wires at the prevailing tariff	4.16
4	Less: Amount held as security deposits	1.20
5	Net Working Capital	6.15
6	Rate of Interest (%)	10.55%
	Interest on Working Capital	**0.65**

The Commission approves the Interest on Working Capital as INR 0.65 Crore for the FY 2020-21.

6.16. Income Tax

Petitioner's submission

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

Commission's analysis

Regulation 32 of MYT Regulations, 2018 stipulates the following:

"32. Tax on Income

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

32.2 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.

32.3 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.

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

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

Since the Petitioner has paid no Income tax in the previous years, no income tax liability is computed for the FY 2020-21 and the same shall be Trued-up based on the actual income tax paid by the Petitioner.

Table 130: Income Tax approved by Commission (INR Crore)

S. No	Particulars	FY 2020-21
1	Income Tax	0.00

6.17. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner has not proposed any provision for bad and doubtful debts during the FY 2020-21.

Commission's analysis

Regulation 62 of the MYT Regulations, 2018 stipulates the following

"62. Provision for bad and doubtful debts

62.1 The Commission may allow bad debts written off as a pass through in the Aggregate Revenue Requirement, based on the trend of write off of bad debts in the previous years, subject to prudence check:

Provided that the Commission shall true up the bad debts written off in the Aggregate Revenue Requirement, based on the actual write off of bad debts excluding delayed payment charges waived off, if any, during the year, subject to prudence check:

Provided also that the provision for bad and doubtful debts shall be limited to 1% of the annual Revenue Requirement of the Distribution Licensee:

Provided further that if subsequent to the write off of a particular bad debt, revenue is realised from such bad debt, the same shall be included as an uncontrollable item under the Non-Tariff Income of the year in which such revenue is realised."

The Commission also has not considered any Provision for Bad & Doubtful Debts for the FY 2020-21. The same shall be accounted for as per actuals during the True-up of respective years.

6.18. Non-Tariff Income

Petitioner's submission

The Petitioner has estimated the non-tariff income of INR 1.24 crore for FY 2020-21 as approved by the Commission in MYT Order.

Commission's analysis

Regulation 64 of the MYT Regulations, 2018 stipulates the following:

"64. Non-Tariff Income

64.1 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.

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

(a) Income from rent of land or buildings;

(b) Income from sale of scrap;

(c) Income from statutory investments;

(d) Interest on advances to suppliers/contractors;

(e) Rental from staff quarters;

(f) Rental from contractors;

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

(h) Income from advertisements, etc.;

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

(j) Service charges;

(k) Consumer charges;

(l) Recovery for theft and pilferage of energy;

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

(n) Miscellaneous receipts;

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

(p) Prior period income, etc.:

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

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

The Commission approves the NTI in line with the approved figures of MYT Order. The same shall be Trued-up on actual basis at the time of true-up. The NTI approved for FY 2020-21 has been shown in the following table:

Table 131: Non -tariff Income approved by Commission (INR Crore)

S. No	Particulars	FY 2020-21
1	Non- Tariff Income	1.24

The Commission approves Non-Tariff Income of INR 1.24 Crore for the FY 2020-21.

6.19. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the Petitioner has submitted the net aggregate revenue requirement of INR 164.11 crore as against the approved net aggregate revenue requirement of INR 140.63 crore in MYT Order.

Commission's analysis

On the basis of the detailed analysis of the cost parameters of the ARR the net revenue requirement as approved in MYT order, Petitioner's submission and now approved by the Commission for FY 2020-21 is shown in table below:

Table 132: Aggregate Revenue Requirement approved by Commission (INR Crore)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost	0.57	0.00	0.00
2	Fuel Cost	82.35	98.27	94.97
3	Employee Expenses	26.05	26.06	23.87
4	Administration & General Expenses (A&G)	2.91	3.76	2.90
5	Repair & Maintainence Expenses (R&M)	8.32	17.85	8.22
6	Depreciation	7.76	7.47	6.06
7	Interest and Finance charges	5.79	1.79	1.74
8	Interest on Working Capital	0.67	0.85	0.65
9	Return on Equity	7.39	9.24	9.24
10	Interest on Security Deposit	0.07	0.07	0.07
11	Income Tax	0.00	0.00	0.00
12	**Total Revenue Requirement**	**141.87**	**165.36**	**147.72**
13	Less: Non-Tariff Income	1.24	1.24	1.24
14	**Net Revenue Requirement**	**140.63**	**164.12**	**146.48**

The Commission approves net ARR of INR 146.48 Crore for the FY 2020-21.

6.20. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has estimated revenue from sale of power at existing tariff as INR 25.68 Crore for the FY 2020-21 based on the projected energy sales, connected load and number of consumers.

Commission's analysis

The category wise revenue at existing retail tariff is calculated as per the applicable tariff rates. The revenue from demand charges and the energy charges have been projected for each category. The Commission has considered number of single phase and three phase consumers in the ratio of 70%-30% and has considered the power factor of 0.9 for computing fixed charges linked with connected load as projected load is in kW terms. The revenue from category tariff as computed by the Commission for the FY 2020-21 has been shown in the following table:

Table 133: Revenue at existing tariff computed by the Commission for the FY 2020-21 (INR Crore)

S. No.	Category	Sales (MUs)	Revenue from Energy Charges (INR Crore)	Revenue from Fixed charges (INR Crore.)	Total (INR Cr.)	ABR (INR/ unit)
1	Domestic	39.29	11.58	0.86	12.45	3.17
2	Commercial	3.25	2.81	0.11	2.92	8.97

S. No.	Category	Sales (MUs)	Revenue from Energy Charges (INR Crore)	Revenue from Fixed charges (INR Crore.)	Total (INR Cr.)	ABR (INR/ unit)
3	Government Connections	7.68	7.37	0.09	7.47	9.72
4	Industrial	0.35	0.23	0.26	0.49	14.14
5	HT Industrial	1.03	0.95	0.14	1.09	10.55
6	Public Lighting	0.82	0.49	0.02	0.51	6.26
7	Temporary	0.12	0.09	0.00	0.09	7.14
	TOTAL	**52.54**	**23.52**	**1.49**	**25.01**	**4.76**

The Commission has determined revenue from sale of power at existing tariff as INR 25.01 Crore in FY 2020-21.

6.21. Standalone Revenue Gap/ Surplus

Petitioner's submission

Based on the ARR and the revenue from retail tariff projected by the Petitioner, the Petitioner has submitted a standalone revenue gap of INR 138.44 Crore for the FY 2020-21.

Commission's analysis

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

Table 134: Standalone Revenue Gap/ Surplus approved at existing tariff for the FY 2019-20 (INR Crore)

S. No	Particulars	Petitioners submission	Now Approved
1	Annual Revenue Requirement	164.12	146.48
2	Revenue from sale of power	25.68	25.01
	Revenue Gap/(Surplus)	**138.44**	**121.47**

The standalone revenue gap at existing retail tariff is INR 121.47 Crore for the FY 2020-21.

7. Chapter 7: Tariff Principles and Design

7.1. Overall Approach

The Commission while designing retail tariffs for the FY 2020-21 has kept in view the principles of determination of tariff set out in the Electricity Act, 2003 (EA 2003), Tariff Policy, 2016 and the MYT Regulations, 2018.

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

The provision of supply of electricity to all the people is an essential driver for development, and also influences social and economic change. Since the majority of the energy sales within LED's jurisdiction is to tourism related businesses, the Commission has attempted to ensure that, while tourism is promoted, but at the cost of other segments of society.

7.2. Applicable Regulations

Regulation 19 of MYT Regulations, 2018 states the following:

"19. Annual determination of tariff

19.1 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 17, 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 67 of the MYT Tariff Regulations, 2018 stipulates as follows:

"67. Determination of Tariff

67.1 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.

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

67.3 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.

67.4 The tariff proposal by Licensee and the tariff determination by the Commission shall be based on the following principles:

(a) The tariff for all categories shall preferably be two part, consisting of fixed and variable charges.

(b) The fixed charges in tariff shall progressively reflect actual fixed cost incurred by Distribution Licensee;

(c) The overall retail supply tariff for different Consumer categories shall progressively reflect the cost of supply for respective categories of Consumers;

(d) The tariff for residential Consumers shall be set considering the affordability of tariff for various class of Consumers;

(e) The tariff shall be set in such a manner that it may not present a tariff shock to any category of Consumers."

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

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

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

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

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

Petitioner's Submission

The Petitioner has proposed revenue gap of INR 138.42 Crore for FY 2020-21 at existing tariff. The revenue gap submitted by the Petitioner for FY 2020-21 is as follows:

Table 135: Revenue Gap at existing tariff submitted by the Petitioner for FY 2020-21 (INR Crore)

Sr. No.	Particulars	FY 2020-21
1	Net Revenue Requirement	164.11
2	Revenue from Sale of Power at existing Tariff	25.68
3	**Net Gap during the year**	**138.42**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**138.42**

Commission's View

The Commission based on the ARR and Revenue from sale of power computed above, has derived revenue gap for the FY 2020-21 at existing tariff as shown in table below:

Table 136: Revenue Gap determined by the Commission at existing tariff for FY 2020-21 (INR Crore)

Sr. No.	Particulars	FY 2020-21
1	Net Revenue Requirement	146.48
2	Revenue from Sale of Power at existing Tariff	25.01
3	**Net Gap during the year**	**121.47**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**121.47**

Accordingly, the Commission determined the revenue gap of INR 121.47 Crore for FY 2020-21 at existing tariff.

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

From above, it can be seen that at existing tariff, there is revenue gap of INR 121.47 Crore for FY 2020-21. However, the Commission has not approved any tariff hike in tariff for FY 2020-21 as compared to tariff for FY 2019-20 considering the socio-economic conditions of the people in Lakshadweep and in view of the budgetary support by the Government to meet the balance revenue gap.

7.4.1. Tariff Proposal

Petitioner Submission

1. The Petitioner has proposed that at existing tariff, the average cost of supply comes to INR 30.42 per unit, whereas the Average Billing Rate (ABR) is INR 4.76 per unit. Thus, there is a gap of INR 25.66 per unit.
2. The Petitioner has submitted that over 95% of power is generated from Diesel based generating stations and HSD cost forms major component of cost of supply. Further, there has been a reduction in budgetary support from the government. The above factors, apart from general rise in prices have necessitated the increase in tariff. However, the Petitioner has only proposed partial recovery of cost.
3. The Petitioner has proposed to increase energy charges by 10% while keeping the fixed charges at the same level.

Accordingly, the tariff proposal submitted by the Petitioner for FY 2020-21 for individual category is as follows:

Table 137: Tariff proposal submitted by the Petitioner for FY 2019-20

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	1.10
Domestic Connection			**Domestic Connection**		
0 to 100 units	INR 20/- per connection per month or part thereof for single phase INR 70/- per connection per month 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	1.49
101 to 200 units		3.10	101 to 200 units		3.41
201 to 300 units		5.20	201 to 300 units		5.72
301 units & above		6.85	301 units & above		7.54
Commercial			**Commercial**		
0-100 Units		6.30	0-100 Units		6.93

Existing			Proposed		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
101 to 200 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	7.65	101 to 200 Units	INR 30/- per connection per month or part thereof for single phase INR 125/- per connection per month or part thereof for three phase	8.42
201 units & above		9.50	201 units & above		10.45
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	8.80
201 units & above		9.70	201 units & above		10.67
Industrial	INR 50.00 per kVA connected load or part thereof	6.50	**Industrial**	INR 50.00 per kVA connected load or part thereof	7.15
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	10.12
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	6.60
EV Charging Stations	INR 100.00 per kVA connected load or part thereof per month	4.76	**EV Charging Stations**	INR 100.00 per kVA connected load or part thereof per month	5.24
	-				
Temporary Connections		4.71	**Temporary Connections**		5.16

Accordingly, the computation of impact of proposed tariff on revenue for FY 2020-21 is as follows:

Table 138: Average Tariff Hike for FY 2020-21 as submitted by the Petitioner (INR Crore)

Sr. No.	Particulars	Units	FY 2020-21	
			Existing	Proposed
1	Net ARR for FY 2020-21	INR Crore	164.12	164.12
2	Revenue for FY 2020-21	INR Crore	25.68	28.13
3	**Gap (1-2)**	**INR Crore**	**138.44**	**135.96**
4	Total Sales	MU	53.95	53.95
5	Average Cost of Supply	INR/kWh	30.42	30.42
6	Average Billing Rate	INR/kWh	4.76	5.22
7	Per Unit Gap	INR/kWh	25.66	25.20
8	Average Tariff Hike	INR/kWh		0.46
9	Tariff Hike in %	%		9.59%

Commission View

As discussed above, the Commission has determined the retail tariff for the FY 2020-21 in accordance with the principles stated in the Electricity Act, 2003 Tariff Policy, 2016, and the MYT Regulations, 2018. 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 promotes 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 & Commercial consumers for defining slab ranges and setting tariffs
5. Revenue stability: Utilities should ensure adequate fixed cost recovery from fixed/demand charges
6. Avoiding tariff shocks: Tariff shocks should be prevented, and consumers should be kept informed about 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 Discom. For example, in order to ensure that tariffs are kept in check for residential consumers, while still allowing cost recovery for Discoms, cross subsidy is built in between categories. The tariffs so determined, are skewed, with tariff for industrial and commercial consumers being higher and for other categories being lower than their respective costs of supply. The implications of this imbalance in tariffs is twofold – uncompetitive industries owing to higher input costs and inability of Discoms 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 utilities 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 imposed by each consumer category on the Discom. By determining consumer category wise costs of supply, the Discom would be in a better position to allocate costs where relevant and determine how tariffs can be levied fairly on each category.

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

b) Approach:

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. A simplified version of the same was suggested by Hon'ble ATE in 2010, to determine VCoS in the absence of all necessary data. In this method, the power purchase costs and other costs (such as network costs, wheeling costs etc.) are allocated to various consumer categories based on energy input or energy sales (as considered appropriate by the State Commission). This approach factors in the voltage level differentiation based on losses, however, it does not factor in asset utilization at different voltage levels.

A more refined version of determination of 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 Residential consumer. Thus, it believes that the most progressive way forward for LED is to accurately determine the cost of supply is to attempt to determine Cost of Supply at various category level. The Commission notes that States like Andhra Pradesh and Telangana have determined Category wise Cost of Supply albeit with several assumptions and LED must also attempt to determine the same.

On studying the existing methodologies followed internationally, among developing nations with energy access situations like India's, the Commission is of the opinion that the Category wise Cost of Supply methodology is an appropriate starting point. The embedded cost method identifies and appropriately assigns the historical or accounting costs that make up a Discom's revenue requirement to all categories and sub-categories of consumers.

This method involves three steps:

- Cost Functionalization
- Cost Classification
- Cost Allocation

Cost functionalization separates cost data into the functional activities performed in the operation of a utility system - power generation/supply, transmission, distribution and retail supply. Classification determines the portion of the cost that is related to specific cost-causal factors, such as those that are demand-related, energy-related, or customer-related. Finally, the cost allocation step assigns the costs to specific customer categories based on the customer's contribution to the specific classifier selected.

The Commission as part of this Order has determined the tariff according to the Average Cost of Supply (ACoS) due to lack of requisite data. 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 CoS in this Order but directs the Petitioner to start maintaining this data and submit the same in the tariff proceedings of next year.

2. *Tariff Affordability*

a) Context

The Commission understands that the consumer base of LED is varied and covers a wide spectrum of socio-economic backgrounds, specially the domestic category consumers. It is 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 Discom has to undergo 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 globally for social impact assessment of electricity tariffs by studying international research reports and studying model practices internationally, 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 Discom across tariff slabs can be mapped across the established economic levels to develop the final affordability ratio matrix for the Discom'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.

The Commission, after analysis of the various components of the ARR for FY 2020-21, has come to the conclusion that the utility has to increase the average tariff from the existing level of INR 4.76 per unit to INR 27.88 per unit to recover the full amount of ARR as projected for FY 2020-21.

Keeping in view the above principles and based on the category wise information submitted by the Petitioner, and in view of the socio-economic constraints of the people residing in the licensee's area, the Commission feels that aligning the tariff with Average Cost of Supply would be unjust to the consumers. Duly considering the difficult terrain where people reside in remote areas spread across the various islands with limited access to basic amenities, the Commission, has not approved any increase in the tariff of FY 2020-21 over the FY 2019-20. However, Single Part Tariff has been approved for Electric Vehicle Charging Station category in line with the Draft Amendment to the Tariff Policy, 2016 dated May 30, 2018. Also, the limit on monthly energy consumption for Lifeline Connection has been increased to 100 units/month and beyond it, the entire consumption for such consumers shall be charged at Domestic tariff.

The approved tariff for FY 2020-21 is as follows:

Table 139: Existing vs. Tariff approved by the Commission for FY 2020-21

Existing			Approved		
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	1.00

Existing			**Approved**		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
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	1.35
101 to 200 units		3.10	101 to 200 units		3.10
201 to 300 units		5.20	201 to 300 units		5.20
301 units & above		6.85	301 units & above		6.85
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	6.30
101 to 200 Units		7.65	101 to 200 Units		7.65
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	8.00
201 units & above		9.70	201 units & above		9.70
Industrial	INR 50.00 per kVA connected load or part thereof	6.50	**Industrial**	INR 50.00 per kVA connected load or part thereof	6.50
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	9.20
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	6.00

Existing			Approved		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
EV Charging Stations	INR 100.00 per kVA connected load or part thereof per month	4.76	**EV Charging Stations**		4.75
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	

7.4.2. Revenue from Approved Retail Tariff for FY 2020-21

Based on the retail tariff approved above, the revenue at revised tariff approved by the Commission for FY 2020-21 is given in the following Table:

Table 140: Revenue at tariff approved by the Commission for FY 2020-21

Sr. No.	**Category**	**No. of Consumers**	**Energy Sales (in MU)**	**Approved Tariff**		**Fixed Charges (INR Crore)**	**Energy Charges (INR Crore)**	**Total Revenue (INR Crore)**
				Fixed Charges	**Energy Charge (INR/Kwh)**			
1	**Life line Connection**							
	0 to 100 units			INR 10 per connection per month or part thereof	1.00	-	-	-
2	**Domestic**							
	0 to 100 units	20581	18.29	INR 20 per connection per month or part thereof for Single Phase & INR 70 per connection per month for three phase or part thereof for three phase	1.35	0.86[4]	2.47	
	101 to 200 units		12.04		3.10		3.73	
	201 to 300 units		4.58		5.20		2.38	
	301 units & above		4.38		6.85		3.00	
	Sub-total		**39.29**			**0.86**	**11.58**	**12.45**
3	**Commercial**							
	0-100 Units	3020	0.60	INR 30 per connection per month or part	6.30	0.11[5]	0.38	

[4] **Domestic Category:** In line with MYT Order, the Commission has assumed 70% connections with Single Phase supply and 30% connections with Three Phase supply.
[5] **Commercial Category:** In line with MYT Order, the Commission has assumed 70% connections with Single Phase supply and 30% connections with Three Phase supply.

Sr. No.	Category	No. of Consumers	Energy Sales (in MU)	Approved Tariff		Fixed Charges (INR Crore)	Energy Charges (INR Crore)	Total Revenue (INR Crore)
				Fixed Charges	Energy Charge (INR/Kwh)			
	101 to 200 Units		0.48	thereof for Single Phase & INR 125 per connection per month for three phase or part thereof for three phase	7.65		0.37	
	201 units & above		2.17		9.50		2.06	
	Sub-total		**3.25**			**0.11**	**2.81**	**2.92**
4	**Govt. Connection**							
	0-200 Units	1217	0.42	INR 35 per connection per month or part thereof for Single Phase & INR 125 per connection per month for three phase or part thereof for three phase	8.00	0.09[6]	0.34	
	201 units & above		7.26		9.70		7.04	
	Sub-total		**7.68**			**0.09**	**7.37**	**7.47**
5	**Industrial**							
	All units	**359**	**0.35**	INR 50 per kVA per month or part thereof	**6.50**	**0.26**[7]	**0.23**	**0.49**
6	**HT Industrial**							
	All units	**8**	**1.03**	INR 150 per kVA per month or part thereof	**9.20**	**0.14**[8]	**0.95**	**1.09**
7	**Public Lighting**							
	All units	**76**	**0.82**	INR 50 per kVA per month or part thereof	**6.00**	**0.02**	**0.49**	**0.51**
8	**Electric Vehicle Charging Station**	**0**	**0.00**		**4.75**	**0.00**	**0.00**	**0.00**

[6] **Government Connections Category:** In line with MYT Order, the Commission has assumed 70% connections with Single Phase supply and 30% connections with Three Phase supply

[7] **Industrial Category**: Connected load has been taken at the level as approved in the Business Plan Order for second control period i.e. at PF of 0.9.

[8] **HT Consumers:** Connected load has been taken at the level as approved in the Business Plan Order for second control period i.e. at PF of 0.9.

Sr. No.	Category	No. of Consumers	Energy Sales (in MU)	Approved Tariff		Fixed Charges (INR Crore)	Energy Charges (INR Crore)	Total Revenue (INR Crore)
				Fixed Charges	Energy Charge (INR/Kwh)			
9	**Temporary Supply**							
	All units	193	0.12	1.5 times the rate applicable to the relevant category of consumers.		0.00	0.09	0.09
11	**Total**	25,453	52.54			1.49	23.52	25.01

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

Table 141: Revenue gap at tariff approved by the Commission for FY 2020-21 (in INR crore)

S. No.	Particulars	FY 2020-21	
		Claimed	Approved
1	Net Revenue Requirement	164.11	146.48
2	Revenue from Sale of Power at Revised Tariff	25.68	25.01
3	**Net Gap during the year**	**138.42**	**121.47**
4	Add: Previous Year Gap	0.00	0.00
5	**Total Gap**	**138.42**	**121.47**

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

Table 142: Percentage recovery of ACOS at tariff approved by the Commission for FY 2020-21

S. No.	Category	Average Cost of Supply (INR/unit)	Average Billing Rate (INR/unit)	% of AcoS
1	Life Line Connection (Upto 100 Units)	27.88	0.00	0.00%
2	Domestic	27.88	3.17	11.36%
3	Commercial	27.88	8.97	32.16%
4	Government Connection	27.88	9.72	34.88%
5	Industrial	27.88	14.14	50.71%
6	HT Industrial	27.88	10.55	37.84%
7	Public Lighting	27.88	6.26	22.45%
8	EV Charging Station	27.88	4.75	17.03%
9	Temporary	27.88	7.14	25.61%
10	**Overall**	**27.88**	**4.76**	**17.07%**

Table 143: Approved ACoS and ABR by the Commission at approved tariff for FY 2020-21

Sr. No.	Particulars	FY 2020-21
1	Net Revenue Requirement (INR Crore)	146.48
2	Revenue from Revised Tariff (INR Crore)	25.01
3	Energy Sales (MU's)	52.54
4	Average cost of supply/unit (INR/kWh)	27.88
5	Average Billing Rate (INR/kWh)	4.76

Sr. No.	Particulars	FY 2020-21
6	**Gap (INR/kWh)**	**23.12**

The highlights of the tariff structure approved by the Commission for FY 2020-21 is as follows:

1. The Commission has not approved any tariff hike for FY 2020-21 from FY 2019-20.
2. The Commission has approved the average revenue for FY 2020-21 as INR 4.76/kWh as against the approved Average Cost of Supply of INR 27.88/kWh.
3. In order to promote the use of Electric Vehicles (E.V.), the Commission has introduced a single-part tariff for E.V. Charging Stations where the Fixed Charges have been removed and the Energy Charges have been rationalised on the basis of ABR.
4. The limit on monthly energy consumption for Lifeline Connection has been increased to 100 units/month and beyond it, the entire consumption for such consumers shall be charged at Domestic tariff.

The Commission observes that the Revenue Gap of the previous years was funded by the Government as budgetary support. Previously, LED had submitted a copy of the letter from Administration of the UT, Lakshadweep regarding budgetary support to meet the Revenue Gap. However, the Petitioner has not submitted any such letter for FY 2020-21. The Commission directs the Electricity Department, Lakshadweep to take up the matter with the Administration, UT of Lakshadweep to get the budgetary support to meet the Revenue Gap for FY 2020-21.

8. Chapter 8: Tariff Schedule

8.1. Tariff Schedule

Sr. No.	Category	Fixed Charges	Energy Charge (INR/kWh)
1.	**Life Line Connection**		
	0 to 100 units	INR 10/- per service connection per month or part thereof	1.00
2.	**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
	101 to 200 units		3.10
	201 to 300 units		5.20
	301 units & above		6.85
3.	**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
	101 to 200 Units		7.65
	201 and above		9.50
4.	**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
	201 Units & above		9.70
5.	**Industrial**		
	All units	INR 50/- per KVA per month or part thereof	6.50
6.	**HT Industrial**		
	All Units	INR 150/- per KVA per month or part thereof	9.20
7.	**Public Lighting**		
	All Units	INR 50/- per KVA per month or part thereof	6.00
8.	**Electric Vehicle Charging Station**		4.75
9.	**Temporary supply**		
	All Units	1.5 times the rate applicable to the relevant category of consumers.	

Secretary, JERC
(For Goa & UTs)

8.2. Applicability

Sr. No.	Category	Applicability	Point of Supply news
1	Life Line	Applicable to domestic consumers with monthly consumption of upto 100 units and below.	Note: The Domestic Consumer having consumption above 100 units shall be charged according to the slabs defined under Domestic Category.
2	Domestic	Applicable to private houses, bungalows, hostels and hospitals run on non-commercial lines, charitable educational and religious institutions for lights, fans, radios, Government schools along with related facilities, domestic heating and other household appliances	
3	Commercial	This includes all categories which are not covered by other tariff categories i.e. Domestic Category, BPL, Industrial LT, HT Consumers and Public Lighting. Applicable for Shops, Offices, Restaurants, Bus Stations, Photo Studios, Laundries, Cinema Theatres, Industrial Lighting, clubs and other commercial installations.	
4	Government Connection	Applicable to all Government Connections except those connections specifically included in Industrial LT and Public Lighting.	
5	Industrial Supply	Applicable to all LowTension Industrial Connections including water works/pumps.	
6	HT Industrial	Applicable for the consumers connected with 11 KV.	Note: To be read with other Terms and Conditions for HT Supply mentioned separately.
7	Public Lighting	Applicable for lighting on public roads, footpaths, streets and fares in parks & markets.	
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.	

In order to mitigate the hardship of Electricity Consumers and DISCOMs/EDs in view of nation wide lockdown due to COVID-19. The Commission has issued SUO MOTU Order No. JERC/LEGAL/SMP/27/2020 on April 10, 2020 giving directions, wherein the Commission has provided relief to Industrial and Commercial consumers and acknowledged the need for additional working capital requirement by the Distribution Licensees. Further, the Commission is of the view that the lockdown will also impact certain other parameters of ARR like sales/sales mix, power purchase quantum and cost, revenue etc. However, it may not be possible to take into account all these impacts in totality with the desired accuracy and efficacy at this point of time. The Commission will consider all such additional costs and variations in parameters appropriately while evaluating the APR of FY 2020-21 and thereafter True-up of FY 2020-21.

8.3. 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.

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 2% per month shall be levied on all arrears of bills. In case of delay less than a month, the surcharge will be levied at 2% 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.

8.4. 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.

8.5. 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

S. No.	PARTICULARS	Charges (INR)
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
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

9. Chapter 9: 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.

9.1. Directives continued in this Order

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

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

9.1.1. 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 20th May 2019 *The Commission directs the Petitioner to get the audited accounts of FY 2015-16 and FY 2016-17 and file the true up Petitions 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 2017-18 & FY 2018-19 and get the same audited to enable the Petitioner to file the true up petitions for the said years with the next tariff filing for FY 2020-21.* *The Petitioner is again directed to file APR for FY 2019-20 along with the tariff petition for FY 2020-21.*
Petitioner's response in the present Tariff Petition *It is submitted that the Accounts for the FY 2015-16 & FY 2016-17 has been completed & audited and True-up for the years is submitted in the instant petition. The Accounts for the FY 2017-18 is completed but the audit for the same is yet to be done by AG. The accounts for the FY 2018-19 is under compilation. It is submitted that the True-up for the FY 2017-18 & FY 2018-19 shall furnished after completion of the Audit for the respective years. Hon'ble Commission may kindly allow the same.* *The APR for the FY 2019-20 is submitted in the instant petition.*
Commission's response The Commission has noted the submission of the Petitioner. 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.

9.1.2. Annual statements of accounts

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 20th May 2019 *The Commission directs the Petitioner to get the audited accounts of FY 2015-16 and FY 2016-17 and file the true up Petitions 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 2017-18 & FY 2018-19 and get the same audited to enable the Petitioner to file the true up petitions for the said years with the next tariff filing for FY 2020-21.* *The Petitioner is again directed to file APR for FY 2019-20 along with the tariff petition for FY 2020-21.*
Petitioner's response in the present Tariff Petition *It is submitted that the Accounts for the FY 2015-16 & FY 2016-17 has been completed & audited and True-up for the years is submitted in the instant petition. The Accounts for the FY 2017-18 is completed but the audit for the same is yet to be done by AG. The accounts for the FY 2018-19 is under compilation. It is submitted that the True-up for the FY 2017-18 & FY 2018-19 shall furnished after completion of the Audit for the respective years. Hon'ble Commission may kindly allow the same.* *The APR for the FY 2019-20 is submitted in the instant petition.*
Commission's response The Commission has noted the submission of the Petitioner and has clubbed the following directive with the Directive 9.1.1.

9.1.3. Capital Expenditure

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 20th May 2018 *The Commission observes that the Petitioner has submitted the actual capitalization for previous years upto FY 2017-18. However, the Petitioner has still not submitted the details of capital expenditure and capitalization for first six months of FY 2018-19. Accordingly, the Commission directs the Petitioner to submit the detailed statement of capital expenditure and capitalization upto March 2019 within three months from issue of the Tariff Order. Further, the Commission directs the Petitioner to regularly submit the quarterly report on capital expenditure and capitalization for the second control period within three months after completion of each quarter in timely manner.*
Petitioner's response in the present Tariff Petition *It is submitted that capital expenditure and capitalization for FY 2018-19 have been submitted in Annex I of letter no. 67/2/2/Ele-2018/1718 dated September 12, 2019. LED will submit quarterly report on capital expenditure and capitalization for second control period within three months after completion of each quarter.*
Commission's response The Commission has noted the submission of the Petitioner. 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.

9.1.4. Improvement of specific fuel consumption

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 20th May 2019 *The Commission has observed that the Petitioner has still not submitted the details of the progress report on overhauling of the existing DG sets and augmentation of DG capacity in the last three years. The Commission sought data on actual fuel consumption and actual generation for FY 2016-17 and FY 2017-18 in additional information. From the data submitted by the Petitioner, it was observed that the actual specific consumption of HSD and Lubricant increased from 260.70 ml/kWh for HSD and 0.96 ml/kWh for Lubricant in FY 2016-17 to 271.53 ml/kWh for HSD and 1.02 ml/kWh for Lubricant in FY 2017-18 respectively. The Commission has already approved the capital expenditure for Installation / Replacement / Augmentation of DG Sets for the second control period in Business Plan order. Therefore, it is expected that the specific fuel consumption will improve from the present level. Accordingly, the Commission directs the Petitioner to submit the quarterly progress report on overhauling of the existing DG sets and augmentation of DG capacity, failing which the Commission will be constrained to take appropriate action against the Petitioner.*
Petitioner's response in the present Tariff Petition *The proposed augmentation for F Y 2017-18 and F Y 2018-19 was delayed due to administrative reasons. From 2012 onwards no augmentation was done. Now this year 3 numbers 1010 KVA engines will be added each at Minicoy, Amini and Kalpeni. Also 4 numbers 750 KVA engines tender process have already in the final stage. LED will submit progress of DG augmentation on quarterly basis from next quarter onwards.*
Commission's response The Commission has noted the submission of the Petitioner. The Commission directs the Petitioner to submit the progress report on quarterly basis.

9.1.5. Manpower Studies

Originally issued in Tariff Order dated 11th April 2014
Commission's latest directive in Tariff Order dated 20th May 2018 *The Petitioner is directed to expedite the process for completion of manpower study and submit the report within three months of issuance of this order.*
Petitioner's response in the present Tariff Petition *It is submitted that Manpower Study by the Consultant is almost complete and the report will be submitted in due course.*
Commission's response The Commission directs the Petitioner to submit the manpower studies report within two months of issuance of this order.

9.1.6. Interest on security deposit

Originally issued in Tariff Order dated 31th October 2012
Commission's latest directive in Tariff Order dated 20th May 2019 *The Commission directs the Petitioner to submit the details of interest on security deposit paid/settled in the bills of consumers during FY 2016-17, FY 2017-18 and first nine months of FY 2018-19 (April to December 2018) within 3 months from the date of this Order.*

Petitioner's response in the present Tariff Petition *It is submitted that the details of interest on security deposit paid/settled in the bills of consumers during FY2016-17, FY 2017-18 and FY2018-19 has been submitted in Annex II.*
Commission's response The Commission has noted the Petitioner's submission and directs the Petitioner to pay interest on security deposits in a timely manner as specified in Supply Code 2018.

9.1.7. 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 20th May 2019 *The Commission has noted the submission of the Petitioner. Still the Petitioner has not submitted the report giving details of the number of non-functional or defective meters and the action plan for replacement of such meters. In this regard the Commission directs the Petitioner to comply with the direction within three months from the issuance of this order, else proceedings under Section 142 of the Electricity Act 2003 shall be initiated against the Petitioner for repeated non-compliance.*
Petitioner's response in the present Tariff Petition *It is submitted that all the consumers of LED are installed with energy meters. No unmetered connections exist. The details of defective meters have been submitted in Annex III. Whenever energy meter becomes defective department will be replacing it within short period of time. Department is in the process of installation of Smart Meters for all consumers initially in Kavaratti and Minicoy and latter all the other island consumers will be installed with Smart Meters. Department is expected that EESL will complete these work by 2020.*
Commission's response 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.

9.1.8. Energy Audit Report

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 20th May 2019 *It is disheartening to see that the Petitioner has not been able to comply with the majority of the directions issued by the Commission. The Commission directs the Petitioner to comply with the direction within one month from the issuance of this order.*
Petitioner's response in the present Tariff Petition *Energy Audit work has almost completed by the Consultant. Commission may please allow more time for submission of Energy Audit Report. It is expected that the Report will be ready by next quarter.*
Commission's response The Commission has noted the submission of the Petitioner. The Commission directs the Petitioner to submit the energy audit report within two months from the issuance of this order.

9.1.9. State Load Despatch Centre

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 20th May 2019 *The Commission is of the view that though the power demand of each Island is being met by their on generating stations, however, establishment of SLDC will help in proper demand forecasting and capacity planning for the LED. Hence, the Commission directs the Petitioner to re-examine its decision on requirement of SLDC and prepare a roadmap for establishment of an independent SLDC.*
Petitioner's response in the present Tariff Petition *It is submitted that the department will prepare a roadmap for establishment of an independent SIDC. Currently department is not having sufficient experienced hands for establishing SLDC and will seek help from other organizations.*
Commission's response 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.

9.1.10. Slab wise details

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 20th May 2019 *The Commission again directs the Petitioner to provide the island-wise, month-wise and slab-wise detailed break up of number of consumers, connected load and energy sales under each consumer category for the last five years within three months of the issuance of this order. Further, the Commission also directs the Petitioner to maintain and submit monthly island-wise information for category-wise sales, number of consumers, connected load, T&D losses, plant-wise generation/purchase, fuel cost, etc. on quarterly basis within three months of the issuance of this order.* *Failing to comply with above directions the Commission may initiate proceedings under Section 142 of the Electricity Act 2003 for repeated non-compliance.*
Petitioner's response in the present Tariff Petition *Island-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 have been submitted in Annexure-V to VIII.*
Commission's response 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.*

9.1.11. Details of O&M Expenses

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 20th May 2019 *The Commission has noted the submission of the Petitioner and directs the Petitioner to submit the detailed break-up of Employee Expenses, R&M Expenses and A&G expenses in the next Tariff Petition.*
Petitioner's response in the present Tariff Petition *The break-up of Employee Expenses, R&M Expenses and A&G expenses is being submitted separately.*

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

9.1.12. Details of upcoming power plants

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 20th May 2019 *The Commission has observed that the Petitioner had proposed purchase of power to meet RPO in Business Plan through development of floating Solar, repowering of existing ground mounted solar power projects, development of rooftop solar power projects, development of small scale wind turbines, purchase of power from NTPC from agro-waste based biomass system. However, in the MYT Petition, the Petitioner has not projected any purchase through above sources.* *The Commission directs the Petitioner to submit the quarterly status report on procurement of power from the approved solar plants and details of the ongoing and proposed installation of solar power plants.*
Petitioner's response in the present Tariff Petition *LED will submit quarterly status on procurement of power from the approved solar plants and details of ongoing and proposed installation of solar power plants. Solar energy generation for the past 5 years have been submitted in Annexure —IV.*
Commission's response 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.*

9.1.13. Explore alternate sources of energy generation

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 20th May 2019 *The Commission has observed that the Petitioner had proposed purchase of power to meet RPO in Business Plan through development of floating Solar, repowering of existing ground mounted solar power projects, development of rooftop solar power projects, development of small scale wind turbines, purchase of power from NTPC from agro-waste based biomass system. However, in the MYT Petition, the Petitioner has not projected any purchase through above sources. The Commission directs the Petitioner to submit the quarterly status report on procurement of power from the approved solar plants and details of the ongoing and proposed installation of power plants apart from diesel based generating stations.*
Petitioner's response in the present Tariff Petition The Petitioner has informed that they have chalked out a plan in which during the next three years 50% of the total power purchase will be from solar generation.
Commission's response 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.

Annexures

Annexure 1: List of Stakeholders who attended the Public hearing on 12th February 2020 in Kalpeni and 13th February in Kavaratti

Table 144: List of Stakeholders

S.No.	Name of Person (Mr/Ms)
List of Stakeholders in Kalpeni	
1	P. Muthukoya
2	P. Kazim Koya
3	A.K. Khalid
4	U.P. Hamza
5	N.P. Sayed
6	Koya C.P.
7	A.M Kasmi Koya
8	Abdul Salam
9	K. Sayed Mohammed
10	Anwar Hussain
11	Koya K.I.N.
12	A.K. Abdul Gaboor
13	Abdul Hukeem C.G.
14	Hamza Koya
15	Sayed Buhari P.P.
16	Hyder A.K.
17	Koya K.P.
18	Shafeeq C.N.
19	Rafeeq M
20	Abdul Azeez
List of Stakeholders in Kavaratti	
1	Abdul Azeez SK
2	Shukoor P.P.
3	Aboobacker Koya P.P.
4	Doo Koya C.P.
5	M.I. Attakoya
6	T.P. Hamsan
7	Kamalukhin A
8	Farisha Beegum
9	Sithunnisa E
10	Nafeesa Begum PK
11	Rasiyabi KP
12	Moominath AP
13	Sanooj K

S.No.	Name of Person (Mr/Ms)
14	Hussain B
15	Jhajunnisa