TARIFF ORDER

Approval of Aggregate Revenue Requirement for 2nd MYT Control Period (FY 2019-20 to FY 2021-22) & Determination of Retail Supply Tariff for the FY 2019-20

Petition No. 273/2018

For

Lakshadweep Electricity Department

20th May 2019

JOINT ELECTRICITY REGULATORY COMMISSION
For the State of Goa and Union Territories,
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Table of Contents

List of Tables

List of abbreviations

Abbreviation	Full Form
A&G	Administrative and General
Act	The Electricity Act, 2003
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
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)

Smt. Neerja Mathur (Member)

Petition No. 273/2018

In the matter of

Approval of Aggregate Revenue Requirement for 2nd MYT Control Period (FY 2019-20 to FY 2021-22) & Determination of Retail Supply Tariff for the FY 2019-20.

And in the matter of

Lakshadweep Electricity Department (LED) .... Petitioner

ORDER

Dated: 20th May 2019

1) This order is passed in respect of the Petition filed by the Electricity Department, Lakshadweep (herein after referred as the Petitioner or LED) for approval of Aggregate Revenue Requirement for 2nd MYT Control Period (FY 2019-20 to FY 2021-22) and Retail Supply Tariff for the FY 2019-20.

2) On receipt of the Petition, the Commission scrutinised its contents and requisitioned further information/clarifications on the data gaps observed in the Petition to take a prudent view of the Petition. The Commission also held a Technical Validation Session to determine sufficiency of data and the veracity of the information submitted. Further, suggestions/comments/objections were invited from the public/stakeholders. Public Hearings were also held and the Stakeholders/Public were heard.

3) The tariff, as detailed in the Chapter "Tariff Schedule" and other provisions as approved in this Order shall come into force from 1st June 2019 and shall remain valid till further Orders of the Commission.

4) The licensee shall publish the revised Tariff Schedule and the salient features of tariff 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. The Commission also directs the licensee to upload the tariff order on its website and announce the Tariff Structure and the salient features of the Tariff over public address system and local TV Channels, if any, within one week from the date of the Tariff Order in the respective local languages of the regions, in case of the non-availability/non-publication of any newspaper in the islands of the UT of Lakshadweep.

5) The Commission based on the Petitioner's submission, relevant MYT Regulations, facts of the matter and after proper due diligence has approved the ARR for the 2nd MYT Control Period along with the retail supply tariff for FY 2019-20.

The following table provide the ARR and Revenue Gap as projected by the Petitioner and approved by the Commission for FY 2019-20:

Table 1: Revenue Gap / (Surplus) approved for FY 2019-20 (INR Crore)

S. No.	Particulars	FY 2019-20	
		Claimed	Approved
1	Net Revenue Requirement	176.58	135.71
2	Revenue from sale of power at Existing Tariff	23.61	23.94
2	Increase/(decrease) in revenue from sale of power at Approved Tariff	2.65	1.49
3	**Net Gap during the year**	**150.32**	**110.28**
4	Add: Previous Year Gap	0.00	0.00
5	**Total Gap**	**150.32**	**110.28**

6) In order to meet the entire gap of INR 110.28 Crore through tariff, an average tariff hike from INR 4.48/unit to INR 25.39/unit would be required. However, keeping in view the socio-economic constraints of consumers residing in the licensee area and the budgetary support by the Government to meet the gap, a nominal increase in tariff from the existing level of INR 4.48 / unit to INR 4.76/ unit is approved by the Commission.

7) The Commission has abolished BPL / Kutir Jyoti consumer category in absence of any consumers reported by the Petitioner in the said category and has introduced a new category of Life line Connection for consumers having consumption upto 50 units in order to provide benefit of lower tariffs to the weaker section of the society having consumption upto 50 units per month. The tariff for this lifeline category will be applicable only for the consumers consuming upto 50 units per month. For consumers having consumption higher than 50 units per month, the tariff as specified for Domestic Connection shall be applicable.

8) The Commission believes that the demand for charging infrastructure for electric vehicles will increase in the near future due to increased commercialization. Furthermore, the Commission is of the opinion that to impart the necessary impetus for the adoption of E-Vehicles in the Territory a sustainable framework has to be developed and having a designated electricity tariff is the first step towards achieving it. Therefore, keeping in view the anticipated demand and need, the Commission introduces a new category namely Electric Vehicle Charging Stations for consumers setting up infrastructure for charging of Electric vehicles/ Electric rickshaws etc. and has fixed the tariff as per the guidelines of Ministry of Power, Govt. of India.

9) The Commission has also introduced the two part tariff for the consumers falling under category of Public Lighting.

10) The Commission has increased the average tariff for FY 2019-20 by 6.21% from the existing tariff of FY 2018-19.

11) Ordered as above, read with attached document giving detailed reasons, grounds and conditions.

-sd-	**-sd-**
(Neerja Mathur)	**(M. K. Goel)**
Member	**Chairperson**

Place: Gurugram
Date: 20th May 2019

1. Chapter 1: Introduction

1.1 Joint Electricity Regulatory Commission (JERC) Formation

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 "Joint Electricity Regulatory Commission for the Union Territories" vide notification no. 23/52/2003-R&R dated May 2, 2005. Later with the joining of the State of Goa, the Commission came to be known as "Joint Electricity Regulatory Commission for the State of Goa and Union Territories" (hereinafter referred to as "JERC" or "Commission") vide notification no. 23/52/2003-R&R (Vol. II) dated May 30, 2008.

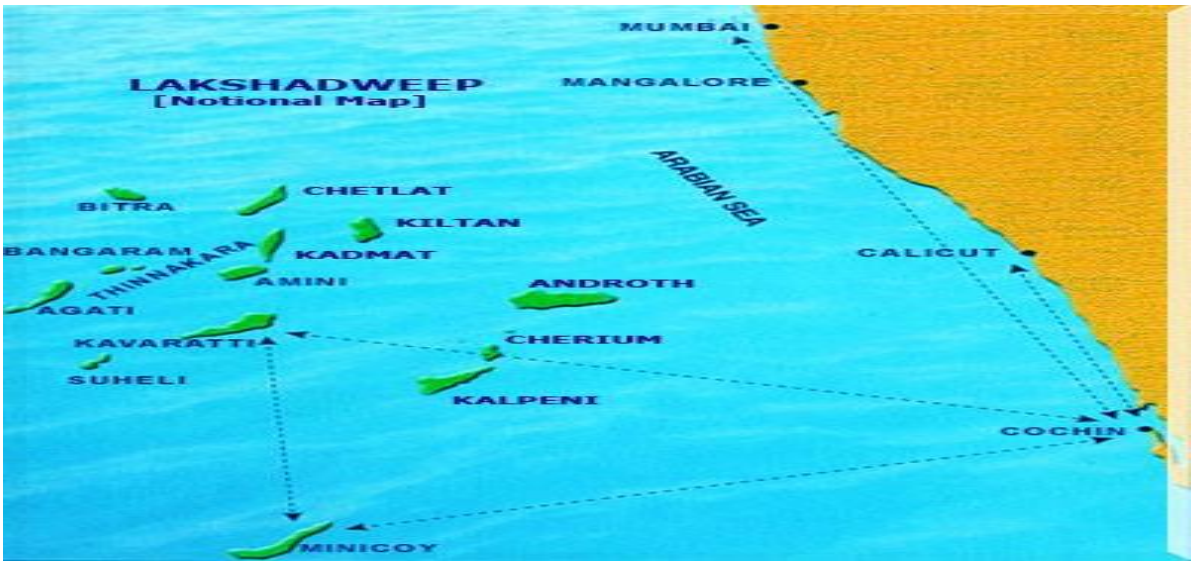
The JERC is an autonomous body responsible for regulation of the Power Sector in the State of Goa and the Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry, consisting of generation, transmission, distribution, trading and use of electricity. Its primary objective includes taking measures conducive to the development of the electricity industry, promoting competition therein, protecting interest of consumers and ensuring 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 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 pressure cables or overhead lines or associated with such high-pressure 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 present Installed Capacity of LED is 23.39 MW from various generating sources. The Peak demand for last year touched 10MW (FY 2017-18) and is around 10.2 MW in FY 2018-19.

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

Table 2: Electricity Department at a glance (FY 2017-18)

S. No.	Particulars	Details
1	Total Installed Capacity	23 MW
1(a)	Diesel Generation	21 MW
1 (b)	Solar Generation	2 MW
2	No. of Power Plants	22 Nos (11 Nos of Diesel power plant + 11 Nos of solar power plant)
3	HT Line	112 kms
4	LT Line	322 kms
5	Distribution Transformer	106 Nos.
6	No. of consumers	23,947
7	T&D Loss	13.10%

1.4 Multi Year Tariff Regulations, 2018

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2018 on 10 August 2018. The said Regulations have been hereinafter referred to as the "JERC MYT Regulations". As per Clause 2.1.17 of these Regulations, the "Control Period" is defined as the multi-year period comprising of three financial years from FY 2019-20 to FY 2021-22.

These Regulations are applicable to all the generation companies and 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 Approval of Business Plan for Second MYT Control Period from FY 2019-20 to FY 2021-22

As per Clause 8.1 of the JERC MYT Regulations, the Petitioner is required to file Business Plan Petition for the three years Control Period from FY 2019-20 to FY 2021-22 with details for each year of the Control Period for approval of the Commission.

LED submitted the Petition via email for approval of 'Business Plan for MYT Control Period from FY 2019-20 to FY 2021-22' on 28 August, 2018. The hard copy of the same was received by the Commission on 13 September, 2018.

After initial scrutiny/analysis, the Petition (Soft Copy) on Business Plan for the Second Control Period FY 2019-20 to FY 2021-22 was admitted on 4 September, 2018 and was marked as Petition no. 263/2018. Subsequently, the Commission approved the Business Plan vide order dated 21.12.2018 with the direction to the Petitioner to submit the MYT Petition at the earliest.

1.6 Filing and Admission of the Present Petition

As per Regulation 9 and 16 of the JERC MYT Regulations, the Petitioner is required to file Multi Year Tariff Petition for the three years Control Period from FY 2019-20 to FY 2021-22 with details for each year of the Control Period and Tariff proposal for the first year of the Control Period for approval of the Commission.

The Petitioner has submitted this Petition for approval of its Multi Year Tariff for the three years Control Period from FY 2019-20 to FY 2021-22 on 28th December 2018, which was admitted by the Commission on 31st December, 2018 and marked as Petition no. 273/2018.

1.7 Interaction with the Petitioner

The Order has referred at numerous places to various actions taken by the "Commission". It may be mentioned for the sake of clarity that the term "Commission," except for the Hearing and Orders, denotes the Secretariat of the Commission responsible for carrying out technical due diligence and validation of data of the Petitions filed by the utilities, obtaining and analysing information/clarifications received from the utilities, and submitting relevant issues for consideration of the Commission.

To analyse the Petition, the Commission's staff held discussions with the Petitioner/Petitioner's representatives, obtained information/clarifications wherever required, and carried out technical validation with regard to the information provided by the Petitioner. The Commission's staff interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for analysis of the Tariff Petition and conducted a Technical Validation Session (TVS) with the Petitioner during which discrepancies in the Tariff Petition were pointed out and additional information required by the Commission was indicated. This session was held in the office of JERC, Gurgaon, Haryana on 15th February 2019. The Petitioner submitted its response on the issues through various letters/emails. The following table provides the list of interactions with the Petitioner along with the dates:

Table 3: Interactions with the Petitioner

S. No.	Subject	Date
1	Receipt of Petition by the Commission	December 28, 2018
2	Admission of the Petition by the Commission	December 31, 2018
3	Deficiency note issued by the Commission	January 09, 2019
4	Reply to the Deficiency Note received by the Commission	January 16, 2019
5	Additional Information sought by the Commission	January 18, 2019
6	Reply of Petitioner to additional data gaps	February 7 and 12, 2019
7	Additional Information sought during TVS by the Commission	February 15, 2019
8	Reply of Petitioner to the additional queries sought during TVS	February 16, 2019

1.8 Public Hearing Process

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 also uploaded the Petition on its website (http://lakpower.nic.in) for inviting objections and suggestions on the Petition. Interested parties/stakeholders were requested to file their objections / suggestions on the Petition to the Commission with a copy to the Petitioner on or before 28 January, 2019. The Commission also uploaded the MYT 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 28th January 2019 at Kavaratti and 30th January 2019 at Kadmat. The schedule of Public Hearing conducted by the Commission is as below.

Sr. No.	Date & Time	Venue of Hearing
1	28th January 2019 at 3:00 PM onwards	Conference Hall, 2nd Floor, Office of the Village (Dweep) Panchayat, Near Main Jetty, Kavaratti
2	30th January 2019 at 10:00 AM onwards	Bharkat Bhavan, Near Government High School, Kadmat.

During the public hearing, each Stakeholder was provided with an opportunity to present his views on the petition filed by the Petitioner. All those present in the hearing, irrespective of whether they had given a written comments / observations or not, were given an equal opportunity to express their views. The list of Stakeholders is attached at Annexure 1 to this order. The list includes the Stakeholders who gave their written comments / observations and presented before the Commission; and other stakeholders who did not submitted their written comments / observations earlier but presented before the Commission orally. The Commission has examined the issues and concerns expressed by stakeholders. The major issues raised/indicated during the public hearing, along with the comments/replies of the utility and the views of the Commission, thereon, have been summarized in **Chapter 2** of this order.

1.9 Organization of the Order

This Order is organized in the following chapters:

- **Chapter 1** of the Order provides the Background and Brief description of the Territory, utility and regulatory process undertaken by the Commission.
- **Chapter 2** of the Order provides a Summary of various suggestions / observations submitted by the Stakeholders, followed by the response of the Petitioner and the rulings of the Commission on these issues.
- **Chapter 3** of the Order discusses the views of the Commission on True-Up of previous years.
- **Chapter 4** of the Order discusses various components of ARR for the MYT Control Period FY 2019-20 to FY 2021-22, key issues and Commission's ruling on the same.
- **Chapter 5** of the Order discusses the approach of the Commission on Tariff Principles and Design.
- **Chapter 6** of the Order discusses the Tariff Schedule approved by the Commission.
- **Chapter 7** of the Order provides necessary directions of the Commission to LED.

2. Chapter 2: Stakeholder Consultation

2.1 Regulatory Process

The Public Hearing was held on 28th January 2019 at Conference Hall, Office of the Village (Dweep) Panchayat, Kavaratti Island and on 30th January 2019 at Bharkat Bhavan, Near Government High School, Kadmat Island in respect of approval of Aggregate Revenue Requirement for the 2nd MYT Control Period (FY 2019-20 to FY 2021-22) & Retail Supply Tariff for FY 2019-20. During the Public Hearing, stakeholders presented their views in person before the Commission. All the participants from the public, who had not submitted written comments earlier, were also given an equal opportunity to present their views/ suggestions/objections in respect of the Petition.

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

The Commission appreciates the efforts of various stakeholders for providing suggestions / comments / observations and making the Power 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. Relevant observations have been suitably considered by the Commission while finalising the Tariff Order. The details of issues raised by the Stakeholders, response of the Petitioner thereon and the views of the Commission on the same are as follows:

2.2.1 Cost of Fuel

Stakeholder Comments:

- Stakeholders submitted that from 2014 onwards usage of LED bulbs has increased and therefore the consumption of electricity should have been decreased. Hence, the requirement of diesel as projected for the control period may get reduced. Further, the Stakeholder submitted that transportation losses of diesel are very high and inquired about the actual transportation losses of diesel from LED.

Petitioner's Response:

- LED submitted that actual transportation losses of diesel is less than 2%.

Commission's View:

- The Commission appreciates the suggestion of the stakeholders and directs the Petitioner to expedite the completion of installation of storage tank for diesel at various islands in order to reduce the transportation losses.

2.2.2 Tariff Proposal

Stakeholder Comments:

- Stakeholders submitted that the Petitioner should have taken views of the public before filing the tariff proposal before the Commission.

- Stakeholder submitted that 30% to 40% of the total consumption of electricity is consumed by Government departments and hence requested the Commission to increase the tariff for Government department thereby not burdening the domestic consumers and commercial consumers. Further, the stakeholder requested the Commission to decrease the tariff for Domestic and Commercial consumers citing the financial condition of the people of Lakshadweep.

Petitioner's Response:

- The Petitioner has not submitted any response to the same.

Commission's View:

- It is noteworthy that the Petitioner has not proposed any tariff hike for the consumers of domestic category having consumption between 0-100 kWh and 101-200 kWh. The Petitioner has also proposed the Tariff hike for Govt. Departments. However, the Commission has noted the submission of all the stakeholders. The Commission has discussed the principles adopted for approving the Tariff in Chapter 5 of the Tariff Order.

2.2.3 Non-compliance of CGRF Orders

Stakeholder Comments:

- Stakeholder submitted that CGRF is not able to resolve the petitions pending before it due to lack of proper infrastructure. Further, the CGRF orders are not being complied with by LED.

Petitioner's Response:

- LED submitted that a separate building for the office of CGRF is under construction but it may take 1-2 years for completion.

Commission's View:

- The Commission expressed grave concern over the issue and directed LED to ensure adequate alternate infrastructure for proper functioning of the CGRF till the separate building is constructed. Further, the Commission informed the stakeholder that if the orders of the CGRF are not complied with, then the same may be appealed before the Ombudsman for the redressal of the issue.

2.2.4 Separate tariff for Agricultural category

Stakeholder Comments:

- Stakeholder submitted that a separate tariff may be provided for all those consumers who are utilizing agricultural land for the purpose of poultry, coconut cultivation etc. Presently, commercial tariff is being charged to these consumer categories.

Petitioner's Response:

- The Petitioner has not submitted any response to the same.

Commission's View:

- The Commission has noted the submission of the stakeholder and has considered the same while fixing Tariff.

2.2.5 Difficulty in taking New Connection

Stakeholder Comments:

- Stakeholder submitted that they are facing difficulty in taking new electricity connection due to requirement of Aadhaar Card and title deed of the land.

Petitioner's Response:

- The Petitioner has not submitted any response to the same.

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.

2.2.6 Non-maintenance of Installation of Solar PV plants and street lights

Stakeholder Comments:

- Stakeholder submitted that the Petitioner is not carrying out the timely maintenance of already installed Solar PV plants and Solar Street lights.

Petitioner's Response:

- The Petitioner has not submitted any response to the same.

Commission's View:

- The Commission directed the Petitioner to carry out the proper maintenance of the existing solar plants and street lights.

2.2.7 Alternate Source of Power Generation

Stakeholder Comments:

- Stakeholder submitted that as the cost of diesel is increasing, generation of power from Diesel generating station is not feasible and suggested to explore possibility of generation of power from Biomass and tidal energy.

Petitioner's Response:

- The Petitioner has not submitted any response to the same.

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.

2.2.8 Reduction of tariff for Kadmat Island

Stakeholder Comments:

- The Stakeholder submitted that the Lakshadweep islands are divided into two group of islands, Minor Islands (also known as Kadmat Islands) and Major Islands. This bifurcation is based on the economic condition of the people residing in these islands i.e. Major islands has better economic condition as compare to minor islands. Hence it was requested that the Commission may reduce tariff for Minor Islands (Kadmat Island) considering the financial condition of the people residing there.

Petitioner's Response:

- The Petitioner has not submitted any response to the same.

Commission's View:

- The Commission appreciates the suggestion of the stakeholders. In accordance with provisions of the Electricity Act, 2003, the Commission cannot show undue preference to any consumer but may differentiate according to the consumer's 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. Hence, a separate tariff cannot be allowed / approved for different islands of Lakshadweep.

2.2.9 LED Bulbs and Solar Lamps to be distributed by LED

Stakeholder Comments:

- The Stakeholder submitted that the LED bulbs and solar lamps should be distributed by LED to each household which shall lead to reduction in energy consumption.

Petitioner's Response:

- LED submitted that the distribution of LED is already in process. They have purchased 1 Lakh LED bulbs and 50,000 tube light for distribution.

Commission's View:

- The Commission appreciates the steps taken by Petitioner and directs the Petitioner to expedite the process of distribution of LED bulbs and tube light.

3. Chapter 3: True Up of FY 2015-16, FY 2016-17 and FY 2017-18

3.1 Applicable provision of Regulations

The True-up of FY 2015-16 and FY 2016-17 & FY 2017-18 is to be carried out as per the provisions of Regulation 8 of Tariff Regulations, 2009 and Tariff Regulations, 2014 as follows:

"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'.

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

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

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.

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.

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.

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 truing up of previous years

The Petitioner has not submitted the true-up Petition for previous years along with the audited accounts. The Commission in Tariff Order for FY 2018-19 had directed the Petitioner as follows:

"The Commission observes that the Petitioner has not filed for the True-up for FY 2015-16 in the current Petition. The Petitioner is directed to prepare annual accounts in a timely manner and file for the True-up of FY 2015-16 and FY 2016-17 along with audited accounts in the next tariff filing, else proceedings under Section 142 of the Electricity Act 2003 shall be initiated against the Petitioner for repeated non-compliance."

In response to the queries of the Commission on non-submission of true up of FY 2015-16 and FY 2016-17, the Petitioner submitted that the Accounts for the FY 2015-16 & FY 2016-17 have been finalised and submitted to AG for audit three months back and the True-up of these years shall be submitted upon completion of audit.

The Commission in its previous order had stressed upon the requirement of the audited accounts to bring in more accuracy in the estimates of the Commission. The JERC Tariff regulation also requires the licensee to file the true up along with the audited accounts in the filing.

In absence of the audited accounts of FY 2015-16 and FY 2016-17, the Commission has not carried out true up for the above said years. 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.

4. Chapter 4: Annual Performance Review of FY 2018-19

4.1 Applicable provisions of Tariff Regulations, 2014

The review of FY 2018-19 is to be carried out as per the following provisions of the JERC for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014 (herein after referred as MYT Regulations, 2014):

"8. Annual Review of Performance and True-up

(1) The Commission shall undertake a review along with the next Tariff Order of the expenses and revenues approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/pre-actuals of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments/ changes in case such variations are for adequate and justifiable reasons. Such an exercise shall be called '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."

4.2 Annual Performance Review (APR) of FY 2018-19

The ARR for the first MYT Control Period (FY 2016-17 to FY 2018-19) was approved by the Commission vide the MYT Order dated 31st March 2016 along with the Tariff for the FY 2016-17. In accordance with the Regulation 8 (1) of the MYT Regulations, 2014, the Petitioner has not filed for the Annual Performance Review for the FY 2018-19.

The Commission has taken note of the same and directs the Petitioner to follow the Regulations in totality and accordingly directs LED to file APR for FY 2019-20 along with the tariff petition for FY 2020-21.

5. Chapter 5: Determination of Aggregate Revenue Requirement for 2nd MYT Control Period (FY 2019-20 to FY 2021-22)

5.1 Approach for the approval of ARR for the MYT Control Period

The Commission approved the Business Plan for the Second Control for the Petitioner for period from FY 2019-20 to FY 2021-22 vide order dated December 21, 2018. In this order the Commission had approved Capital investment Plan, Power Procurement Plan, Sales and Demand Projection, trajectory for certain variable for FY 2019-20 to FY 2021-22. Accordingly, as per the provision of the MYT Regulations, 2018, the Commission has approved various components of ARR based on the approved Business Plan in this chapter.

5.2 Number of Consumers, Connected Load and Energy Sales

Petitioner Submission

The Petitioner has projected the number of consumers, connected load and the category wise sales as approved by the Commission in the Business Plan order dated December 21, 2018 for FY 2019-20 to FY 2021-22.

Commission's View

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

Table 4: Number of consumers approved by the Commission for FY 2019-20 to FY 2021-22

Number of Consumers	CAGR Approved	Estimated	Approved		
		Base Year	Second Control Period		
Consumer Category		FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Domestic	3.89%	20,496	21,294	22,122	22,982
Commercial	4.56%	2,512	2,626	2,746	2,871
Govt. Connection	2.68%	1,251	1,284	1,319	1,354
Industrial	3.51%	368	381	395	409
HT Consumers	10.00%	7	7	8	9
Public Lighting	1.35%	77	78	79	80
Temporary Connection	0.00%	160	160	160	160
Total		**24,871**	**25,831**	**26,828**	**27,865**

Table 5: Connected Load approved by the Commission for FY 2019-20 to FY 2021-22 (kW)

Connected Load (kVA) / Consumer Category	CAGR Approved	Estimated Base Year FY 2018-19	Approved Second Control Period FY 2019-20	FY 2020-21	FY 2021-22
Domestic	2.40%	87,653	89,754	91,906	94,109
Commercial	3.41%	16,357	16,916	17,493	18,090
Govt. Connection	3.32%	8,287	8,561	8,845	9,139
Industrial	4.17%	3,862	4,024	4,191	4,366
HT Consumers	8.16%	562	608	658	711
Public Lighting	3.67%	307	318	330	342
Temporary Connection	0.00%	66	66	66	66
Total		**117,095**	**120,248**	**123,490**	**126,824**

Table 6: Category wise sales approved by the Commission for FY 2019-20 to FY 2021-22 (MU)

Sales (MU) / Consumer Category	CAGR Approved	Estimated Base Year FY 2018-19	Approved Second Control Period FY 2019-20	FY 2020-21	FY 2021-22
Domestic	5.68%	37.94	40.10	42.38	44.78
Commercial	6.27%	3.05	3.24	3.44	3.66
Govt. Connection	1.54%	8.13	8.26	8.39	8.52
Industrial	1.97%	0.44	0.45	0.46	0.46
HT Consumers	10.00%	0.58	0.64	0.71	0.78
Public Lighting	2.43%	0.66	0.67	0.69	0.70
Temporary Connection	0.00%	0.09	0.09	0.09	0.09
Total		**50.89**	**53.45**	**56.15**	**59.00**

5.3 Transmission & Distribution Losses

Petitioner Submission

The Petitioner has considered the Transmission and Distribution (T&D) losses as approved by the Commission in the Business Plan order dated December 21, 2018 for FY 2019-20 to FY 2021-22 for determination of ARR.

Commission View

The Commission has already approved the Transmission & Distribution losses for the second control period in the Business Plan Order dated December 21, 2018.

Accordingly, the same has been considered by the Commission, which is as follows:

Table 7: T&D Losses approved by the Commission for FY 2019-20 to FY 2021-22

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
T&D loss trajectory (%)	12.75%	12.50%	12.25%

5.4 Energy Requirement

Petitioner Submission

The Petitioner has submitted that the energy requirement for the control period from FY 2019-20 to FY 2021-22 has been projected based on the approved sales grossed up with T&D losses approved by the Commission in Business Plan Order dated December 21, 2018.

Commission View

The Commission has already approved the energy requirement for the second control period from FY 2019-20 to FY 2021-22 in the Business Plan Order dated December 21, 2018. Accordingly, the Commission has considered the same for FY 2019-20 to FY 2021-22 as follows:

Table 8: Energy Requirement approved by the Commission for FY 2019-20 to FY 2021-22

Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
	Estimated	Approved	Approved	Approved
Energy Sales	50.89	53.45	56.15	59.00
Overall T&D Losses (%)	**13.00%**	**12.75%**	**12.50%**	**12.25%**
Overall T&D Losses (MU)	7.60	7.81	8.02	8.24
Total Energy Requirement (MU)	**58.50**	**61.26**	**64.17**	**67.23**

Further, the Commission in accordance with the Renewable Purchase Obligation (RPO) specified in JERC for State of Goa & Union Territories (Procurement of Renewable Energy), 2010 approved RPO target for the Second Control Period as follows:

Table 9: RPO Target approved by the Commission for FY 2019-20 to FY 2021-22

Description	FY 2019-20	FY 2020-21	FY 2021-22
Sales (MU)	53.45	56.15	59.00
RPO Obligation (%)			
Solar	4.70%	6.10%	8.00%
Non-Solar	6.80%	8.00%	9.00%
Total Solar & Non-solar (%)	**11.50%**	**14.10%**	**17.00%**
RPO Obligation for the Year (MU)			
Solar	2.51	3.42	4.72
Non-Solar	3.63	4.49	5.31
Total Solar & Non-solar (MU)	**6.15**	**7.92**	**10.03**

The Commission in the Business Plan order has directed the Petitioner to comply with the entire RPO target irrespective of Solar or Non-Solar Sources.

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

Table 10: Details of Source wise Energy Requirement Approved for FY 2019-20 to FY 2021-22 (MU)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
	Approved	Approved	Approved
Total Energy Requirement	**61.26**	**64.17**	**67.23**
Diesel Power Plants	**55.11**	**56.25**	**57.20**
Solar & Non-Solar Power Plants	**6.15**	**7.92**	**10.03**

5.5 Power Purchase Quantum and Cost

Petitioner Submission

The Petitioner has submitted that there is no availability of power from Central Generating Stations or from other sources/ open market/ power exchanges etc. and therefore the entire energy requirement is met by own generation for FY 2019-20 to FY 2021-22. The expected energy generation for FY 2019-20 to FY 2021-22 from existing and upcoming power generating station is as follows:

Table 11: Details of Power generation as submitted by the Petitioner for FY 2019-20 to FY 2021-22 (MU)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
	Projected	Projected	Projected
Units Generated (MU)	61.94	64.89	67.98
Auxiliary Consumption (MU)	0.68	0.72	0.75
Net Energy sent out (MU)	**61.26**	**64.17**	**67.23**

The Petitioner has submitted the details of the existing installed capacity of DG sets and Solar PV island wise, which is as follows:

Table 12: Existing Installed Capacity of DG Sets

Sr. No.	Name of Island	Existing Installed capacity (kW)			
		New		Old	Total
1	Minicoy	1 x 1000	1,000	800	3,400
		1 x 1600	1,600		
2	Kavaratti	2 x 1000	2,000	0	3,200
		2 x 600	1,200		
3	Amini	3 x 750	2,250	400	2650
4	Andrott	1 x 750	750	1,150	2,900
		2 x 500	1,000		
5	Kalpeni	1 x 750	750	500	1,750
		2 x 250	500		
6	Agatti	3 x 400	1,200	400	2,350
		1 x 750	750		
7	Kiltan	2 x 400	800	200	1,480
		1 x 480	480		
8	Kadmat	1 x 400	400	750	1,900
		1 x 750	750		
9	Chetlat	2 x 250	500	0	1,000
		1 x 500	500		
10	Bitra	1 x 100	100	330	430
11	Bangaram	1 x 60	60	120	180
Total			**16,590**	**4,650**	**21,240**

Table 13: Details of Installed Capacity of Solar PV Plants

Sr. No.	Name of Island	Existing Installed Capacity (kW)
1	Minicoy	210
2	Kavaratti	760
3	Amini	100
4	Andrott	320
5	Kalpeni	100
6	Agatti	100
7	Kadmat	260
8	Kiltan	100
9	Chetlat	100
10	Bitra	50
11	Bangaram	50
Total		**2,150**

Further, the Petitioner has submitted the details of the new generating station to be added / augmented / replaced during the control period as follows:

Table 14: Details of New Generation Capacity (kW)

Sr. No.	Name of Island	FY 2019-20	FY 2020-21	FY 2021-22
1	Minicoy	750	0	0
2	Kavaratti	0	750	750
3	Amini	750	0	0
4	Kalpeni	750	0	0
5	Agatti	0	750	750
Total		**2,250**	**1,500**	**1,500**

The Petitioner has submitted that approximately 96-97% of the power requirement is met through Diesel power generation and remaining through Solar Power Plants. Therefore, the cost of fuel i.e. HSD and Lubricants is a major component in cost of generation. The cost of fuel for the Second Control Period from FY 2019-20 to FY 21-22 has been projected based on the actual fuel cost prevailing in November 2018 escalated by 5% year on year basis. Accordingly, the projected cost of fuel for FY 2019-20 to FY 2021-22 is as follows:

Table 15: Projected Cost of Fuel submitted by Petitioner (INR Crore)

Sr. No.	Type of fuel	FY 2019-20	FY 2020-21	FY 2021-22
1	HSD	113.98	124.89	137.55
2	Lubricant	0.99	1.09	1.20
3	Total	114.37	125.98	138.75

Commission View

As per Regulation 12.1 of the MYT Regulations, 2018, power purchase and fuel cost is an uncontrollable parameter. Thus, the power purchase and fuel cost has to be revisited every year by the Commission based on the audited accounts. The Commission during the Technical Validation Session with the Petitioner sought island wise projected power generation for the control period. The Petitioner in reply has submitted the island wise projected diesel generation only for FY 2019-20, which is as follows:

Table 16: Island wise Projected Generation for FY 2019-20

Sl. No.	Islands	Generation projected in FY 2019-20 (kWh)
1	Minicoy	8,930,974
2	Kavaratti	14,101,374
3	Amini	6,070,697
4	Androth	9,122,433
5	Kalpeni	4,261,649
6	Agatti	7,457,434
7	Kadmat	4,810,927
8	Kiltan	3,311,873
9	Chetlat	1,772,943
10	Bitra	328,159
11	Bangram	166,086
	Total	**60,334,549**

Further, the Commission vide deficiency note sought island wise actual generation, Actual consumption of HSD and Lubricant oil and Cost of HSD and Lubricant for FY 2016-17 and FY 2017-18. The Petitioner in its reply has submitted the following details:

Table 17: Actual Fuel Consumption and Cost for FY 2016-17

Sr. No.	FY 2016-17	HSD	Lube Oil
1	Total Generation (kWh)	56,969,596	56,969,596
2	Total Cost of Fuel (in INR)	677,912,024	6,121,421
3	Total Consumption (ltr)	14,851,946	54,625
4	**Specific Consumption (ml/kWh) (4=3/1)**	**260.70**	**0.96**
5	**Fuel Rate (INR/ltr) (5=2/3)**	**45.64**	**112.06**

Table 18: Actual Fuel Consumption and Cost for FY 2017-18

Sr. No.	FY 2017-18	HSD	Lube Oil
1	Total Generation (kWh)	54,604,549	54,604,549
2	Total Cost of Fuel (in INR)	740,802,435	6,901,385
3	Total Consumption (ltr)	14,826,982	55,488
4	**Specific Consumption (ml/kWh) (4=3/1)**	**271.53**	**1.02**
5	**Fuel Rate (INR/ltr) (5=2/3)**	**49.96**	**124.38**

Further, during the interaction with the Petitioner, the Commission sought actual generation, actual fuel cost of HSD and Lubricant from April 2018 to November 2018 and computation of fuel cost as per the petition. In reply, the Petitioner submitted the statement showing cost of HSD from April to October 2018, as per which the prevailing prices of HSD in October 2018 is INR 66.92 per litre, whereas the average price during the period is INR 60.28 per litre. Similarly, the Petitioner submitted a statement of purchase of Lubricant for 2018, as per which the prevailing prices for Lubricant is INR 180 per litre. Further, the Petitioner has submitted the computation of cost of fuel as follows:

Table 19: Computation of Projected Fuel Cost as proposed by Petitioner

S. No.	Type of Fuel	FY 2018-19 (Estimated)	FY 2019-20	FY 2020-21	FY 2021-22
1	Diesel Generation (kWh)	57,404,548	60,194,548	63,144,548	66,234,548
2	HSD Rate (INR/ltr)	66.92	70	74	77
3	Lube Oil Rate (INR/ltr)	180	189	198	208
4	HSD SFC as per MYT order for FY 2018-19 (ltr/kWh)	0.26807	0.26807	0.26807	0.26807
5	Lube Oil SFC as per MYT order for FY 2018-19 (ltr/kWh)	0.00087	0.00087	0.00087	0.00087
6	HSD (INR Crore)	102.98	113.38	124.89	137.55
7	Lubricant (INR Crore)	0.90	0.99	1.09	1.20
8	**Total (INR Crore)**	**103.88**	**114.37**	**125.98**	**138.75**

From the data submitted by the Petitioner it is observed that the prices of HSD has increased enormously from INR 50.11 per litre as on 01.04.2016 to INR 66.62 per litre as on 06.11.2018, whereas the cost of Lubricant has increased from INR 173.05 per litre as on April 2016 to INR 180.00 per litre as on August 2018. It is understood that the cost of fuel is not in control of the Petitioner and is dependent on the prevailing market condition.

As per Regulation 37.3 of the JERC MYT Regulations, 2018, the recovery of Aggregate Revenue Requirement and fuel cost shall be in accordance to prevalent CERC Tariff Regulations which is as follow:

"37.3 The recovery of Aggregate Revenue Requirement and fuel cost for a Generation Company shall be in accordance with the prevalent CERC Tariff Regulations governing generation of electricity."

With regard to cost of fuel, Regulation 23 of the presently prevailing CERC Tariff Regulations, 2014 provides as follows:

*"**23. Landed Fuel Cost for Tariff Determination:** The landed fuel cost of primary fuel and secondary fuel for tariff determination shall be based on actual weighted average cost of primary fuel and secondary fuel of the three preceding months, and in the absence of landed costs for the three preceding months, latest procurement price of primary fuel and secondary fuel for the generating station, before the start of the tariff period for existing stations and immediately preceding three months in case of new generating stations shall be taken into account."*

Accordingly, the Commission sought HSD prices prevailing for preceding three months i.e. December 2018, January 2019 and February 2019.

The Petitioner vide email dated 26 February, 2019 and 02 March, 2019 submitted the HSD prices as follows:

Table 20: HSD rates submitted by Petitioner (INR/Litre)

Sr. No.	Month	HSD Rate (INR/Litre)
1	December 2018	56.15

2	January 2019	51.42
3	February 2019	55.46
4	**Average**	**54.34**

Accordingly, considering the volatile nature of prices of HSD and in line with the JERC Tariff Regulations, 2018, the Commission has considered the HSD price of INR 54.34/litre, which is the average of the HSD prices prevailing during December 2018 to February 2019. Further, with regard to Lube Oil prices, the Commission has considered INR 180 per litre prevailing in October 2018 (i.e. the latest available price) for the Control Period.

Further, the Commission has observed that the actual specific fuel consumption has increased from 260.70 ml/kWh of HSD and 0.96 ml/kWh of lubricant for FY 2016-17 to 271.53 ml/kWh of HSD to 1.02 ml/kWh of lubricant for FY 2017-18. Considering the capital investment approved by the Commission for installation/replacement/augmentation of DG at various islands, it expected that the specific fuel consumption shall improve from the existing levels. Therefore, the Commission has considered the average of the actual specific fuel consumption of HSD and Lubricant for FY 2016-17 and FY 2017-18 as 266.12 ml/kWh and 0.99 ml/kWh respectively for projecting the fuel cost for the second Control Period from FY 2019-20 to FY 2021-22.

Further, it is observed that the Petitioner has not claimed any cost towards purchase of power to meet RPO approved by the Commission in Business Plan Order. However, the Petitioner in the Business Plan petition had submitted that it would meet the proposed RPO through development of floating solar power projects, Repowering of existing ground mounted solar projects, Development of roof top solar power projects, Development of small-scale wind turbines. In addition, the Petitioner in its Business Plan Petition had also proposed to purchase power from NTPC where they will design, develop and commission concentrated solar thermal agro-waste biomass system for power and portable water production in Andrott island. However, in absence of preparedness shown by the Petitioner to procure power to comply RPO in the MYT Petition, the Commission is inclined to consider that the Petitioner shall fulfil the RPO by purchasing the Solar and Non-Solar REC.

Accordingly, the Commission has considered that the Petitioner shall meet part of the RPO by its own generation and remaining through purchase of REC. The Commission has considered floor price of Solar and Non-Solar REC of Rs. 1000/MWh for meeting the RPO Obligations. However, the same shall be reviewed based on the actual RPO compliance and REC prices by the Petitioner at the time of Annual Performance Review and / or True Up of FY 2019-20 to FY 2021-22.

Accordingly, the approved cost of fuel and power purchase for the control period from FY 2019-20 to FY 2021-22 is as follows:

Table 21: Approved Fuel Cost and Power Purchase Cost for FY 2019-20 to FY 2021-22

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
	Power Generation from DG Sets			
1	Units Generated in MU	55.11	56.25	57.20
2	Specific HSD Consumption per kWh (ml)	266.12	266.12	266.12
3	Oil Consumption (Litre) (3=1*2)	14,665,689.70	14,969,062.71	15,221,873.54
4	Cost of HSD per Litre (INR)	54.34	54.34	54.34
5	**Total Cost of HSD (INR Crore) (5=3*4)**	**79.70**	**81.35**	**82.72**
6	Specific Lube oil consumption per kWh (ml)	0.99	0.99	0.99

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
7	Oil Consumption (Litre) (7=1*6)	54,421.67	55,547.43	56,485.56
8	Cost of Lubricant per Litre (Rs.)	180.00	180.00	180.00
9	**Total Cost of Lubricant (INR Crore) (9=7*8)**	**0.98**	**1.00**	**1.02**
10	**Total Cost of fuel for power generation from DG (INR Crore) (10=5+6)**	**80.68**	**82.35**	**83.74**
	Power Generation from Existing Solar PV of LED			
11	Units Generated in MU	2.20	2.20	2.20
12	Cost of Generation (INR/unit)	0.00	0.00	0.00
13	**Total Cost of Generation (INR Crore) (13=11*12)**	**0.00**	**0.00**	**0.00**
	Power Purchase from other sources for meeting the RPO			
14	Quantum in MU	3.95	5.72	7.83
15	Cost of REC in (INR/unit)	1.00	1.00	1.00
16	**Total Cost to comply RPO (INR Crore) (16=14*15/10)**	**0.40**	**0.57**	**0.78**
17	**Total Cost of Power Generation and Power Purchase (INR Crore) (17=10+13+16)**	**81.07**	**82.92**	**84.52**

Further, FPPCA formula has been separately notified under the Regulation. It is seen that in the case of LED, majority of the generation is diesel based, making per unit cost of generation very high compared to other utilities. In view of this, the approved tariff is not covering the full cost of supply. Historically, there has been substantial gap between the actual cost of supply and revenue realized. This gap so far has been borne by the administration of LED, with budgetary support from the Government of India.

Keeping the above facts in view, the Commission is of the view that any variation in cost of their own generation should, for the time being, be borne by the Utility.

5.6 GFA and Capitalisation

Petitioner Submission

The Petitioner has submitted that the opening GFA for FY 2018-19 has been considered as per the Fixed Asset Register for FY 2017-18 and thereafter estimated addition for FY 2018-19 has been added for FY 2018-19. Addition in asset for the control period has been considered as per the GFA addition plan approved by the Commission. Accordingly, the GFA addition plan submitted by the Petitioner for FY 2019-20 to FY 2021-22 is as follows:

Table 22: GFA details submitted by Petitioner (INR Crore)

Particulars	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Opening GFA	162.30	168.74	184.74	194.74	205.09
Asset Capitalised	6.44	16.00	10.00	10.35	7.75
Closing GFA	168.74	184.74	194.74	205.09	212.84

Commission View

It is observed that the True up has only been completed till FY 2014-15. The Commission vide deficiency note directed the Petitioner to submit the audited account for FY 2015-16 to FY 2017-18. In reply the Petitioner submitted that accounts for FY 2015-16 and FY 2016-17 are prepared and has been sent to AG for auditing and hence shall be submitted subsequent to the completion of audit. Further, the accounts for FY 2017-18 is still under preparation. In additional query, the Commission sought unaudited accounts for FY 2015-16 and FY 2016-17, which was submitted by the Petitioner.

The GFA movement from FY 2014-15 to FY 2018-19 as per provisional account for FY 2015-16 and FY 2016-17 and Fixed Asset Register for FY 2017-18 is as follows:

Table 23: GFA movement from FY 2014-15 to FY 2018-19 (INR Crore)

Particulars	FY 2014-15	FY 2015-16		FY 2016-17		FY 2017-18		FY 2018-19	
	True Up FY 2014-15	Approved in TO FY 2015-16	Revised	Approved in TO FY 2016-17	Revised	Approved in TO FY 2017-18	Revised	Approved in TO FY 2018-19	Revised
Opening GFA	137.25	73.52	145.45	87.47	156.30	105.17	162.30	124.12	168.74
Addition	8.20	13.95	10.85	17.70	6.00	18.95	6.44	14.60	16.00
Deletion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing GFA	145.45	87.47	156.30	105.17	162.30	124.12	168.74	138.72	184.74

In the absence of the audited account of FY 2015-16 to FY 2017-18, the Commission has considered the closing GFA for FY 2018-19 as per revised estimate as per provisional accounts and Fixed Asset Register as shown above. Accordingly, the approved GFA capitalisation for the control period is as follows:

Table 24: GFA Approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Opening GFA	184.74	194.74	205.09
Addition	10.00	10.35	7.75
Deletion	0.00	0.00	0.00
Closing GFA	194.74	205.09	212.84

5.7 Depreciation

Petitioner Submission

The Petitioner has computed the Depreciation rate for FY 2019-20 to FY 2021-22 based on the actual depreciation as per the Fixed Asset Register for FY 2017-18. The proposed depreciation for the control period from FY 2019-20 to FY 2021-22 by the Petitioner is as follows:

Table 25: Depreciation submitted by the Petitioner for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Opening GFA	184.74	194.74	205.09
Addition	10.00	10.35	7.75
Closing GFA	194.74	205.09	217.44
Average GFA	189.74	199.92	212.84[1]
Depreciation Rate	3.92%	3.92%	3.92%
Depreciation	**7.43**	**7.83**	**8.18**

Commission View

Regulation 32 of the MYT Tariff Regulation, 2018 specifies as follows:

"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.

.....

30.7 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:

[1] The Petitioner has incorrectly submitted the average GFA for FY 2020-21 as INR 208.97 Crore in the Petition.

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 determined the depreciation for the second control period from FY 2019-20 to FY 2021-22 based on the approved GFA and depreciation rates specified in JERC Tariff Regulations, 2018. Further, it is observed that the entire assets has been funded through equity only, hence the petitioner is not eligible for AAD (Advance Against Depreciation). Accordingly, the approved depreciation for FY 2019-20 to FY 2021-22 is as follows:

Table 26: Depreciation approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Opening GFA	184.74	184.74	194.74	194.74	205.09	205.09
Addition	10.00	10.00	10.35	10.35	7.75	7.75
Deletion	0.00	0.00	0.00	0.00	0.00	0.00
Closing GFA	194.74	194.74	205.09	205.09	212.84	212.84
Average GFA	189.74	189.74	199.92	199.92	208.97	208.97
Depreciation Rate	3.92%	3.88%	3.92%	3.88%	3.92%	3.88%
Depreciation	**7.43**	**7.36**	**7.83**	**7.76**	**8.18**	**8.11**

5.8 Operation and Maintenance Expense

Petitioner Submission

Employee Expenses

The Petitioner has submitted that it has projected the employee expenses in accordance to Regulation 41 of the MYT Regulations, 2018 by escalating actual employee expenses for FY 2017-18 by average increase in CPI from FY 2015-16 to FY 2017-18 i.e. 4.28%. Further, the Petitioner has computed the Growth Factor (Gn) based on the projected employee addition plan for the control period. The Proposed Employee Expenses for the Second Control Period is as follows:

Table 27: Employee Expenses projected by the Petitioner for FY 2019-20 to FY 2021-22

Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Opening No. of Employees	322	328	348	357
Addition	29	36	28	48
Retirement	23	16	19	13

Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Closing No. of Employees	**328**	**348**	**357**	**392**
Employee Cost of previous year (INR Crore)	**20.71**	**22.00**	**24.34**	**26.04**
Growth Factor (Gn)	**2.00%**	**6.10%**	**2.59%**	**9.80%**
CPI Inflation (%)	**4.28%**	**4.28%**	**4.28%**	**4.28%**
Employee Cost (INR Crore)	**22.00**	**24.34**	**26.04**	**29.82**

A&G Expenses

The Petitioner has submitted that the A&G Expenses for the control period has been projected based on the actual A&G Expense of FY 2017-18 escalated by average increase in CPI from FY 2015-16 to FY 2017-18 by 4.28%.

The proposed A&G Expenses for the control period of FY 2019-20 to FY 2021-22 is as follows:

Table 28: A&G Expenses projected by the Petitioner for FY 2019-20 to FY 2021-22

Particular	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
A&G Expense of previous year (INR Crore)	2.56	2.67	2.78	2.90
CPI Inflation (%)	4.28%	4.28%	4.28%	4.28%
Projected A&G Expense (INR Crore)	**2.67**	**2.78**	**2.90**	**3.03**

R&M Expenses

The Petitioner has submitted that the R&M Expenses for the control period has been projected in accordance with Regulation 41 of the MYT Regulations, 2018 considering K factor as per Regulation 41.3 of the MYT Regulations, WPI as per average increase in FY 2015-16 to FY 2017-18. Accordingly, the proposed R&M Expenses for the Control period is as follows:

Table 29: R&M Expenses projected by the Petitioner for FY 2019-20 to FY 2021-22

Particular	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Opening GFA (INR Crore)	168.74	184.74	194.74	205.92
Addition to GFA (INR Crore)	16.00	10.00	10.35	7.75
Closing GFA (INR Crore)	184.74	194.74	205.09	212.84
Average GFA (INR Crore)		**189.74**	**199.92**	**208.97**
K Factor (%)		8.21%	8.21%	8.21%
WPI Inflation (%)		0.33%	0.33%	0.33%
R&M Expense (INR Crore)		**15.23**	**16.05**	**16.90**

Commission View

Regulation 60 of the MYT Tariff Regulations, 2018 stipulates as follows:

"60.4 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 (WPIinflation)

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

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

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

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

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

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

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

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

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

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

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

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

The O&M expenses include Employee expenses, R&M expenses and A&G expenses. In accordance with Regulation 60 of the Tariff Regulations, 2018, the O&M expenses for the first year of the Control Period shall be determined by the Commission taking into account actual O&M expenses of the previous years and any other factors considered appropriate by the Commission. The submissions of the Petitioner and the Commission's analysis on the O&M expenses for the Second Control Period from FY 2019-20 to FY 2021-22 is detailed below.

Employee Expense

The Commission has observed that the Petitioner has not been able to submit the audited accounts of the previous years i.e. FY 2015-16 and FY 2016-17 even on repeated direction of the Commission. Hence, in order to compute the employee expense for the Second Control Period, the Commission has no option other than to consider the provisional accounts submitted by the Petitioner for FY 2015-16 and FY 2016-17. The Commission has computed the growth factor based on the employee addition plan submitted by the Petitioner.

Further, the employee expenses for the FY 2017-18 has been arrived by escalating the average employee expense for FY 2014-15 to FY 2016-17 by percentage increase in CPI for FY 2016-17 and FY 2017-18 respectively, which is shown as follows:

Table 30: Revised computation of Employee Expense for FY 2015-16 to FY 2017-18

Particular	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Gross Employee Expense as per provisional accounts (INR Crore)	**17.13**	**18.80**	**21.31**	
Average of 3 Years for which actual figures / trued up figures are available (INR Crore)		19.08		
CPI Inflation			4.52%	3.59%
Revised Employee Expense (INR Crore)		**19.08**	**19.94**	**20.66**

Employee expenses for FY 2018-19 (INR 21.98 Crore) has been arrived at by escalating the revised employee expense of INR 20.66 Crore for FY 2017-18 as shown above with the average increase in CPI (4.34%) for preceding three years i.e. for FY 2015-16 to FY 2017-18 and actual Growth Factor of 2% for FY 2018-19. Further, the employee expense for the control period from FY 2019-20 to FY 2021-22 has been arrived at by escalating the employee expense for FY 2018-19 of INR 21.98 Crore by average increase in CPI (i.e. 4.34%) for preceding three years i.e. for FY 2015-16 to FY 2017-18 and growth factor for each year of the control period respectively.

Accordingly, the approved employee expense for the control period is as follows:

Table 31: Employee Expenses approved by the Commission for FY 2019-20 to FY 2021-22

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	**Approved**	**Claimed**	**Approved**	**Claimed**	**Approved**
EMPn-1 (INR Crore)	22.00	21.98	24.34	24.34	26.04	26.05
Gn (%)	6.10%	6.10%	2.59%	2.59%	9.80%	9.80%
CPIinflation (%)	4.28%	4.34%	4.28%	4.34%	4.28%	4.34%
Gross Employee Expense EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation) (INR Crore)	**24.34**	**24.34**	**26.04**	**26.05**	**29.82**	**29.85**

A&G Expense

In absence of the audited accounts of previous years the Commission has considered actual A&G Expense for FY 2014-15 as per the true up, actual A&G expense for FY 2015-16 and FY 2016-17 as per provisional accounts submitted by the Petitioner. Accordingly, the A&G Expense for the FY 2017-18 has been arrived at by escalating the average of actual A&G expense for FY 2014-15 to FY 2016-17 by increasing the same with CPI for FY 2016-17 and FY 2017-18 shown as follows:

Table 32: Revised computation of A&G Expense for FY 2015-16 to FY 2017-18

Particular	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Gross A&G Expense as per provisional accounts (INR Crore)	**2.98**	**1.97**	**2.73**	
Average of 3 Years for which actual figures / trued up figures are available (INR Crore)		2.56		
CPI Inflation			4.52%	3.59%
Revised A&G Expense (INR Crore)		**2.56**	**2.67**	**2.77**

From above, it can be observed that the A&G expense computed for FY 2017-18 by the Commission is higher than the actual A&G expense for FY 2017-18 as per petitioner submission i.e. INR 2.56 Crore. Accordingly, in absence of the audited figures of A&G expense for FY 2017-18, the Commission has no other option than to consider the actual expense submitted by the Petitioner. Therefore, in order to project A&G expense at optimum level, the Commission has projected the A&G Expense for FY 2018-19 and the control period by escalating the actual A&G expense submitted by the Petitioner for FY 2017-18 of INR 2.56 Crore by average increase in CPI (i.e. 4.34%) of preceding three years i.e. FY 2015-16 to FY 2017-18 as follows:

Table 33: A&G Expenses approved by the Commission for FY 2019-20 to FY 2021-22

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
A&Gn-1 (INR Crore)	2.67	2.67	2.78	2.79	2.90	2.91
CPIinflation (%)	4.28%	4.34%	4.28%	4.34%	4.28%	4.34%
Provision (INR Crore)	0.00	0.00	0.00	0.00	0.00	0.00
Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)	**2.78**	**2.79**	**2.90**	**2.91**	**3.03**	**3.03**

R&M Expenses

The Commission has computed the K factor considering the % of actual R&M expense to actual opening GFA for FY 2014-15 to FY 2016-17 as follow:

Table 34: Computation of K factor approved by the Commission for FY 2019-20 to FY 2021-22

Sr. No.	Particular	FY 2014-15	FY 2015-16	FY 2016-17
1	Actual R&M Expense	5.60	6.38	6.74
2	GFAn-1 (Opening GFA)	137.25	145.45	156.30
3	WPInflation	1.26%	-3.65%	1.73%
4	Actual R&M Expense as % of Opening GFA (4=1/2)	4.08%	4.38%	4.32%
5	**K Factor (Average of Actual R&M Expense as % of Opening GFA)**	**4.26%**		

Further, the Commission has considered opening GFA for each year of the second control period from FY 2019-20 to FY 2021-22 as approved in this Tariff Order. The Commission has considered the WPI inflation of 0.33% which is the average increase in the Wholesale Price Index (WPI) for FY 2015-16 to FY 2017-18.

Accordingly, the R&M expenses approved by the Commission for the Second Control period from FY 2019-20 to FY 2021-22 is as follows:

Table 35: R&M Expenses approved by the Commission for FY 2019-20 to FY 2021-22

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
K Factor	8.21%	4.26%	8.21%	4.26%	8.21%	4.26%
GFAn-1 (INR Crore)	189.74	184.74	199.92	194.74	208.97	205.09
WPIinflation	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%
R&Mn = K x (GFAn-1) x (1+WPIinflation)	**15.23**	**7.90**	**16.05**	**8.32**	**16.90**	**8.77**

The Total O&M expense approved by the Commission for the Control period from FY 2019-20 to FY 2021-22 is as follows:

Table 36: Total O&M Expenses approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Employee Expense	24.34	24.34	26.04	26.05	29.82	29.85
A&G Expense	2.78	2.79	2.90	2.91	3.03	3.03
R&M Expense	15.23	7.90	16.05	8.32	16.90	8.77
Total O&M Expense	**42.35**	**35.02**	**44.99**	**37.28**	**49.74**	**41.65**

5.9 Interest & Finance Charges

Petitioner Submission

The LED being a Government Department, the entire capital employed till date has been funded through equity infusion by the Central Government through budgetary support without any external borrowings. The interest on debt/loan has been calculated considering debt to be 70% of GFA. Repayment of loan has been considered equivalent to the depreciation of the respective years.

Interest on loan for the control period FY 2019-20, FY 2020-21 and FY 2021-22 has been calculated on the average loan for the respective year at SBI MCLR for 1 year tenor as on 1st April, 2018 plus 100 basis points as provided in Regulation 28.4 of MYT Regulations, 2018. The SBI MCLR for 1 year tenor as on 1st April,2018 was 8.15%, hence rate of interest considered for calculating interest on loan is 9.15%. The proposed interest on loan for the control period is as follows:

Table 37: Interest Expenses projected by the Petitioner for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Opening Normative Loan	63.86	63.43	62.85
Add: Normative Loan during year (70% of Capitalisation)	7.00	7.25	5.43
Less: Normative Repayment	7.43	7.83	8.18
Closing Normative Loan	63.43	62.85	60.09
Average Normative Loan	**63.65**	**63.14**	**61.47**
Rate of Interest	9.15%	9.15%	9.15%
Interest on Normative Loan	**5.82**	**5.78**	**5.62**

Commission View

Regulation 28 of the MYT Tariff Regulations, 2018 stipulates as follows:

*"**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-capitalisation 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 capitalisation 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.

……"

Accordingly, the Commission has considered 70% of the GFA addition approved for the control period as normative loan. Further to arrive at the opening loan of FY 2019-20, the Commission has considered approved closing loan of FY 2018-19 in Tariff order dated March 31, 2016. Interest rate on loan has been considered as per the provision of the Regulation as SBI MCLR as on 1st April 2018 plus 100 basis points. The Interest on Loan approved by the Commission for FY 2019-20 to FY 2021-22 is as follows:

Table 38: Interest Expenses approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Opening loan	63.86	63.86	63.43	63.50	62.85	62.99
Addition	7.00	7.00	7.25	7.25	5.43	5.43
Repayment	7.43	7.36	7.83	7.76	8.18	8.11
Closing loan	**63.43**	**63.50**	**62.85**	**62.99**	**60.09**	**60.30**
Average Normative Loan	**63.65**	**63.68**	**63.14**	**63.24**	**61.47**	**61.64**
Interest Rate	9.15%	9.15%	9.15%	9.15%	9.15%	9.15%
Interest on Loan	**5.82**	**5.83**	**5.78**	**5.79**	**5.62**	**5.64**

5.10 Return on Equity

Petitioner Submission

The Petitioner has submitted that it has computed the return on equity of 16% on the 30% equity considered as per Regulation. The proposed return on equity for the control period is as follows:

Table 39: Return on Equity projected by the Petitioner for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Opening Normative Equity	41.62	44.62	47.73
Addition During the year	3.00	3.11	2.33
Closing Normative Equity	44.62	47.73	50.05
Average Normative Equity	**43.12**	**46.17**	**48.89**
Rate of Return	16%	16%	16%
Return on Equity	**6.90**	**7.39**	**7.82**

Commission View

Regulation 27 of the MYT Tariff Regulations, 2018 stipulates as follows:

"27. Return on Equity

27.1 Return on equity shall be computed on the paid up equity capital determined in accordance with Regulation 26 for the assets put to use for the Transmission Licensee and shall be allowed in accordance with the prevalent CERC Tariff Regulations for transmission system.

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."

The Commission is of the view that historically, all the asset has been funded through budgetary support of the Government which is equivalent to equity infusion only. Therefore, the Commission has restricted the normative equity at 30% of the approved GFA. Further, the opening equity of FY 2019-20 has been considered as per the closing equity of FY 2018-19 approved by the Commission in Tariff Order dated 31st March 2016. Accordingly, the approved Return on Equity for the Second Control Period is as follows:

Table 40: Return on Equity approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Opening Equity	41.62	41.62	44.62	44.62	47.73	47.73
Addition	3.00	3.00	3.11	3.11	2.33	2.33
Deletion / Adjustment	0.00	0.00	0.00	0.00	0.00	0.00
Closing equity	**44.62**	**44.62**	**47.73**	**47.73**	**50.05**	**50.05**
Average Normative Equity	**43.12**	**43.12**	**46.17**	**46.17**	**48.89**	**48.89**
Rate of Return on Equity	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%
Return on Equity	**6.90**	**6.90**	**7.39**	**7.39**	**7.82**	**7.82**

5.11 Interest on Working Capital

Petitioner Submission

The Petitioner has submitted that working capital has been computed in accordance to Regulation 63.1 of the Tariff Regulations, 2018. Further, Interest on working capital for the control period FY 2019-20, FY 2020-21 and FY 2021-22 has been calculated on the working capital for the respective year at SBI MCLR for 1 year tenor as on 1st April, 2018 plus 200 basis points as provided in Regulation 31.4 of MYT Regulations, 2018. The SBI MCLR for 1 year tenor as on 1st April,2018 was 8.15%, hence rate of interest considered for calculating interest on loan is 10.15%.

The proposed Interest on Working Capital for the control period is as follows:

Table 41: Interest on Working Capital submitted by the Petitioner for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Two months receivables	3.94	4.09	4.26
Add: One Month O&M Expenses	3.53	3.75	4.15
Add: 40% of repair and maintenance expenses for one month	0.51	0.53	0.56
Less: Consumer Security Deposit excl. BG/FDR	1.41	1.67	1.93
Total working capital Requirement	7.97	8.38	8.97
Interest Rate	10.15%	10.15%	10.15%
Interest on Working Capital	**0.81**	**0.85**	**0.91**

Commission View

As per Regulation 31 and Regulation 52 of the MYT Tariff Regulations, 2018, Interest on Working Capital is to be computed as follows:

"31. Interest on Working Capital

.....

31.2 The norms for working capital for Distribution Wires Business and Retail Supply Business shall be as specified in Chapter 6 and Chapter 7 of these Regulations.

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

"63. Norms of Working Capital for Retail Supply Business

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

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

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

(c) Receivables equivalent to two (2) months of the expected revenue from charges for use of distribution wires at the prevailing tariff Consumers at the prevailing tariff;

Less

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

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

Based on the above Regulation, the Commission has worked out the interest on working capital for the control period, which is shown in table below:

Table 42: Interest on Working Capital approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
O&M expenses for 1 month	3.53	2.92	3.75	3.11	4.15	3.47
Maintenance Spares @ 40% of R&M expense of 1 month	0.51	0.26	0.53	0.28	0.56	0.29
Receivables for two months	3.94	4.24	4.09	4.42	4.26	4.62
Less: Adjustments for security deposits	1.41	0.94	1.67	1.20	1.93	1.45
Net Working Capital	**7.97**	**6.48**	**8.38**	**6.61**	**8.97**	**6.93**
Rate of Interest on Working Capital	10.15%	10.15%	10.15%	10.15%	10.15%	10.15%

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Interest on Working Capital	**0.81**	**0.66**	**0.85**	**0.67**	**0.91**	**0.70**

5.12 Interest on Security Deposit

Petitioner Submission

The Petitioner has submitted that the Interest on Security Deposits has been calculated on the projected average balance of Security Deposit from the consumers during the respective financial year. The rate of interest on security deposit has been calculated at the bank rate as on 1stApril, 2018 in accordance with Regulation 28.11 of MYT Regulations, 2018. The bank rate as on 1st April, 2018 was 6.25%. The proposed interest on security deposit for FY 2019-20, FY 2020-21 and FY 2021-22 is as follows:

Table 43: Interest on Security Deposit submitted by the Petitioner for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Opening Consumer Security Deposit	1.16	1.41	1.67
Net Addition During the year	0.26	0.26	0.26
Closing Consumer Security Deposit	1.41	1.67	1.93
Average Deposit	**1.28**	**1.54**	**1.80**
Bank Rate	6.25%	6.25%	6.25%
Interest on Consumer Security Deposit	**0.08**	**0.10**	**0.11**

Commission View

Regulation 28.11 of the MYT Tariff Regulations, 2018 stipulates as follows:

"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."

In absence of the details of the actual data on the security deposit in the previous years, the Commission has arrived at opening security deposit for FY 2019-20 by considered actual closing security deposit of FY 2015-16 and FY 2016-17 as per the provisional account and addition in security deposit for FY 2017-18 and FY 2018-19 as per the respective tariff orders, which is as follows:

Table 44: Security Deposit for FY 2016-17 to FY 2018-19 (INR Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening Security Deposit	0.17	0.64	0.66
Addition during the year	0.47	0.02	0.02
Closing Security Deposit	0.64	0.66	0.68

Further, the Commission in accordance to the Regulation has considered bank rate as on 1st April 2018 of 6.25% for computation of Interest on Security Deposit which is as follows:

Table 45: Interest on Security Deposit approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Opening Security Deposit	1.16	0.68	1.41	0.94	1.67	1.20
Addition	0.26	0.26	0.26	0.26	0.26	0.26
Closing Security Deposit	1.41	0.94	1.67	1.20	1.93	1.45
Average Security Deposit	1.28	0.81	1.54	1.07	1.80	1.32
RBI Bank Rate	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%
Interest on Security Deposit	0.08	0.05	0.10	0.07	0.11	0.08

5.13 Non-tariff Income

Petitioner submission

The Petitioner has submitted that the Non-tariff income for the FY 2019-20, FY 2020-21 and FY 2021-22 has been projected by escalating the actual Non-tariff income of FY 2017-18 by 5% YOY. Accordingly, Non-tariff income for the FY 2019-20, FY 2020-21 and FY 2021-22 proposed at INR 1.18 Crore, INR 1.24 Crore and INR 1.31 Crore respectively.

Commission View

Regulation 64 of the MYT Tariff Regulations, 2018 stipulates as follows:

"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 wheeling charges.

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) Income from interest on contingency reserve investment;

(e) Interest on advances to suppliers/contractors;

(f) Rental from staff quarters;

(g) Rental from contractors;

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

(i) Income from advertisements, etc.;

(j) Miscellaneous receipts;

(k) Excess found on physical verification;

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

(m) Prior period income, etc.:"

The Commission considers the projected Non-Tariff Income as reasonable and accordingly, approves same for the MYT Control Period. The Non-Tariff Income approved by the Commission is tabulated below:

Table 46: Non-Tariff Income approved by the Commission for FY 2019-20 to FY 2021-22 (INR Crore)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Non-Tariff Income	1.18	1.18	1.24	1.24	1.31	1.31

5.14 Income Tax

Petitioner Submission

The Petitioner has not submitted any details of Income Tax.

Commission View

Regulation 32 of the MYT Tariff Regulations, 2018 stipulates as follows:

"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."

It is observed that the Petitioner has not made any claim towards the tax on income, therefore the Commission has not approved any income tax for the second control period. The Commission will review the same at the time of truing up.

5.15 Aggregate Revenue Requirement for the 2nd MYT Control period (FY 2019-20 to FY 2021-22)

The Commission, based on the detailed analysis of the cost parameters, has considered the ARR for MYT Control Period as given in the table below:

Table 47: Summary of ARR for Second Control Period for FY 2019-20 to FY 2021-22 (INR Crore)

S. No.	Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
		Claimed	Approved	Claimed	Approved	Claimed	Approved
1	Cost of Fuel	114.37	80.68	125.98	82.35	138.75	83.74
2	Cost of power purchase	0.00	0.40	0.00	0.57	0.00	0.78
3	Depreciation	7.43	7.36	7.83	7.76	8.18	8.11
4	Employee expenses	24.34	24.34	26.04	26.05	29.82	29.85
5	A&G expenses	2.78	2.79	2.90	2.91	3.03	3.03
6	R&M expenses	15.23	7.90	16.05	8.32	16.90	8.77
7	Interest & Finance Charge	5.82	5.83	5.78	5.79	5.62	5.64
8	Return on Equity	6.90	6.90	7.39	7.39	7.82	7.82
9	Interest on Working Capital	0.81	0.66	0.85	0.67	0.91	0.70
10	Interest on Consumer Security Deposit	0.08	0.05	0.10	0.07	0.11	0.08
11	Income Tax	0.00	0.00	0.00	0.00	0.00	0.00
12	**Total Revenue Requirement**	**176.76**	**136.89**	**192.91**	**141.87**	**211.14**	**148.52**
13	Less: Non-Tariff Income	1.18	1.18	1.24	1.24	1.31	1.31
14	**Net Revenue Requirement**	**176.58**	**135.71**	**191.66**	**140.63**	**209.84**	**147.22**

5.16 Revenue at Existing tariff and Gap for FY 2019-20

Petitioner Submission

The estimated revenue and gap for the control period at existing tariff for the second control period from FY 2019-20 to FY 2021-22 projected by the Petitioner is as follows:

Table 48: Revenue and Gap at Existing Tariff as submitted by the Petitioner for FY 2019-20 to FY 2021-22 (INR Crore)

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Net Revenue Requirement	176.58	191.66	209.84
2	Revenue from Sale of Power	23.61	24.57	25.57
3	**Net Gap During the Year**	**152.97**	**167.10**	**184.27**
4	Add: Previous Year Gap	0.00	0.00	0.00
5	**Total Gap**	**152.97**	**167.10**	**184.27**

Commission View

In accordance to Regulation 9.1 of the MYT Tariff Regulations, 2018, the Petitioner has proposed ARR for each year of the control period and tariff proposal for first year of the control period i.e. FY 2019-20. Accordingly, the Commission is of the view that since the tariff has to be approved for FY 2019-20 only, the revenue and revenue gap computations are accordingly required to be done for FY 2019-20 only. Based on the slab-wise information provided by the Petitioner and category-wise sales, connected load and number of consumers approved by the Commission, the computed revenue from sale of power for the FY 2019-20 by the Commission is as follows.

Table 49: Revenue at existing tariff determined by the Commission for FY 2019-20

Sr. No.	Category	No. of Consumers	Energy Sales (in MU)	Existing Tariff		Fixed Charges (INR Crore)	Energy Charges (INR Crore)	Total Revenue (INR Crore)
				Fixed Charges	Energy Charge (INR/Kwh)			
1	**Domestic**							
	Upto 100 units	21294	18.67	INR 15 per connection per month or part thereof for Single Phase & INR 50 per connection per month for three phase or part thereof for three phase	1.35	0.65[2]	2.52	
	101 to 200 units		12.29		3.10		3.81	
	201 to 300 units		4.67		4.95		2.31	
	301 units & above		4.47		6.55		2.93	
	Sub-total		**40.10**			**0.65**	**11.57**	**12.22**
2	**Commercial**							
	0-100 Units	2626	0.60	INR 25 per connection per month or part thereof for Single Phase & INR 100 per connection per month for three phase or part thereof for three phase	6.10	0.15[3]	0.37	
	101 to 200 Units		0.48		7.40		0.36	
	201 Units & above		2.16		8.70		1.88	
	Sub-total		**3.24**			**0.15**	**2.60**	**2.75**
3	**Govt. Connection**							
	0-200 Units	1284	0.45	INR 25 per connection per month or part thereof for Single Phase &	7.50	0.07[4]	0.34	

[2] **Domestic Category:** In absence of specific details, assumption of 70% connections having Single Phase supply (to be billed at INR 15 per connection per month) and 30% connections having Three Phase supply (to be billed at INR 50 per connection per month) has been taken.

[3] **Commercial Category:** In absence of specific details, assumption of 70% connections having Single Phase supply (to be billed at INR 25 per connection per month) and 30% connections having Three Phase supply (to be billed at INR 100 per connection per month) has been taken.

[4] **Government Connections Category:** In absence of specific details, assumption of 70% connections having Single Phase supply (to be billed at INR 25 per connection per month) and 30% connections having Three Phase supply (to be billed at INR 100 per connection per month) has been taken.

Sr. No.	Category	No. of Consumers	Energy Sales (in MU)	Existing Tariff		Fixed Charges (INR Crore)	Energy Charges (INR Crore)	Total Revenue (INR Crore)
				Fixed Charges	Energy Charge (INR/Kwh)			
	201 units & above		7.81	INR 100 per connection per month for three phase or part thereof for three phase	8.95		6.99	
	Sub-total		**8.26**			**0.07**	**7.33**	**7.40**
4	**Industrial**							
	All units	381	0.45	INR 35/- per kVA per month or part thereof	6.00	**0.19**[5]	**0.27**	**0.46**
5	**HT Consumers**							
	All units	7	0.64	INR 100/- per kVA per month or part thereof	8.70	**0.08**[6]	**0.56**	**0.64**
6	**Public Lighting**							
	All units	78	0.67	-	5.55	**0.00**	**0.37**	**0.37**
7	**Temporary Connections**							
	All units	160	0.09	-	10.50	**0.00**	**0.10**	**0.10**
8	**Total**	**25830**	**53.46**			**1.14**	**22.80**	**23.94**

The Commission based on the ARR and Revenue from sale of power approved above, has derived revenue gap for the FY 2019-20 at existing tariff as shown in the following table:

Table 50: Total Gap determined by the Commission at existing tariff for FY 2019-20 (INR Crore)

S. No.	Particulars	FY 2019-20	
		Claimed	Approved
1	Net Revenue Requirement	176.58	135.71
2	Revenue from Sale of Power at Existing Tariff	23.61	23.94
3	**Net Gap during the year**	**152.97**	**111.76**
4	Add: Previous Year Gap	0.00	0.00
5	**Total Gap**	**152.97**	**111.76**

[5] **Industrial Category:** Connected load has been taken at the level as approved in the Business Plan Order for second control period i.e. 4024 kW at PF of 0.9.

[6] **HT Consumers:** Connected load has been taken at the level as approved in the Business Plan Order for second control period i.e. 608 kW at PF of 0.9.

5.17 Average Cost of Supply & Average Billing Rate

Petitioner Submission

The Petitioner has submitted the Average Cost of Supply (ACoS) for the control period as shown in the table below:

Table 51: ACoS & ABR as submitted by the Petitioner for FY 2019-20 to FY 2021-22

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Net Revenue Requirement (INR Crore)	176.58	191.66	209.84
2	Revenue from Existing Tariff (INR Crore)	23.61	24.57	25.57
2	Energy Sales (MU's)	53.45	56.15	59.00
3	Average Cost of Supply (In INR/unit)	33.04	34.13	35.57
4	Average Billing Rate (In INR/unit)	4.42	4.37	4.33
5	Gap (In INR/unit)	28.62	29.76	31.24

Commission View

The Commission has computed the Average Cost of Supply for the Petitioner for FY 2019-20 as per the Net revenue requirement approved in previous sections as shown in table below:

Table 52: Approved ACoS & ABR at existing tariff by the Commission for FY 2019-20

Sr. No.	Particulars	FY 2019-20
1	Net Revenue Requirement (INR Crore)	135.71
2	Revenue from Existing Tariff (INR Crore)	23.94
3	Energy Sales (MU's)	53.45
4	Average cost of supply/unit (In INR/unit)	25.39
5	Average Billing Rate (In INR/unit)	4.48
6	**Gap (In INR/unit)**	**20.91**

6. Chapter 6: Tariff Principles and Design

6.1 Overall Approach

The Commission while designing retail tariffs for the FY 2019-20 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 provision of supply of electricity to all the people is an essential driver for development, and also influences social and economic change.

6.2 Principles of Tariff Design

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.

6.3 Cumulative Revenue Gap/ (Surplus) at Existing Tariff

Petitioner's Submission

The Petitioner has proposed revenue gap of INR 152.97 Crore for FY 2019-20 at existing tariff. The revenue gap submitted by the Petitioner for FY 2019-20 is as follows:

Table 53: Revenue Gap at existing tariff submitted by the Petitioner for FY 2019-20 (INR Crore)

Sr. No.	Particulars	FY 2019-20
1	Net Revenue Requirement	176.58
2	Revenue from Sale of Power at existing Tariff	23.61
3	**Net Gap during the year**	**152.97**
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**152.97**

Commission's View

The Commission has computed the revenue gap for the Petitioner for FY 2019-20 at existing tariff as follows:

Table 54: Revenue Gap at existing tariff determined by the Commission for FY 2019-20 (INR Crore)

Sr. No.	Particulars	FY 2019-20
1	Net Revenue Requirement	135.71
2	Revenue from Sale of Power at existing Tariff	23.94
3	**Net Gap during the year**	**111.76**

Sr. No.	Particulars	FY 2019-20
4	Add: Previous Year Gap	0.00
5	**Total Gap**	**111.76**

Accordingly, the Commission has determined revenue gap of INR 111.76 Crore for FY 2019-20 at existing tariff.

6.4 Treatment of Gap /(Surplus) and Tariff Design

From above, it can be seen that at existing tariff, there is revenue gap of INR 111.76 Crore for FY 2019-20. However, the Commission has approved marginal tariff hike in tariff for FY 2019-20 as compared to tariff for FY 2018-19, in view of the budgetary support by the Government to meet the balance revenue gap.

6.4.1 Tariff Proposal

Petitioner Submission

1. The Petitioner has proposed that at existing tariff, the average cost of supply comes to INR 33.04 per unit, whereas the Average Billing Rate (ABR) is INR 4.42 per unit. Thus, there is a gap of INR 28.62 per unit.
2. The Petitioner has proposed tariff hike of 11.21% for FY 2019-20 from FY 2018-19.
3. The Petitioner in Tariff proposal has proposed only partial recovery of cost. At the proposed tariff only 14.87% of the Annual Revenue Requirement would be recovered.

Accordingly, the tariff proposal submitted by the Petitioner for FY 2019-20 for individual category is as follows:

Table 55: 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)**
BPL/Kutir Jyoti	INR 25/- per service connection per month or part thereof		**BPL/Kutir Jyoti**	INR 25/- per service connection per month or part thereof	
Domestic Connection			**Domestic Connection**		
0 to 100 units	INR 15/- per connection per month or part thereof for single phase INR 50/- 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 100/- 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		4.95	201 to 300 units		5.50
301 units & above		6.55	301 units & above		7.20
Commercial			**Commercial**		

Existing			Proposed		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
0-100 Units	INR 25/- per connection per month or part thereof for single phase INR 100/- per connection per month or part thereof for three phase	6.10	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	6.70
101 to 200 Units		7.40	101 to 200 Units		8.20
201 Units & above		8.70	201 to 300 Units		9.60
			301 Units & above		11.00
Govt. Connection			**Govt. Connection**		
0-200 Units	INR 25/- per connection per month or part thereof for single phase INR 100/- per connection per month or part thereof for three phase	7.50	0-200 Units	INR 100/- per connection per month or part thereof for single phase INR 125/- per connection per month or part thereof for three phase	8.30
201 units & above		8.95	201 units & above		9.90
Industrial			**Industrial**		
All units	INR 35/- per KVA per month or part thereof	6.00	0 to 200 Units	INR 100/- per KVA per month or part thereof	7.50
HT Consumers	INR 100/- per KVA per month or part thereof	8.70	**HT Consumers**	INR 250/- per KVA per month or part thereof	10.00
Public Lighting		5.55	**Public Lighting**		6.10
Temporary Connection		10.50	**Temporary Connection**		11.55

Further, the Petitioner has submitted the computation of impact of proposed tariff on revenue and average tariff hike for FY 2019-20 as follows:

Table 56: Average Tariff Hike for FY 2019-20 as submitted by the Petitioner

Sr. No.	Particulars	Units	FY 2019-20	
			Existing	Proposed
1	Net ARR for FY 2019-20	INR Crore	176.58	176.58
2	Revenue for FY 2019-20	INR Crore	23.61	26.26
3	Gap (1-2)	INR Crore	152.97	150.32
4	Total Sales	MU	53.45	53.45
5	Average Cost of Supply	INR/kWh	33.04	33.04
6	Average Revenue	INR/kWh	4.42	4.91
7	Pure Gap	INR/kWh	28.62	28.12
8	Average Tariff Hike	INR/kWh		0.50
9	Tariff Hike in %	%		11.21

Commission View

The Commission, after analysis of the various components of the ARR for FY 2019-20, has come to the conclusion that the utility has to increase the average tariff from the existing level of INR 4.48 per unit, as given in Chapter 5 **Table 52: Approved ACoS & ABR at existing tariff by the Commission for FY 2019-20** to INR 25.39 per unit to recover the full amount of ARR as projected for FY 2019-20.

However, 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, in order to avoid tariff shock, has approved a marginal increase in the tariff of FY 2019-20 over the FY 2018-19.

The Commission has determined the retail tariff for FY 2019-20 keeping in view the guiding principles as stated in the Electricity Act 2003, the Tariff Policy, MYT Tariff Regulations 2018, the suggestions/observations submitted by the Stakeholders in this regard and the Petition submitted by ED-Lakshadweep. The approved tariff for FY 2019-20 viz-a-viz existing tariff for each consumer category is as follows:

Table 57: Existing vs. Tariff approved by the Commission for FY 2019-20

Existing			Approved		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
BPL/Kutir Jyoti	INR 25/- per service connection per month or part thereof		**Life line Connection**		
			0 to 50 units	INR 10/- per service connection per month or part thereof	1.00
Domestic Connection			**Domestic Connection**		
0 to 100 units	INR 15/- per connection per	1.35	0 to 100 units	INR 20/- per connection per month	1.35

Existing			Approved		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
101 to 200 units	month or part thereof for single phase INR 50/- per connection per month or part thereof for three phase	3.10	101 to 200 units	or part thereof for single phase INR 70/- per connection per month or part thereof for three phase	3.10
201 to 300 units		4.95	201 to 300 units		5.20
301 units & above		6.55	301 units & above		6.85
Commercial			**Commercial**		
0-100 Units	INR 25/- per connection per month or part thereof for single phase INR 100/- per connection per month or part thereof for three phase	6.10	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		7.40	101 to 200 Units		7.65
201 Units & above		8.70	201 Units & above		9.50
Govt. Connection			**Govt. Connection**		
0-200 Units	INR 25/- per connection per month or part thereof for single phase INR 100/- per connection per month or part thereof for three phase	7.50	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		8.95	201 units & above		9.70
Industrial			**Industrial**		
All units	INR 35/- per KVA per month or part thereof	6.00	All units	INR 50/- per KVA per month or part thereof	6.50
HT Consumers	INR 100/- per KVA per month or part thereof	8.70	**HT Consumers**	INR 150/- per KVA per month or part thereof	9.20

Existing			Approved		
Category	**Fixed Charges**	**Energy Charge (INR/kWh)**	**Category**	**Fixed Charges**	**Energy Charge (INR/kWh)**
Public Lighting		5.55	**Public Lighting**	INR 50/- per KVA per month or part thereof	6.00
			EV Charging Stations	INR 100/kVA/Month or part thereof	4.76
Temporary Connection		10.50	**Temporary Connection**	1.5 times the rate applicable to the relevant category of consumers.	

6.4.2 Revenue from Approved Retail Tariff for FY 2019-20

Based on the retail tariff approved above, the revenue at tariff approved by the Commission for FY 2019-20 is given in the following Table:

Table 58: Revenue at tariff approved by the Commission for FY 2019-20

Sr. No.	Category	No. of Consumers	Energy Sales (in MU)	Revised 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 50 units			INR 10 per connection per month or part thereof	**1.0**	-	-	-[7]
2	**Domestic**							
	0 to 100 units	21294	18.67	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	0.89[8]	2.52	
	101 to 200 units		12.29		3.10		3.81	
	201 to 300 units		4.67		5.20		2.43	
	301 units & above		4.47		6.85		3.06	
	Sub-total		**40.10**			**0.89**	**11.82**	**12.72**
3	**Commercial**							
	0-100 Units	2626	0.60	INR 30 per connection per month or part thereof for	6.30		0.38	

7 **Life Line Connection:** The Commission has not projected any revenue under this category presently, considering the unavailability of information about the Number of Consumers, Sales and Connected Load. The Petitioner is required to submit the data for this category at the time of filing of next tariff Petition.

8 **Domestic Category:** In absence of specific details, assumption of 70% connections having Single Phase supply (to be billed at INR 20 per connection per month) and 30% connections having Three Phase supply (to be billed at INR 70 per connection per month) has been taken.

Sr. No.	Category	No. of Consumers	Energy Sales (in MU)	Revised 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	Single Phase & INR 125 per connection per month for three phase or part thereof for three phase	7.65	0.18[9]	0.37	
	201 Units & above		2.16		9.50		2.05	
	Sub-total		**3.24**			**0.18**	**2.80**	**2.98**
4	**Govt. Connection**							
	0-200 Units	1284	0.45	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	0.10[10]	0.36	
	201 units & above		7.81		9.70		7.57	
	Sub-total		**8.26**			**0.10**	**7.93**	**8.03**
5	**Industrial**							
	All units	**381**	**0.45**	INR 50/- per kVA per month or part thereof	6.50	**0.27**[11]	**0.29**	**0.56**
6	**HT Consumers**							
	All units	7	**0.64**	INR 150/- per kVA per month or part thereof	9.20	**0.12**[12]	**0.59**	**0.71**
7	**Public Lighting**							
	All units	**78**	**0.67**	INR 50/- per kVA per month or part thereof	6.00	**0.02**	**0.40**	**0.43**
8	**EV Charging Stations**	-	-	INR 100/kVA/Month or part thereof	4.76	-	-	-
9	**Temporary Connections**							
	All units	**160**	**0.09**	1.5 times the rate applicable to the relevant category of consumers				

[9] **Commercial Category:** In absence of specific details, assumption of 70% connections having Single Phase supply (to be billed at INR 30 per connection per month) and 30% connections having Three Phase supply (to be billed at INR 125 per connection per month) has been taken.

[10] **Government Connections Category:** In absence of specific details, assumption of 70% connections having Single Phase supply (to be billed at INR 35 per connection per month) and 30% connections having Three Phase supply (to be billed at INR 125 per connection per month) has been taken.

[11] **Industrial Category:** Connected load has been taken at the level as approved in the Business Plan Order for second control period i.e. 4024 kW at PF of 0.9.

[12] **HT Consumers:** Connected load has been taken at the level as approved in the Business Plan Order for second control period i.e. 608 kW at PF of 0.9.

Sr. No.	Category	No. of Consumers	Energy Sales (in MU)	Revised Tariff		Fixed Charges (INR Crore)	Energy Charges (INR Crore)	Total Revenue (INR Crore)
				Fixed Charges	Energy Charge (INR/Kwh)			
10	**Total**	**25831**	**53.46**			**1.59**	**23.84**	**25.43**

The Commission has approved revenue from retail tariff of FY 2019-20 as INR 25.43 Crore. The revenue gap at the tariff approved by the Commission for FY 2019-20 is given in the Table below:

Table 59: Revenue gap at revised tariff approved by the Commission for FY 2019-20 (in INR Crore)

S. No.	Particulars	FY 2019-20	
		Claimed	Approved
1	Net Revenue Requirement	176.58	135.71
2	Revenue from Sale of Power at Revised Tariff	26.26	25.43
3	**Net Gap during the year**	**150.32**	**110.28**
4	Add: Previous Year Gap	0.00	0.00
5	**Total Gap**	**150.32**	**110.28**

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 60: Percentage recovery of ACOS at existing and at tariff approved by the Commission for FY 2019-20

S. No.	Category	Existing Tariff		% Hike	Approved Tariff	
		Average Billing Rate (INR/unit)	% of ACoS		Average Billing Rate (INR/unit)	% of ACoS
1	**Domestic**	3.05	12.00%	**4.04%**	3.17	12.49%
2	**Commercial**	8.49	33.42%	**8.41%**	9.20	36.24%
3	**Government Connection**	8.96	35.29%	**8.52%**	9.72	38.29%
4	**Industrial**	10.17	40.06%	**22.49%**	12.46	49.07%
5	**HT Consumers**	9.96	39.22%	**11.34%**	11.09	43.67%
6	**Public Lighting**	5.55	21.86%	**13.78%**	6.31	24.87%
7	**Temporary Connections**	10.50	41.35%	**-**	-	-
8	**Overall**	4.48	17.64%	**6.21%**	**4.76**	**18.73%**

Table 61: Approved ACoS & ABR at approved tariff by the Commission for FY 2019-20

Sr. No.	Particulars	FY 2019-20
1	Net Revenue Requirement (INR Crore)	135.71
2	Revenue from Revised Tariff (INR Crore)	25.43
3	Energy Sales (MU's)	53.45

Sr. No.	Particulars	FY 2019-20
4	Average cost of supply/unit (In INR/unit)	25.39
5	Average Billing Rate (In INR/unit)	4.76
6	**Gap (In INR/unit)**	**20.63**

The highlights of the tariff structure approved by the Commission for FY 2019-20 are as follows:

1. The Commission has abolished BPL / Kutir Jyoti consumer category in absence of any consumers reported by the Petitioner in the said category and has introduced a new category of Life line Connection for consumers having consumption upto 50 units in order to provide benefit of lower tariffs to the larger section of the society having consumption upto 50 units per month. The tariff for this lifeline category will be applicable only for the consumers consuming upto 50 units per month. For consumers having consumption higher than 50 units per month, the tariff as specified for Domestic Connection shall be applicable.

2. The Commission believes that the demand for charging infrastructure for electric vehicles will increase in the near future due to increased commercialization. Furthermore, the Commission is of the opinion that to impart the necessary impetus for the adoption of E-Vehicles in the Territory a sustainable framework has to be developed and having a designated electricity tariff is the first step towards achieving it. Therefore, keeping in view the anticipated demand and need, the Commission introduces a new category namely Electric Vehicle Charging Stations for consumers setting up infrastructure for charging of Electric vehicles/ Electric rickshaws etc. and has fixed the tariff as per the guidelines of Ministry of Power, Govt. of India.

3. The Commission has also introduced the two part tariff for the consumers falling under category of Public Lighting.

4. The Commission has approved tariff hike of 6.21% for FY 2019-20 from FY 2018-19.

5. The Commission has approved the average revenue for FY 2019-20 as INR 4.76/kWh as against the approved Average Cost of Supply of INR 25.39/kWh.

The Commission observes that the Revenue Gap of the previous years was funded by the Government as a 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 2019-20. 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 2019-20.

7.Chapter 7: Tariff Schedule

7.1 Tariff Schedule

Sr. No.	Category	Fixed Charges	Energy Charge (INR/kWh)
1.	**Life Line Connection**		
	0-50 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 units & 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 Consumers**		
	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.	**EV Charging Stations**	INR 100/- per kVA per Month or part thereof	4.76
9.	**Temporary Connection**		
	All Units	1.5 times the rate applicable to the relevant category of consumers.	

7.2 Applicability

Sr. No.	Category	Applicability	Point of Supply news
1	Life Line	Applicable to domestic consumers with monthly consumption of upto 50 units and below.	Note: The Domestic Consumer having consumption above 50 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, 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 Low Tension Industrial Connections including water works/pumps.	
6	HT Supply	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	EV Charging Stations	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 shall be given for a period of not more than three months. For any extension a fresh connection has to be obtained on proper fresh application. The temporary connection can only be for a maximum period of six months.	

7.3 General Terms and Conditions

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 Regulations 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) In case of exceeding the sanctioned load by the low-tension consumers by adding additional load, the penalty charges shall be charged as per the relevant provisions of the JERC Supply Code Regulations 2018.

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

12) **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.

13) **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.

14) **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.

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

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

7.4 Other Terms and Conditions for HT Supply

(i) Penalty Charges:

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

(ii) **Power Factor Charges**

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

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

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

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

(iii) Billing Demand

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

7.5 Schedule of Miscellaneous Charges

S. No.	PARTICULARS	CHARGES
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 CHARGE		
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 Meter	INR 100 per meter

S. No.	PARTICULARS	CHARGES
14.	Three Phase Meter	INR 300 per meter
15.	Three Phase Tri-vector Meter (0.5 Class) Industrial LT Consumer	INR 500 per meter
16.	Three Phase Tri-vector Meter (0.5 Class)11 KV HT Consumer	INR 500 per meter
17.	Combined CT-PT Unit for 11 KV Consumer	INR 500 per unit
18.	Three Phase CT Block	INR 300 per block
19.	CT Coil	INR 100 per coil
FEES (NON-REFUNDABLE) FOR SUBMISSION OF TEST REPORT OF WIRING COMPLETION		
20.	Single Phase Lighting / Domestic Connection	INR 10 per test report
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)	INR 1,000
27.	Shifting of poles on consumer request	INR 1,500
28.	Diversion of HT/LT line on consumer request	INR 100/- per meter
29.	Penalty for tampering/damaging of supplier equipment	As per the relevant provisions of the JERC Supply Code Regulations, 2018

8. Chapter 8: Directives

Over the years, the Commission has issued various directives to the Petitioner for necessary action. It has been observed that the Petitioner is not fully complying with most 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 orders that the Petitioner will now compulsorily submit:

- ***The detailed action plan for compliance of all the directives within 1 month of 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 after the end of each quarter of the calendar year.***

8.1 Directives continued in this Tariff Order

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

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

8.1.1 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 19th March 2018 *The Commission observes that the Petitioner has not filed for the True-up for FY 2015-16 in the current Petition. The Petitioner is directed to prepare annual accounts in a timely manner and file for the True-up of FY 2015-16 and FY 2016-17 along with audited accounts in the next tariff filing, 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 the Annual Accounts for the FY2015-16 & FY 2016-17 has been compiled and submitted to AG for audit. The same is being pursued. The LED will file True-up petition once the audit is completed by AG. Hon'ble Commission may kindly allow the same. The Annual accounts for the FY 2017-18 is being finalised.*
Commission's response 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.

8.1.2 Annual statements of accounts

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 19th March 2018 *There has been a significant delay in the preparation of Annual Accounts for the past years by the Petitioner. The Petitioner is directed to file for the True-up of FY 2015-16 and FY 2016-17 along with the Audited Accounts of the respective years in the subsequent tariff filing. Further, the Petitioner is required to regularize its processes in order to ensure availability of audited accounts for the past year at the time of tariff filing for subsequent years.*
Petitioner's response in the present Tariff Petition *It is submitted that the Annual Accounts for the FY2015-16 & FY 2016-17 has been compiled and submitted to AG for audit. The same is being pursued. The LED will file True-up petition once the audit is completed by AG. Hon'ble Commission may kindly allow the same. The Annual accounts for the FY 2017-18 is being finalised.*
Commission's response 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.

8.1.3 Capital Expenditure

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 19th March 2018 *The Petitioner is directed to submit the detailed statement of capital expenditure and capitalization for every quarter up to March 2017 within three months from issue of the Tariff Order failing which, the Commission will be constrained to take appropriate action against the Petitioner.*
Petitioner's response in the present Tariff Petition *It is submitted that LED has not been able to submit the quarterly capitalisation & capital expenditure as there is delay in getting data from various islands. However, LED has submitted the yearly CAPEX details along with the petition.*
Commission's response *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.*

8.1.4 Improvement of specific fuel consumption

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 19th March 2018 *The Petitioner is directed to submit the progress report on overhauling of the existing DG sets and augmentation of DG capacity in the last three years by 31st July 2018 along with details of improvement in specific fuel consumption.*
Petitioner's response in the present Tariff Petition *The plan for augmentation and overhauling of DG sets for improving performance & SFC is already approved by the Hon'ble Commission in the Business Plan order for the control period -FY 219-20 to FY 2021-22. LED shall implement the plan and report the status to the Hon'ble Commission.*
Commission's response *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.*

8.1.5 Manpower Studies

Originally issued in Tariff Order dated 11th April 2014
Commission's latest directive in Tariff Order dated 19th March 2018 *The Commission is concerned about the efforts undertaken by the Petitioner in undertaking the study. The Petitioner is directed to undertake the manpower study and submit a copy of the report within 3 months of issuance of this Order.*
Petitioner's response in the present Tariff Petition *It is submitted that LED has already started the manpower study and report shall be submitted at earliest.*
Commission's response *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.*

8.1.6 Interest on security deposit

Originally issued in the Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 19th March 2018 *The Commission directs the Petitioner to substantiate their response of no pending security deposit interest by providing details of interest paid on security deposit along with penalty amount in the past years within three months of issuance of this Order.*
Petitioner's response in the present Tariff Petition *It is submitted that the interest on security deposit is paid/ settled along the bills periodically. However, details as required are being compiled and shall be submitted shortly.*
Commission's response *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.*

8.1.7 Notified Tariff Categories

Originally issued in the Tariff Order dated 5th April 2017
Commission's latest directive in Tariff Order dated 19th March 2018 *The Commission notes that the Petitioner has only introduced the category of 'Government Connections'. However, the details of Government Connections have not been submitted as part of the Petition filed by the Petitioner and partial details were submitted in response to the queries / clarifications sought by the Commission. The Petitioner is directed to provide complete details of number of consumers and connected load along with the full year sales figure in the next tariff filing.*
Petitioner's response in the present Tariff Petition *The details related to the Government connections have been submitted in the petition.*
Commission's response *The Commission noted that the petitioner has submitted the details of actual number of connections, connected load, and actual sales for FY 2012-13 to FY 2014-15 and unaudited figures for FY 2015-16 to FY 2017-18 and accordingly drops this directive.*

8.1.8 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 19th March 2018 *The issue of replacement of non-functional or defective meters is being raised by the consumers since a considerable amount of time. The Commission is not satisfied with the efforts undertaken by the Petitioner in this regard. The Commission directs the Petitioner to submit a report within 3 months of issuance of this Order giving details of the number of non-functional or defective meters and the action plan for replacement of such meters within a time frame of one year failing which the Commission shall be constrained to take appropriate action against the Petitioner. Further the action plan with respect to the scheme for installation of smart meters at Kavaratti may also be submitted within 3 months of issuance of this Order.*
Petitioner's response in the present Tariff Petition *It is submitted that LED takes all efforts to replace defective meters as and when the meters get out of order. Further, the status of installation of smart meters in at Kavaratti & other islands shall be submitted shortly.*
Commission's response *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.*

8.1.9 Energy Audit Report

Originally issued in Tariff Order dated 31st October 2012
Commission's latest directive in Tariff Order dated 19th March 2018 *The Petitioner is directed to submit the reason for such delay in compliance of this directive along with efforts taken in this regard within three months of issuance of this Order. The Petitioner is also directed to undertake adequate steps for selection of a firm to undertake energy audit in Lakshadweep and provide quarterly report of progress in this regard.*
Petitioner's response in the present Tariff Petition *It is submitted that LED has already started the Energy audit & the report shall be submitted within 1 month.*
Commission's response *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.*

8.1.10 State Load Dispatch Centre

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 19th March 2018 *The Petitioner is directed to take steps for establishment of an independent SLDC for demand forecasting and better scheduling of power in the UT of Lakshadweep Islands at the earliest. The Petitioner shall prepare a roadmap in this regard and submit the same to the Commission within 3 months from the date of this Order.*
Petitioner's response in the present Tariff Petition *In Lakshadweep Group of Islands, all islands are having independent Generating stations which are not grid connected and hence each Generating station operates independently. Each islands power demand is being met by their own generating station. There is no provision for getting power from other islands generating stations via grid/transmission line. Hence requirement of State Load Despatch Centre is not required.*
Commission's response 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.

8.1.11 Slab-wise details

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

8.1.12 Details of O&M Expenses

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 19th March 2018 *The Commission has observed that the Petitioner has not submitted detailed break-up of Employee Expenses, R&M Expenses and A&G expenses in the current Tariff Petition. The Petitioner is directed to maintain a detailed record of these expenses and report the same in their audited accounts. The detailed break-up of O&M expenses should also be reported as part of the tariff filing formats.*
Petitioner's response in the present Tariff Petition *The detailed break up is being compiled island wise from the current financial year and the same shall be submitted along with future filings.*
Commission's response 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.

8.1.13 Details of upcoming Power Plants

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 19th March 2018 *In the MYT Order dated 31st March 2016, the Commission had approved power purchase from solar power plants during the Control Period FY 2016-17 to FY 2018-19. However, no details with respect to procurement of power from the approved solar plants have been submitted by the Petitioner in its subsequent tariff filings.* *The Petitioner is directed to submit the details of ongoing and proposed power plants in the UT of Lakshadweep along with the next tariff filing.*
Petitioner's response in the present Tariff Petition *The details of ongoing & upcoming solar plants is submitted in the Business plan.*
Commission's response 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.

8.1.14 Explore alternate sources of energy generation

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 19th March 2018 *The Commission has observed that there is huge dependency on diesel for generation of energy which not only increases the average cost of supply but also has an adverse impact on the environment. Therefore, the Petitioner is directed to explore alternate sources of energy generation i.e. rooftop solar, wind, etc. and submit an action plan for utilising the renewable generation sources for reducing its dependence on diesel based generation.*
Petitioner's response in the present Tariff Petition *It is submitted that LED is making efforts to explore alternate sources of energy generation. The status of the same is submitted in the Business Plan.*
Commission's response 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.

8.1.15 Advertising the Public Hearing

Originally issued in Tariff Order dated 19th March 2018
Commission's latest directive in Tariff Order dated 19th March 2018 *The Commission has observed that several concerns were raised during the Public Hearing with respect to inadequate advertisement of the hearing. In the absence of a local newspaper, the Petitioner should take measures to ensure people from all islands are informed about the Public Hearing to ensure public participation at the Hearing. The Petitioner is directed to send a notice of the hearing to Panchayats Heads/ peoples' representatives of all islands at least 7 days before the hearing, display notice of the hearing at the substation and other public spaces, make public announcement using loud speakers etc. to advertise the hearing.*
Petitioner's response in the present Tariff Petition *It is submitted that the LED has taken all efforts to ensure adequate publicity as per the directions of the Hon'ble Commission.*
Commission's response The Commission has noted the submission of the Petitioner and accordingly the Commission drops this directive.

Annexure 1: List of Stakeholders

The following is the list of stakeholders who have submitted Comments/suggestions:

Sr. No.	Name
1	Shri Saleem P. A.
2	Shri Mukriyillam Habeeb
3	Shri Cheriya Koya
4	Shri Kasim
5	Shri Hameed Haji
6	Shri Nishad P.
7	Shri K. L. Koya
8	Shri C. N. Koya
9	Shri Mohd. Rateek
10	Shri S. C. Hameed
11	Shri U. C. Saiyed
12	Shri B. K. Hameed
13	Shri Naseed P. P.
14	Shri Ahmed
15	Shri Saiyad Mohd. P K.