## **AFFIDAVIT**

## BEFORE HON'BLE JOINT ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF GOA & UNION TERRITORIES

FILE No:		
CASE No:		
IN THE MATTER OF	:	Petition for Approval of Business Plan for 5-year MYT Control Period From FY 2025-26 to 2029-30.
AND		
IN THE MATTER OF THE PETITIONER	:	Lakshadweep Electricity Department,  Kavaratti - 682555

#### Petitioner

- I, M.P Dharwesh Khan S/o, Shri. Koya M.K (aged 51 years), Executive Engineer, Lakshadweep Electricity Department, U.T of Lakshadweep residing at Kavaratti, Lakshadweep, the deponent named above do hereby solemnly affirm and state on oath as under:-
- 1. That the deponent is the Executive Engineer of Lakshadweep Electricity Department and is acquainted with the facts deposed to below.
- 2. I, the deponent named above do hereby verify that the contents of the accompanying petition are based on the records of Lakshadweep Electricity Department maintained in

the ordinary course of business and believed by them to be true and I believe that no part of it is false and no material has been concealed there from.

#### Details of enclosures:

 a) Petition for Approval of Business Plan for 5-year MYT Control Period From FY 2025-26 to 2029-30

For Lakshadweep Electricity Department

Petitioner

Place: Kavaratti, Lakshadweep,

Dated:

कार्यकारी अभियंता (वि) Executive Engineer (ELE) लक्षद्वीप सं.श.प्र / U.T. of Lakshadweep कवारत्ती /Kaveratti-682 555

I, Shwam Chandra Advocate, Executive Magistrate, do hereby declare that the person making this affidavit is known to me through the perusal of records and I am satisfied that he is the same person alleging to be deponent himself.

#### Advocate

> EXECUTIVE MAGISTRATE KAVARATTI-682 555



Business Plan for Lakshadweep Electricity Department Administration of Lakshadweep

For

**Control Period** 

FY 2025-26 To FY 2029-30

Submitted by:
Lakshadweep Electricity Department
Administration of Lakshadweep
May-2025

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## BEFORE HON'BLE JOINT ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF GOA & UNION TERRITORIES

	FILE No:
	CASE No:
	Petition for Approval of Business Plan for 5 year MYT
:	Control Period From FY 2025-26 to FY 2029-30.

AND

IN THE MATTER OF THEPETITIONER

IN THE MATTER OF

Lakshadweep Electricity Department,

Kavaratti - 682555

#### Petitioner

Lakshadweep Electricity Department (hereinafter referred to as "LED"), files Petition for Approval of Business Plan for 5-year MYT Control Period From FY 2025-26 to FY 2029-30.

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# BEFORE HON'BLE JOINT ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF GOA & UNION TERRITORIES

FILE No:	
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IN THE MATTER OF THE

**PETITIONER** 

Lakshadweep Electricity Department,

Kavaratti - 682555

Petitioner

- I, M.P Dharwesh Khan S/o, Shri. Koya M.K (aged 51 years), Executive Engineer, Lakshadweep Electricity Department, U.T of Lakshadweep residing at Kavaratti, Lakshadweep, the deponent named above do hereby solemnly affirm and state on oath as under:-
  - 1. That the deponent is the Executive Engineer of Lakshadweep Electricity Department and is acquainted with the facts deposed to below.
  - 2. I, the deponent named above do hereby verify that the contents of the accompanying petition are based on the records of Lakshadweep Electricity Department maintained in the ordinary course of business and believed by them to be true and I believe that no part of it is false and no material has been concealed there from.

Details of enclosures:

Petition for Approval of Business Plan for 5-year MYT Control Period From FY 2025-26 to 2029-30

For Lakshadweep Electricity Department

Petitioner कार्यकारी अभियंता (वि)

> Executive Engineer (ELE) लक्षद्वीप सं.श.प्र / U.T. of Lakshadweep कवारत्ती/Kavaratti-682 555

Dated:

Place: Kavaratti, Lakshadweep,

CHANDRA Advocate, EXECUTIVE MAGISTRATE, do hereby declare that the person making this affidavit is known to me through the perusal of records and I am satisfied that he is the same person alleging to be deponent himself.

#### Advocate

by the deponent who has been identified by the aforesaid Advocate. I have satisfied myself by examining the deponent that he understood the contents of the affidavit which has been read over and explained to him. He has also been explained about section 193 of Indian Penal Code that whoever intentionally gives false evidence in any of the proceedings of the Commission or fabricates evidence for purpose of being used in any of the proceedings shall be liable for punishment as per law.

KAVARATTI-682 555

# BEFORE HON'BLE JOINT ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF GOA & UNION TERRITORIES

FILE No:	
CASE No:	

IN THE MATTER OF

Petition for Approval of Business Plan for 5-year MYT

Control Period from FY 2025-26 to FY 2029-30.

AND

IN THE MATTER OF THE PETITIONER

Lakshadweep Electricity Department,

Kavaratti-682555, U.T. of Lakshadweep.

#### Petitioner

PETITIONER, UNDER JOINT ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF GOA AND UNION TERRITORIES (MULTI YEAR TARIFF) REGULATIONS, 2024 READ WITH JERC (CONDUCT OF BUSINESS), REGULATIONS, 2009 FILES FOR INITIATION OF PROCEEDINGS BY THE HON'BLE COMMISSION FOR APPROVAL OF BUSINESS PLAN FOR 5 YEAR MYT CONTROL PERIOD FROM FY 2025-26 to FY 2029-30 OF LAKSHADWEEP ELECTRICITY DEPARTMENT (HEREIN AFTER REFERRED TO AS "LED").

#### LAKSHADWEEP ELECTRICITY DEPARTMENT RESPECTFULLY SUBMITS:

- 1. The Petitioner, Lakshadweep Electricity Department has been allowed to function as Distribution Utility for UT of Lakshadweep.
- 2. Pursuant to the enactment of the Electricity Act, 2003, LED is required to submit its Aggregate Revenue Requirement (ARR) and Tariff Petitions as per procedures outlined in section 61, 62 and 64, of EA 2003, and the governing regulations thereof.

- 3. The Joint Electricity Regulatory Commission for The State of Goa and Union Territories (Multi Year Tariff) Regulations, 2024 requires the LED to file Business Plan, for Control Period of three financial years from April 1, 2025, to March 31, 2030, which shall comprise but not be limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets.
- 4. Further, the regulation requires that, based on the Business Plan as approved by the Commission by order, submits the forecast of Aggregate Revenue Requirement and expected revenue from tariff, for the Control Period by a Petition.
- 5. LED is submitting its Business Plan for Control Period of five financial years from April 1, 2025 to March 31, 2030 for approval of the Hon'ble Commission on the basis of the principles outlined in tariff regulations notified by the Joint Electricity Regulatory Commission.
- 6. LED prays to the Hon'ble Commission to admit the attached Business Plan for Control Period of three financial years from April 1, 2025, to March 31, 2030, and would like to submit that:

#### PRAYERS TO THE HON'BLE COMMISSION:

- 1. The petition provides, inter-alia, LED's approach for formulating the present petition, the broad basis for projections used, summary of the proposals being made to the Hon'ble Commission, performance of LED in the recent past, and certain issues impacting the performance of LED in the Licensed Area.
- 2. Broadly, in formulating the Business Plan for Control Period of three financial years from April 1, 2025, to March 31, 2030, the principles specified by the Joint Electricity Regulatory Commission For The State Of Goa And Union Territories (Multi Year Tariff) Regulations, 2024 ("Tariff Regulations") have been considered as the basis.
- 3. In order to align the thoughts and principles behind the Business Plan, LED respectfully seeks an opportunity to present their case prior to the finalization of the Business Plan. LED believes that such an approach would go a long way towards providing a fair treatment to all the stakeholders and may eliminate the need for a review or clarification.
- 4. LED may also be permitted to propose suitable changes to the Business Plan and the mechanism of meeting the revenue on further analysis, prior to the final approval by the Hon'ble Commission.

In view of the above, the petitioner respectfully prays that Hon'ble Commission may:

- Approve the Business Plan for Control Period of three financial years from April 1, 2025, to March 31, 2030 for LED formulated in accordance with the guidelines outlined as per the regulation of Joint Electricity Regulatory Commission relating to Distribution Licensee and the principles contained in Tariff Regulations;
- Condone any inadvertent delay/ omissions/ errors/ rounding off differences/shortcomings and LED may please be permitted to add/ change/ modify/ alter the petition;
- Permit LED to file additional data/information as may be necessary;
- Pass such further and other orders, as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case.

**Lakshadweep Electricity Department** 

कार्यकारी अभियंता (वि)

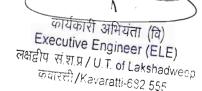
Petitioner Executive Engineer (ELE)
लक्षद्वीप सं.श.प्र / U.T. of Lakshadweep
कवारती /Kaveratti-682 555

Place: Kavaratti, Lakshadweep

Dated:

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## List of abbreviations

Abbreviation	Full Form
A&G	Administrative and General
ACoS	Average Cost of Supply
Act	The Electricity Act, 2003
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal of Electricity
BPL	Below Poverty Line
CAGR	Compound Annualized Growth rate
Capex	Capital Expenditure
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievance Redressal Forum
CGS	Central Generating Stations
COD	Commercial Operation Date
Cr	Crores
Discom	Distribution Company
LED	Lakshadweep Electricity Department
FY	Financial Year
GFA	Gross Fixed Assets
HT	High Tension
JERC	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
LT	Low Tension
MU	Million Units
MYT	Multi Year Tariff
NFA	Net Fixed Assets
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance

## Petition for Approval of Business Plan for the for 5-year MYT Control Period from FY 2025-26 to FY 2029-30

Abbreviation	Full Form
PLF	Plant Load Factor
PLR	Prime Lending Rate
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
REC	Renewable Energy Certificate
RoE	Return on Equity
RPO	Renewable Purchase Obligation
SBI PLR	SBI Prime Lending Rate
SOP	Standard of Performance
T&D Loss	Transmission & Distribution Loss
SECI	Solar Energy Corporation of India Ltd
UT	Union Territory

### **CHAPTER 1: INTRODUCTION**

#### 1.1 BACKGROUND

1.1.1 Lakshadweep Electricity Department ("LED") is responsible for power supply in the union territory. Power requirement of LED is met by own generation station only.

Lakshadweep Islands is a group of islands in the Laccadive Sea, 200 to 440 km (120 to 270 mi) 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. At 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 1982-83 except in Kavaratti where 24 hours power supply was provided from 1964 itself. Round the clock power supply is provided in all the Islands since 1983.

1.1.2 The table below gives an overview of present transmission and distribution infrastructure of LED as of 31.03.24

Table 1: Present Infrastructure

Particulars	Quantity
11 KV Feeders (In Kms)	112
LT Lines (In Kms)	400.364
HT Lines (In Kms)	113.322
Distribution Transformers (Nos)	110
Street Light Points (Nos)	5614
11 KV S/S (Nos)	23

कार्यकारी अभियंता (वि) Executive Engineer (ELE)

लक्षद्वीप सं.श.प्र / U.T. of Lakshadweep ळ्वारत्ती /Kavaratti-682 555

## Petition for Approval of Business Plan for the for 5-year MYT Control Period from FY 2025-26 to FY 2029-30

#### 1.1.3 The key duties being discharged by LED are:

- ❖ Laying and operating of such electric line, sub-station and electrical plant that is primarily maintained for the purpose of distributing electricity in the area of Lakshadweep Islands, notwithstanding that such line, sub-station or electrical plant 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;
- Preparing and carrying out schemes for distribution and generally for promoting the use of electricity within the UT.
- 1.1.4 The present power availability of Lakshadweep Administration is approximately 26.262 MW from various generating stations. The current demand is primarily dependent on the domestic and commercial which contributed approx. 85% to the total sales of LED in FY 2023-24.

#### 1.2 OBJECTIVE OF BUSINESS PLAN

- 1.2.1 The Joint Electricity Regulatory Commission (JERC) for the State of Goa and Union Territories, in exercise of powers conferred by sub section (1) of section 181 and clauses (zd), (ze) and (zf) of sub section (2) of section 181, read with sections 61,62,83 and 86, of the Electricity Act 2003 (36 of 2003) and all other powers enabling it in this behalf, has issued the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Multi Year Tariff) Regulations, 2024, hereinafter referred to as "MYT Regulations".
- 1.2.2 As per the Regulations, the Distribution Licensee were required to file a Business Plan for Control Period of three financial years from April 1, 2025 to March 31, 2030, which shall comprise but not be limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets before the Hon'ble Commission as part of the Tariff Filing before the beginning of the Control Period.

कार्यकारी अनियंता (वि) Executive Engineer (ELE)

- 1.2.3 Accordingly, the LED is hereby filing the Business Plan for the Control Period (FY 2025-26 to FY 2029-30) based on the available data for the FY 2023-24 and previous financial years.
- 1.2.4 The LED has prepared the Business Plan taking into the consideration the various existing internal factors and external business environment affecting the business.
- 1.2.5 The key objectives of this business plan are:
  - Providing a tool for strategic planning and management The primary objective of the Business Plan is to analyse and anticipate the future requirements and strategically plan for the requisite capital investments, means of financing the schemes and various associated costs and document them which would serve as an effective tool for monitoring and execution of future works. It is important to project the growth in transmission and distribution network infrastructure commensurate with the energy demand required for fuelling the economic growth targets of the UT.
  - Meeting the regulatory compliance of submission of a business plan as mandated by the Joint Electricity Regulatory Commission, MYT Regulations, 2024
  - Support in decision making leading to better Operational Efficiency: The Business Plan is prepared so as to be useful for the Management, associated stakeholders, the Hon'ble Commission and various government bodies. The future projections in the Plan would help the department in decision making and taking proactive actions, and thus improving the overall operational efficiency of the transmission and distribution network infrastructure.
- 1.2.6 The LED submits that the Business plan being a dynamic document may need to be updated at periodic intervals taking into account the changes in the internal and external environment and these changes would be intimated to the Hon'ble Commission from time to time.

कार्यकारी अभियंता (वि) Executive Engineer (ELE) लक्षद्वीप सं.श.प्र / U.T. of Lakshadweep

ळवारती/Kavaratti-682 555

#### 1.3 REVIEW OF PREVIOUS CONTROL PERIOD

- 1.3.1 Lakshadweep Electricity Department submitted the petition for approval of Business Plan for the MYT control period FY 2022-23 to FY 2024-25 vide petition no. 74/2022 dated 31<sup>st</sup> December, 2021. The Hon'ble Commission after considering the petition and views of all the stake holders issued the Business Plan Order on 31<sup>st</sup> March 2022. The Hon'ble Commission in its order had approved various parameters as required by the MYT Regulations, 2021. Lakshadweep Electricity Department has made efforts to achieve the targets/trajectories as set out by the Hon'ble Commission. The yearly performances have been submitted for approval of the Commission vide APRs for the FY 2022-23 & FY 2023-24. The Hon'ble Commission has already passed order in respect of the above petitions. LED shall be submitting the APR for the FY 2024-25 along with the MYT petition for the next control period FY 2025-26 to FY 2029-30.
- 1.3.2 The subsequent sections provide the highlights of the targets & achievements on various parameters as approved in the Business Plan & MYT petition for the control period FY 2022-23 to FY 2024-25.
- 1.3.3 <u>Capital Investment Plan</u> The Hon'ble Commission in the Business Plan for the MYT control period of the FY 2022-23 to FY 2024-25 had approved the Capital Investment Plan for each of the years of the control period. The year wise capital expenditure approved and actual expenditure is provided in the table below:

Table 2: Comparison of Capital Investment Plan for Previous Business Plan (Rs. In Crores)

	202	2022-23		3-24	2024-25	
Particulars	Approved in Business Plan Order	Actual (Unaudited)	Approved in Business Plan Order	Actual (Unaudited)	Approved in Business Plan Order	
Capital Expenditure (Rs. in Crores)	20.50	1.99	11.00	6.20	11.50	11.76

1.3.4 <u>Capitalisation</u> - The year wise capitalization for the FY 2022-23 & 2023-24 & estimated capitalization for the FY 2024-25 vis-à-vis capitalization schedule approved is provided in the table below:

Table 3: Comparison of Capitalization for Previous Business Plan

(Rs. In Crores)

	2022-2	2022-23		3-24	2024-25		
Particulars	Approved in Business Plan Order	Actual	Approved in Business Plan Order	Actual (Unaudited)	Approved in Business Plan Order	Estimated	
Capitalisation (Rs. in Crores)	20.50	1.99	11.00	6.20	11.50	11.76	

1.3.5 <u>T&D Loss Trajectory</u> - The year wise distribution loss for the FY 2022-23 & 2023-24 & estimated distribution loss for the FY 2024-25 vis-à-vis approved distribution loss trajectory is provided in the table below:

Table 4: Comparison of T&D Loss for Previous Business Plan

	2022-23		202	3-24	2024-25		
Particulars	Approved in Business Plan Order	Actual	Approved in Business Plan Order	Actual (Unaudited)	Approved in Business Plan Order	Estimated	
T& D Loss	11.25%	11.23%	10.25%	12.42%	9.25%	9.25%	

1.3.6 <u>Sales Forecast</u> - The year wise sales for various categories of consumers for the FY 2022-23 & 2023-24 & estimated sales for the FY 2024-25 vis-à-vis approved sales is provided in the table below:

Petition for Approval of Business Plan for the for 5-year MYT Control Period from FY 2025-26 to FY 2029-30

Table 5: Comparison of Energy Sales for Previous Business Plan

(In MUs)

	2022-23		202	3-24	2024-25		
Category	Approved in Business Plan Order	Actual (Unaudited)	Approved in Business Plan Order	Actual (Unaudited)	Approved in Business Plan Order	Estimated	
Domestic	43.61	37.19	45.35	39.78	47.15	40.59	
Commercial	3.64	3.94	3.82	8.14	4.01	8.54	
Govt. Connection	7.28	7.54	7.28	5.12	7.28	5.38	
Industrial	0.4	0.45	0.42	0.67	0.44	0.74	
HT Consumers	1.05	1.72	1.15	1.95	1.25	2.14	
Public Lighting	0.92	0.79	0.97	0.78	1.03	0.80	
Temporary Connection	0.09	0.11	0.09	0.09	0.09	0.09	
Total	57.00	51.74	59.08	56.52	61.25	58.28	

1.3.7 No. of Consumers - The year wise no. of consumers for various categories of consumers for the FY 2022-23 & 2023-24 & estimated no. of consumers for the FY 2024-25 vis-à-vis approved no. of consumers is provided in the table below:

Table 6: Comparison of No. of Consumer for Previous Business Plan

(In No.)

	2022	2022-23		3-24	2024-25		
Category	Approved in Business Plan Order	Actual	Approved in Business Plan Order	Actual (Unaudited)	Approved in Business Plan Order	Estimated	
Domestic	20,925	20,997	21,269	21,016	21,618	21,293	
Commercial	4,233	4,326	4,708	4,629	5,237	4,953	
Govt. Connection	1,173	1,082	1,173	1,076	1,173	1,098	
Industrial	360	363	364	365	368	369	
HT Consumers	11	8	13	8	15	8	
Public Lighting	76	72	76	69	76	69	
Temp. Connection	136	0	136	188	136	270	
Total	26,914	26,848	27,739	27,351	28,623	28,061	

1.3.8 <u>Connected Load</u> - The year wise connected load for various categories of consumers for the FY 2022-23 & 2023-24 & estimated connected load for the FY 2024-25 vis-à-vis approved connected load is provided in the table below:

Table 7: Comparison of Connected Load for Previous Business Plan

(In kVA.)

	2022-23		2023	3-24	2024-25		
Category	Approved in Business Plan Order	Actual	Approved in Business Plan Order	Actual (Unaudited)	Approved in Business Plan Order	Estimated	
Domestic	96,616	83,952	98,993	87,948	1,01,428	92,135	
Commercial	8,213	10,182	8,213	11,573	8,213	11,935	
Govt. Connection	14,889	11,014	16,567	12,927	18,434	13,242	
Industrial	3,744	3,821	3,788	3,891	3,832	4,243	
HT Consumers	1228	832	1416	1,226	1633	1,347	
Public Lighting	284	290	284	290	284	292	
Temp. Connection	273	0	273	221	273	346	
Total	1,25,247	1,10,091	1,29,534	1,18,077	1,34,097	1,23,540	

Table 8: Comparison of R&M Expenses Norms for Previous Business Plan

Particulars		FY 2022-23 Actual	FY 2023-24 Actual Unaudited	FY 2024-25 Estimated
GFA (Opening)	(Rs. in Crores)	192.16	194.15	200.36
R&M Expenses	(Rs. in Crores)	8.20	13.52	11.95
R&M Expenses	(In %)	4.27%	6.96%	5.96%

### CHAPTER 2: ABOUT LAKSHADWEEP ELECTRICITY DEPARTMENT

#### 2.1 VISION AND MISSION STATEMENT

- 2.1.1 Starting with modest capacity of 51.6 kilo Watts in 1962 from two Diesel Generating Sets, the generating capacity of Lakshadweep Electricity Department has grown up over the years with increase in demand. The power generated has been steadily increasing 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 initially at Kavaratti and Minicoy Islands are under final stage of commissioning.
- 2.1.2 Due to the geographical & topographical peculiarities of these islands including separation by sea over great distances there is no single power grid for the entire electrified island and instead a power house caters independently to the power requirements of area/islands.
- 2.1.3 The Electricity Department is operating and maintain power generation, transmission & distribution system network in these islands for providing electric power supply to general public and implements various schemes for augmentation of DG Generating Capacity and establishment of new power houses and T&D Systems. This department is also functioning as a Nodal Agency for implementing renewable energy program of the Ministry of New & Renewable Energy in these islands. Presently, the department is headed by an Executive Engineer, associated with one Assistant Executive Engineer, ten Assistant Engineers & around Thirty-three JEs for carrying out the task of power generation, transmission & distribution to the general public including schemes under non-conventional energy sources.

2.1.4 The salient features about development of electric power supply in these islands are provided below:

### **ELECTRICITY DEPARTMENT AT A GLANCE (2023-24)**

Total Installed capacity	:	26.262 MW
No. of Power Houses	:	11 Nos
Total Staff strength (filled)	:	273 Nos
HT line	:	113.322 Kms
LT line	:	400.364 Kms
Distribution Transformers	:	110 Nos.
No. of consumers	:	27,351 Nos.
Annual unit generation	:	63.74 MUs.
Annual unit purchased	:	1.24 MUs.
Total unit sent out	:	63.29 MUs.
Total unit sold	:	56.52 MUs.
T&D loss	:	12.42%
No. of site offices	:	11 Nos.

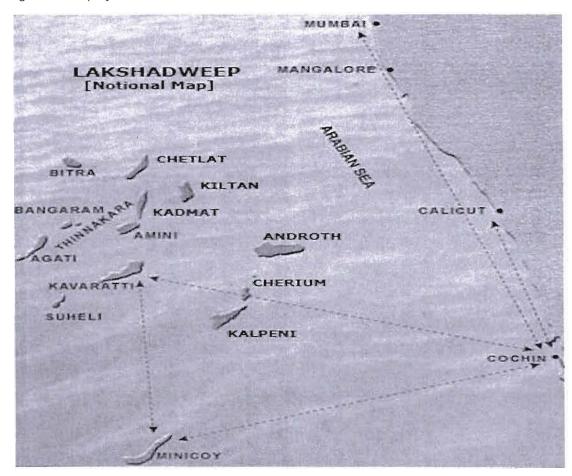
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#### 2.2 AREA SERVED

2.2.1 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.

Figure 1: Map of Area Served

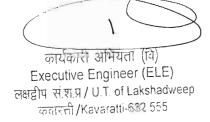




#### 2.3 ORGANIZATIONAL STRUCTURE

2.3.1 The Electricity Operation Circle is headed by Executive Engineer along with one Assistant Executive Engineer and ten Assistant Engineers with the employee strength of 273 (As of 31.03.24).





#### 2.4 HUMAN RESOURCES

2.4.1 Currently there are 405 sanctioned posts of different categories in the LED. However, being a financial matter, the approval of Lakshadweep Administration was sought by the LED. JERC directed the LED to carry out detailed manpower study according to future load growth in LED. Accordingly, LED conducted the manpower study and submitted the report to the JERC. The detail of manpower is provided in the table below.

Table 9: Manpower Strength

Manpower Requirement for LED	Sanctioned	As-Is Manpower At LED	Total Proposed	Proposed In-House	Proposed Outsourced
Executives (AEE/AE & above)	12	3	9	9	Nil
Non-Executives (JE & below)	301	206	95	95	Nil
Ministerial	92	64	28	28	Nil
Total	405	273	132	132	Nil

2.4.2 The LED has planned to carry out recruitment for 132 posts in the current and next 5 years. The table below presents the current status of the employee strength (01.04.24) and future manpower planning for the Control Period:

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Table 10: Present Employee Strength

Sr. No.	Particulars	Current Year Estimates 2024-25	Ensuing Year Projection 2025-26	Ensuing Year Projection 2026-27	Ensuing Year Projection 2027-28	Ensuing Year Projection 2028-29	Ensuing Year Projection 2029-30
1	No. of employees as on 1st April	273	264	340	345	354	357
2	No. of employees added during the year	0	94	18	13	5	2
3	Total number of employees (1+2)	273	358	358	358	359	359
4	Number of employees retired/retiring during the year	9	18	13	5	2	6
5	Number of employees at the end of the year (3-4)	264	340	345	353	357	353

### 2.4.3 The details of the 132 posts to be filled in the ensuing 5 years is as follows:

Table 11: Recruitment Planned

Sr. No.	Category	No of Posts.
1	Executive Engineer	1
2	Assistant Executive Engineer	1
3	Assistant Engineer	7
4	Junior Engineer	6
5	Chargeman and Similar Grades	14
6	Tracer	5
7	Operator and Similar Grades	18
8	Engine Driver and Similar Grades	52
9	Ministerial Staff	28
	Total	132

Petition for Approval of Business Plan for the for 5-year MYT Control Period from FY 2025-26 to FY 2029-30

#### MANPOWER TRAINING AND RE-SKILLING

2.5 With the rapidly expanding system and advent of new technology, it becomes all the important to develop the skill set of the employees of the transmission and distribution utility. The LED acknowledges the fact that improving knowledge base is an ever-evolving process and thus has planned to impart refresher training to its employees vide various training programs.

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#### 2.5 SAFETY MEASURES

- 2.5.1 In order to ensure safety of its manpower, the safety measures prescribed under Indian Electricity rules, Safety, Electricity Supply Regulations 2010 notified by CEA and Joint Electricity Regulatory Commission (Distribution Code Regulation 2010) needs to be adhered to by the utility. Accordingly, to comply with the safety measures directed by the commission the LED intends to examine all the Rules and Regulations in the force and suggest way forward. The LED shall analyze existing safety standards, tool kits and practices being followed by the department. To comply with the safety regulation in place, LED shall come out with suitable safety tool kits/ equipment required to carry out operation and maintenance of distribution network.
- 2.5.2 The proposed expenditure to be incurred on safety measures and procurement of safety materials such as firefighting equipment's and cap shoes gloom etc for its manpower is as below:

Table 12: Proposed Expenditure on Safety Measures

Particulars	2025-26	2026-27	2027-28	2028-29	2029-30
Proposed Expenditure (In Rs Lakh)	2.50	7.50	3.00	8.00	2.00

#### 2.6 TECHNOLOGICAL INITIATIVES

- 2.6.1 LED has taken various IT & Technological initiatives for improvement of system working & efficiency. The Lakshadweep Electricity Department is the first Department in the U.T. to have a working Local Area Network and a Mail Server. Now the entire subordinate offices of the Department have been provided with sufficient computers, Local Area Network, dedicated internet connection and thus virtually interconnected each other.
- 2.6.2 The Ministry of Non-Conventional Energy Sources has identified Lakshadweep Electricity Department as one of the beneficiaries to their scheme "TIFAD" (Technology Information Forecasting Assessment and Databank) during 1998-99. Under the scheme, the Department received financial assistance from the Ministry to set up Renewable Energy NET (RENET) by installing a VSAT (FTDMA), Server and a Client Computer along with one 2 KVA UPS. The VSAT system has installed in the Electricity Division Office, Kavaratti during 04/2000. Later, VSAT connection has been extended to all the offices in the Lakshadweep Islands by Lakshadweep Administration.
- 2.6.3 Department has switched over to web-based applications from the year 2007 for extending various online facilities to its consumers and to have a real time monitoring of the activities of the Department.
- 2.6.4 The CSI-Nihilent e-Governance award 2006-07 for the best e-Governed Department category was jointly awarded to Department of Electricity, Lakshadweep and Department of Health and family welfare, Government of Gujarat for the achievements they had in implementing e-Governance applications in their respective Departments.
- 2.6.5 Web Portal & EBCMS thoroughly revamped and POWERLAK launched introducing online services like online applications and subsequent workflow for all services during 2014 March. SMS services and e-mail services were integrated
- 2.6.6 E-Payment services of Bill collections started in February 2015
- 2.6.7 POWERLAK Services' mobile app for consumer fraternity launched 0n 15 August 2017.
- 2.6.8 POWERLAK Reader App introduced for surprise check readings in Feb 2018. The app reads the readings from consumer premises and sync the same with server.
- 2.6.9 POWERLAK Reader APP introduced for 100% consumer readings in Aug 2018. The app reads the readings from consumer premises and sync the same with server with geotagging.
- 2.6.10 POWERLAK Workflow is changed from 'self-reading' mechanism to 'Department Reading/SPOT Reading' w.e.f 1st Oct 2018. Accordingly billing services are also changed from current-month billing to pre-prepared previous-month billing.
- 2.6.11 BBPS integrated Electricity Billing system for payments apps like BHIM, Google Pay, PayTM etc. started in March 2021.

#### 2.7 CUSTOMER SERVICE-RELATED ACTIVITIES

- 2.7.1 LED has taken several initiatives for improvement of customer service. The steps already taken and those proposed to be taken are provided below.
- 2.7.2 **Centralized Complaint Centre**: LED plans to establish 24X7 centralized complaint centre where consumers can lodge complaints and remedial action can be taken accordingly.
- 2.7.3 LED has introduced the facility of online payment whereby consumers can pay by internet banking system.

#### 2.8 OTHER DETAILS

#### 2.8.1 POWER DEMAND AND SUPPLY

- 2.8.1.1 Electricity Department is responsible for arranging power mainly from own generation and distribution and transmission thereof to all type of consumers. LED has 17 (11 nos. Diesel Power Plant and 06 nos. solar power plants) own generating stations for the generation of power. The Department has entered into Memorandum of Understanding. The MOU deals with the utilization of the land and lagoon area in the Union Territory of Lakshadweep for setting up of cumulative capacity of 25.14 MW Solar Power Projects comprising of re-powering of the existing Ground Mounted Solar PV System, Lagoon based floating Solar PV Projects as well as and Rooftop Solar PV Installation with upto 75.71 MWh Battery Energy Storage System (hereinafter referred to as 'BESS'. The details of power procurement from SECI are provided in the subsequent section. Apart from the above sources, there is no availability of power from Central Generating Stations or from other sources/ open market/ power exchanges etc.
- 2.8.1.2 The present power available to LED is 26.262 MW. The peak demand for last year touched 11.71 MW (FY 23-24) and it is anticipated to reach 13.00 MW in FY 24-25. The peak demand is projected to be 14.08 MW, 15.30 MW, 16.69 MW, 18.29 MW and 20.13 MW for FY 2025-26, FY 26-27, FY 27-28, FY 28-29 and FY 29-30 respectively.

#### 2.8.2 GRID DETAILS

Due to the geographical & topographical peculiarities of these islands including separation by sea over great distances there is no single power grid for the entire electrified island and instead a power house caters independently to the power requirements of area/islands.

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#### 2.8.3 ORGANIZATION STRUCTURE: ROLES AND RESPONSIBILITIES

Electricity Department is part of the Administration of Union Territory of Lakshadweep Islands & headed by the Executive Engineer. Day to day work related to functioning of the Department is looked by the Assistant Executive Engineer at Division level. Under Division there are 10 Sub Division headed by the Assistant Engineers. Executive Engineer at Division Office is also helped by Technical Section, Establishment Section and Account Section headed by the Accountant. At lower level there are Junior Engineers who look after the Operation & Maintenance work of their respected assigned areas and report to their respected Assistant Executive Engineer.

### CHAPTER 3: PROJECTIONS FOR NO. OF CONSUMERS, CONNECTED LOAD AND SALES

#### 3.1 Approach for projection

LED had projected the category wise energy sales, connected load & consumers based on the existing categories of consumers as approved by the Hon'ble Commission in previous tariff Orders and the Business Plan was accordingly submitted to the Hon'ble Commission on 29<sup>th</sup> November, 2024.

Further, the Hon'ble Commission has notified JERC (Retail Supply Tariff Structure) Guideline 2024. The Hon'ble Commission directed LED to revise the petition by considering the consumer categories as defined in the JERC (Retail Supply Tariff Structure) Guideline 2024. Accordingly, LED has regrouped/categorised the energy sale, connected load & consumers based on the new Retail Supply Tariff Structure as notified by the Hon'ble Commission.

It is submitted that total energy sales, connected load & consumers remains same as projected and submitted in the original petition, only the same has been regrouped/recategorized as per the new Retail Supply Tariff Structure.

LED has followed the following methodology for recategorizing the energy sale, connected load & consumers.

- i. The actual data of energy sales, connected load & consumers for the previous periods as per the existing tariff structure have been considered and CAGR has been calculated for respective categories.
- ii. The projections for the control period have been done based actual category wise energy sale, connected load & consumers for the FY 2023-24 and by applying the respective CAGRs year over year.
- iii. The actual data of energy sales, connected load & consumers for the FY 2023-24 has been analysed based on the records.
- iv. The actual consumers of FY 2023-24 have been regrouped & re categorised as per the category applicability defined in the new Retail Supply Tariff Structure by transferring the consumers from existing category to the revised tariff categories/structure.
- v. Wherever, exact matching of consumers of the existing category vis-a-vis new tariff structure could not be done due to insufficiency of details, suitable assumptions have been done with objective to keep the consumers in applicable category based on the past trends.
- vi. Accordingly, the category wise consumer details for the FY 2023-24 as per the new Retail Supply Tariff Structure has been finalised.
- vii. Thereafter, ratio/proportion of consumers in each category vis-à-vis total for the FY 2023-24 has been calculated. The category wise ratio/proportion for FY 2023-24 thus arrived has been applied on the total energy sales, connected load & consumers for each year of the control period (as projected based on CAGR) to compute the category wise energy sales, connected load & consumers for the respective years.
- viii. The category wise energy sales, connected load & consumers shall be again analysed based on actual figures at the end the current financial year (FY 2025-26) and changes as may be required shall be submitted to the Hon'ble Commission for consideration.

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#### 3.2 FORECAST FOR NO. OF CONSUMERS

3.2.1 The Table below summarizes the category wise growth in consumers over the past 5 years as per previous tariff structure.

Table 13: Past Consumer Growth

	2018-19	2019-20	2020-21	2012-22	2022-23	2023-24	
Category	Actual	Actual	Actual (Unaudited)	Actual (Unaudited)	Actual (Unaudited)	Actual (Unaudited)	
Domestic	19,683	20,003	20,254	20,685	20,997	21,016	
Commercial	2,766	2,885	3,422	4,044	4,326	4,629	
Govt. Connection	1,178	1,296	1,173	1,172	1,082	1,076	
Industrial	349	345	352	364	363	365	
HT Consumers	6	8	9	8	8	8	
Public Lighting	75	75	76	72	72	69	
Temporary	246	225	136	117	-	188	
Total	24,303	24,837	25,422	26,462	26,848	27,351	

3.2.2 The 5-years, 3-years & 1-year CAGR was calculated to analyse the growth over different periods of time. On the basis of the past growth trends and expected growth during the ensuing control period, the appropriate CAGR has been considered for various category of consumers. Accordingly, 5-years CAGR has been considered to project the consumer growth of Domestic consumers and HT consumers for the control period, 3-years CAGR has been considered to project the consumer growth of Industrial consumers and 1-year has been considered to project the consumer growth for the control period of Commercial category. Further, the number of consumers in the public lighting & temporary category for the control period has been kept same as that of FY 2023-24. The CAGR along with projected number of consumers for the control period has been given in the table below:

Table 14: Projected Consumer Growth

	CAGR				2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	
Category	5 Years	3 Years	1 Year	USED USED	Estimated	Projected					
Domestic	1.32%	1.24%	0.09%	1.32%	21,293	21,574	21,859	22,147	22,439	22,735	
Commercial	10.85%	10.60%	7.00%	7.00%	4,953	5,300	5,671	6,069	6,494	6,949	
Govt.			_								
Connection	-1.80%	-2.84%	-0.55%	2.00%	1,098	1,119	1,142	1,165	1,188	1,212	
Industrial	0.90%	1.22%	0.55%	1.22%	369	374	378	383	388	392	
HT											
Consumers	5.92%	-3.85%	0.00%	5.92%	8	9	10	10	11	11	
Public											
Lighting	-1.65%	-3.17%	-4.17%	0.00%	69	69	69	69	69	69	
Temporary	-5.24%	11.40%	0.00%	0.00%	270	270	270	270	270	270	
Total					28,061	28,716	29,399	30,113	30,858	31,638	

The category wise number of consumers for the control period FY 2025-26, FY2026-27, FY2027-28, FY2028-29 and FY2029-30 based on the new Retail Supply Tariff Structure is provided below:

Table 15: Projected Number of Consumer based on the new Retail Supply Tariff Structure

S. No.	Categories	2025-26 (Projected)	2026-27 (Projected)	2027-28 (Projected)	2028-29 (Projected)	2029-30 (Projected)
1	DOMESTIC SERVICE (DS)					
i						
	LTDS-I: Connected Load Based	0	0	0	0	0
ii	LTDS-II: Demand Based	20,864	21,142	21,424	21,710	21,999
iii	LTDS-III: Demand Based	1,098	1,113	1,128	1,143	1,158
2	NON-DOMESTIC SERVICE (NDS)					
i	NDS - I: Demand Based	5,843	6,211	6,603	7,023	7,471
ii	NDS - II: Demand Based	188	201	215	230	246
iii			,			
	NDS - III: Demand Based	0	0	0	0	0
iv	NDS - IV: Demand Based	183	187	191	194	198
V	NDS - V: Connected Load Based	72	73	74	75	76
3	AGRICULTURAL SERVICE (AS)					
i	LTAS - I: Connected Load Based	25	40	60	85	120
ii	LTAS – II: Demand Based	0	0	0	0	0
iii	LTAS - III: Demand Based	0	0	0	0	0
4	INDUSTRIAL SERVICES (LTIS)	374	378	383	388	392

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S. No.	Categories	2025-26 (Projected)	2026-27 (Projected)	2027-28 (Projected)	2028-29 (Projected)	2029-30 (Projected)
5	PUBLIC UTILITY SERVICES					
i	LTPS-I: Demand Based	14	14	14	14	15
ii	LTPS-II: Connected Load Based	69	69	69	69	69
iii	LTPS-III: Connected Load Based	2	2	2	2	2
6	Electric Vehicle Charging Stations					
i	LTEV-I: Demand Based	0	0	0	0	0
7	HIGH TENSION SUPPLY					
i	HTS-I: Demand Based	0	0	0	0	0
ii	HTS-II: Demand Based	9	10	10	11	11
8	Total	28,741	29,439	30,173	30,943	31,758

#### 3.3 FORECAST FOR CONNECTED LOAD

3.3.1 The Table given below summarizes the growth in sanctioned load over the past 5 years as per previous tariff structure.

Table 16: Past Load Growth

All Figures are in KVA

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Category	Actual	Actual	Actual (Unaudited)	Actual (Unaudited)	Actual (Unaudited)	Actual (Unaudited)
Domestic	87,669	90,294	92,032	89,702	83,952	87,948
Commercial	15,975	12,240	8,213	9,350	10,182	11,573
Govt. Connection	8,101	7,503	12,026	11,982	11,014	12,927
Industrial	3,786	3,723	3,658	3,845	3,821	3,891
HT Consumers	520	728	923	822	832	1,226
Public Lighting	308	277	284	404	290	290
Temporary	147	275	273	307	0	221
Total	1,16,507	1,15,040	1,17,408	1,16,412	1,10,091	1,18,078

3.3.2 The load growth of different categories of consumers was analysed by calculating 5-years, 3 years and 1-year CAGR. On the basis of the past growth trends and expected growth during the ensuing control period, the appropriate CAGR has been considered for various category of consumers. Accordingly, 5-years CAGR has been considered to project

the consumer growth of Domestic consumers. Further, 3-years CAGR has been considered to project the load growth for the control period of Govt connections, HT consumers and Public lighting. In case of Commercial & Industrial categories inconsistent growth pattern was observed, hence, growth rate during the current year i.e 2024-25 upto September 2024 has been considered. Further, the load in the temporary category for the control period has been kept same as that of FY 2023-24. The CAGR along with projected load for the control period has been given in the table below:

Table 17: Projected Load Growth

All Figures are in KVA

		CAGR		CACD	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Category			USED	Estimated		Projected				
Domestic	0.06%	-1.50%	4.76%	4.76%	92,135	96,521	1,01,116	1,05,929	1,10,972	1,16,255
Commercial	-6.24%	12.11%	13.66%	3.12%	11,935	12,307	12,691	13,088	13,496	13,918
Govt. Connection	9.80%	2.44%	17.37%	2.44%	13,242	13,565	13,896	14,234	14,581	14,937
Industrial	0.55%	2.08%	1.83%	9.05%	4,243	4,627	5,045	5,502	5,999	6,542
HT Consumers	18.71%	9.92%	47.31%	9.92%	1,347	1,481	1,628	1,790	1,967	2,163
Public Lighting	-1.19%	0.70%	0.00%	0.70%	292	294	296	298	300	302
Temporary	8.49%	-6.77%	0.00%	0.00%	346	346	346	346	346	346
	Total					1,29,141	1,35,019	1,41,187	1,47,663	1,54,462

The category wise connected load for the control period FY 2025-26, FY2026-27, FY2027-28, FY2028-29 and FY2029-30 new Retail Supply Tariff Structure is provided below:

Table 18: Projected Connected Load based on the new Retail Supply Tariff Structure

in KVA

S. No.	Categories	2025-26 (Projected)	2026-27 (Projected)	2027-28 (Projected)	2028-29 (Projected)	2029-30 (Projected)
1	DOMESTIC SERVICE (DS)					
i	LTDS-I: Connected Load Based	0	0	0	0	0
ii	LTDS-II: Demand Based	96,660	1,01,144	1,05,838	1,10,753	1,15,899
iii	LTDS-III: Demand Based	5,087	5,323	5,570	5,829	6,100
2	NON-DOMESTIC SERVICE (NDS)					
i	NDS - I: Demand Based	17,460	17,958	18,471	18,998	19,541
ii	NDS - II: Demand Based	522	538	555	572	590
iii	NDS - III: Demand Based	0	0	0	0	0

Lakshadweep Electricity Department

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S. No.	Categories	2025-26 (Projected)	2026-27 (Projected)	2027-28 (Projected)	2028-29 (Projected)	2029-30 (Projected)	
iv	NDS - IV: Demand Based	2,560	2,623	2,687	2,752	2,819	
٧	NDS - V: Connected Load Based	103	108	113	119	124	
3	AGRICULTURAL SERVICE (AS)						
i	LTAS – I: Connected Load Based	63	100	150	213	300	
ii	LTAS - II: Demand Based	0	0	. 0	0	0	
iii	LTAS - III: Demand Based	0	0	0	0	0	
4	INDUSTRIAL SERVICES (LTIS)	4,627	5,045	5,502	5,999	6,542	
5	PUBLIC UTILITY SERVICES						
i	LTPS-I: Demand Based	220	225	230	236	242	
ii	LTPS-II: Connected Load Based	294	296	298	300	302	
iii	LTPS-III: Connected Load Based	127	130	133	136	140	
6	Electric Vehicle Charging Stations						
i	LTEV-I: Demand Based	0	0	0	0	0	
7	HIGH TENSION SUPPLY						
i	HTS-I: Demand Based	0	0	0	0	0	
ií	HTS-II: Demand Based	1,481	1,628	1,790	1,967	2,163	
8	Total	1,29,204	1,35,119	1,41,337	1,47,875	1,54,762	

#### 3.4 ENERGY DEMAND FORECAST

3.3.1 The Table below presents the category-wise energy sales for the past six years as per previous tariff structure. It may be seen that there has been consistent growth in sales for different categories of consumers.

Table 19: Past Sales Growth

All Figures are in MUs

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Category	Actual	Actual	Actual (Unaudited)	Actual (Unaudited)	Actual (Unaudited)	Actual (Unaudited)
Domestic	35.97	35.59	40.35	38.74	37.19	39.78
Commercial	3.09	3.12	3.31	3.33	3.94	8.14
Govt. Connection	8.00	7.60	7.28	7.00	7.54	5.12
Industrial	0.38	0.36	0.37	0.39	0.45	0.67
HT Consumers	0.69	0.81	0.88	1.64	1.72	1.95
Public Lighting	0.67	0.81	0.82	0.82	0.79	0.78
Temporary	0.11	0.14	0.09	0.09	0.11	0.09
Total	48.90	48.42	53.10	52.01	51.74	56.52

3.3.2 The table given below summarizes the projections of category wise energy sales for the Control Period (FY 2025-26 to FY 2029-30) along with the CAGR used for projections.

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Domestic Category Consumers: As can be witnessed that from the data presented in the table above, the 5-years, 3-years and 1-year CAGR for the domestic category sales has been in the range of 2% to 7%. However, sales in domestic category are to be considered on the basis of consistent growth over a period of time. Accordingly, for projection of sales in the domestic category has been done considering 5-years CAGR year over year on the actual figures for the FY 2023-24.

Commercial category consumer: As can be witnessed that from the data presented in the table above, the 5-years, 3-years and 1-year CAGR for the commercial category sales has been in the range of 21% to 106%. The growth in the Commercial category is not showing any specific trend. However, for projecting sales in this category has been considered as the rate of 5.00% year over year on the actual figures for the FY 2023-24.

Government Connection: LED has considered the growth rate as the rate of 5.00% year over year on the actual figures for the FY 2023-24.

Industrial: As can be witnessed that from the data presented in the table above, the 5-years, 3-years and 1-year CAGR for the industrial category sales has been in the range of 12% to 48%. However, sales in industrial category are to be considered on the basis of consistent growth over a period of time. Accordingly, for projection of sales in the industrial category has been done considering 5-years CAGR year over year on the actual figures for the FY 2023-24.

HT Consumers: As can be witnessed that from the data presented in the table above, the 5years, 3-years and 1-year CAGR for the HT industrial category sales has been in the range of 13% to 30%. The growth in the HT industrial category is not showing any specific trend. However, for projecting sales in this category has been considered at the rate of 9.32% (growth of CY 2024-25, till September, 2024) year over year on the actual figures for the FY 2023-24.

Public Lighting Category: Sales in public lighting category is to be considered on the basis of consistent growth over a period of time. Accordingly, for projection of sales in the public lighting category has been done considering 5-years CAGR year over year on the actual figures for the FY 2023-24.

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<u>Temporary Connections:</u> LED has considered the growth rate as the rate of 5.00% year over year on the actual figures for the FY 2023-24.

Based on the assumptions and methodology detailed above, the projected sales for FY2024-25 and for the Control Period FY 2025-26 to FY 2029-30 is summarized in table below:

Table 20: Projected Sales Growth

All Figures are in MUs

		CAGR			2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Category	5 Years	3 Years	1 Year	USED	Estimated			Projected		
Domestic	2.04%	-0.47%	6.98%	2.04%	40.59	41.42	42.26	43.12	44.00	44.90
Commercial	21.40%	34.95%	106.63%	5.00%	8.54	8.97	9.42	9.89	10.38	10.90
Govt. Connection	-8.55%	11.06%	-32.09%	5.00%	5.38	5.64	5.93	6.22	6.53	6.86
Industrial	11.59%	21.48%	47.91%	11.59%	0.74	0.83	0.92	1.03	1.15	1.28
HT Consumers	23.11%	30.36%	13.42%	9.32%	2.14	2.34	2.55	2.79	3.05	3.34
Public Lighting	3.11%	-1.63%	-1.22%	3.11%	0.80	0.83	0.85	0.88	0.91	0.93
Temporary	-4.04%	-2.36%	-21.72%	5.00%	0.09	0.10	0.10	0.11	0.11	0.12
Total			Y IIIN		58.28	60.12	62.04	64.04	66.14	68.33

The category wise sales for the control period FY 2025-26, FY2026-27, FY2027-28, FY2028-29 and FY2029-30 as per the new Retail Supply Tariff Structure is provided below:

Table 21: Projected Energy Sales based on the new Retail Supply Tariff Structure

in MUs

Categories	2025-26 (Projected)	2026-27 (Projected)	2027-28 (Projected)	2028-29 (Projected)	2029-30 (Projected)
MESTIC SERVICE (DS)					
S-I: Connected Load Based	0	0	0	0	0
S-II: Demand Based	42.14	43.08	44.05	45.05	46.06
S-III: Demand Based	2.22	2.27	2.32	2.37	2.42
I-DOMESTIC SERVICE (NDS)					
S – I: Demand Based	6.90	7.24	7.61	7.99	8.39
S – II: Demand Based	1,28	1.35	1.41	1.49	1.56
	S-I: Connected Load Based S-II: Demand Based S-III: Demand Based I-DOMESTIC SERVICE (NDS) I- I: Demand Based	MESTIC SERVICE (DS)	S-I: Connected Load Based   0   0	MESTIC SERVICE (DS)	S-I: Connected Load Based   0   0   0   0

Lakshadweep Electricity Department

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### 22842/2025/Legal Section

# Petition for Approval of Business Plan for the for 5-year MYT Control Period from FY 2025-26 to FY 2029-30

S. No.	Categories	2025-26 (Projected)	2026-27 (Projected)	2027-28 (Projected)	2028-29 (Projected)	2029-30 (Projected)
iii	NDS - III: Demand Based	0	0	0	0	0
iv	NDS - IV: Demand Based	2.53	2.66	2.79	2.93	3.08
V	NDS - V: Connected Load Based	0.14	0.14	0.15	0.15	0.15
3	AGRICULTURAL SERVICE (AS)					
i	LTAS - I: Connected Load Based	0.07	0.11	0.16	0.23	0.32
ii	LTAS - II: Demand Based	0	0	0	0	0
iii	LTAS – III: Demand Based	0	0	0	0	0
4_	INDUSTRIAL SERVICES (LTIS)	0.83	0.92	1.03	1.15	1.28
5	PUBLIC UTILITY SERVICES				_	
i	LTPS-I: Demand Based	0.55	0.58	0.61	0.64	0.67
ii	LTPS-II: Connected Load Based	0.83	0.85	0.88	0.91	0.93
iii	LTPS-III: Connected Load Based	0.36	0.38	0.40	0.42	0.44
6	Electric Vehicle Charging Stations					
i	LTEV-I: Demand Based					
7	HIGH TENSION SUPPLY					
i	HTS-I: Demand Based	0	0	0	0	0
ii_	HTS-II: Demand Based	2.34	2.55	2.79	3.05	3.34
8	Total	60.19	62.15	64.21	66.37	68.66

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#### **CHAPTER 4: POWER PROCUREMENT PLAN**

### 4.1 ENERGY BALANCE AND ENERGY REQUIREMENT

4.1.1 The energy requirement for LED is estimated based on the retail sales projections, grossed up by estimated loss levels. The energy balance expected for the FY 2025-26, FY 2026-27, FY 2027-28, FY 2028-29 and FY 2029-30 is as given below:

Table 22: Energy Requirement – FY 2025-26, FY 2026-27, FY 2027-28, FY 2028-29 and FY 2029-30

SI.		FY 23-24	FY 2024-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30
No.	Particular	(Actuals)	(Estimated)			(Projected)		
A	ENERGY REQUIREMENT (MU)							
i)	Total Sales within UT	56.52	58.28	60.12	62.04	64.04	66.14	68.33
ii)	Transmission & Distribution Losses (%)	12.42%	9.25%	9.25%	9.25%	9.25%	9.25%	9.25%
iii)	T&D Losses (MU)	8.01	5.94	6.13	6.32	6.53	6.74	6.97
	Total Energy Requirement (for sale to retail consumers)	64.53	64.22	66.25	68.36	70.57	72.88	75.30
В	ENERGY AVAILABILITY AT PERIPHERY							
i)	Power Purchase	1.24	3.44	4.21	8.11	31.38	61.03	75.30
ii)	Renewable Generation	0.06	0.01	0.00	0.00	0.00	0.00	0.00
iii)	HSD Generation ( Net)	63.24	60.77	62.04	60.25	39.19	11.85	0.00
	Total Energy Availability	64.53	64.22	66.25	68.36	70.57	72.88	75.30
	ENERGY SURPLUS/(GAP)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

कार्यकारी अभियंता (वि) Executive Engineer (ELE) लक्षद्वीप सं.श.प्र / U.T. of Lakshadweep कवारत्ती/Kavaratti-682 555 4.1.2 The energy requirement of LED is current met majorly from own generation. However, the Department has entered into Memorandum of Understanding. The MOU deals with the utilization of the land and lagoon area in the Union Territory of Lakshadweep for setting up of cumulative capacity of 25.14 MW Solar Power Projects comprising of re-powering of the existing Ground Mounted Solar PV System, Lagoon based floating Solar PV Projects as well as and Rooftop Solar PV Installation with upto 75.71 MWh Battery Energy Storage System (hereinafter referred to as 'BESS'. Apart from the above sources, there is no availability of power from Central Generating Stations or from other sources/ open market/ power exchanges etc. Details of the available sources of power for FY 2025-26, FY 2026-27, FY 2027-28, FY 2028-29 and FY 2029-30 is provided below.

The existing installed capacity of DG sets is provided below:

Table 23: Existing Installed Capacity of DG Sets

S.No.	Island	Machine No.	Engine Make	Alternator Make	Date of installation	Capacity (kW)
1		DG-1	MTU	Leroy Somer	05-08-2009	1000
2	Minicoy	nicoy DG-2 MTU Leroy Somer		15-09-2020	1000	
3	•	DG-6	Perkins	Leroy Somer	03-12-2019	808
4		DG-3	Greaves	KIRLOSKAR	22-04-1995	400
7		DG - 2	MTU	Leroy Somer	13-10-2010	1320
8	Varianatt:	DG - 3	CUMMINS	SAMFORD	27-01-2020	1200
9	Kavaratti	DG - 4	CUMMINS	STAMFORD	19-10-2009	600
10		DG - 5 CUMMINS STAMFORD		18-09-2009	600	
11		DG - 1	MTU	Leroy Somer	31.08.2008	1025
12	Amini	DG - 2	MTU	Leroy Somer	04.04.2010	1025
13	Amim	DG - 4	CUMMINS	STAMFORD	01.09.2013	808
14		DG - 5	Perkins	Leroy Somer	07.01.2020	808
15		DG - 1	MTU	Leroy Somer	09.02.2009	1320
16	]	DG - 4	CUMMINS	Stamford	30.01.2013	808
18	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	DG - 10	VOLVO PENTA	Stamford	01.08.2016	520
19	Androth	DG - 9	VOLVO PENTA	Stamford	01.08.2016	520
20		DG - 11	Perkins	Leroy Somer	18.02.2020	600
21		DG - 12	Perkins	Leroy Somer	18.02.2020	600

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S.No.	Island	Machine No.	Engine Make	Alternator Make	Date of installation	Capacity (kW)
22	NEW SECURIOR	DG - 3	Greaves	NGEF	01-01-1998	250
23		DG - 4	VOLVO PENTA	LEROY SOMER	25-05-2009	250
24	Kalpeni	DG - 5	VOLVO PENTA	LEROY SOMER	25-05-2009	250
25		DG - 6	CUMMINS	Stamford	17-02-2016	808
26		DG - 7	Perkins	LEROY-SOMER	29-01-2020	808
27		DG - 1	MTU	Leroy Somer	12-03-2008	500
28	] [	DG - 2	MTU	Leroy Somer	02-06-2008	500
29	Agatti	DG - 3	CUMMINS	Leroy Somer	09-03-1998	400
30	] [	DG - 5	CUMMINS	Stamford	10-01-2013	808
31	] [	DG - 7	Perkins	Leroy Somer	23/12/2020	600
32		DG - 6	CUMMINS	Kirlosker	08-05-2011	400
33	] 	DG - 7	CUMMINS	Stamford	03-02-2013	750
34	Kadmath	DG - 11	Perkins	LEROY SOMER	17-03-2020	600
35	]	DG - 12	Perkins	LEROY-SOMER	08-05-2021	808
36		DG - 1	MTU	Leroy Somer	13/08/2008	505
37	12:16	DG - 2	MTU	Leroy Somer	14/08/2008	505
38	Kiltan	DG - 4	CUMMINS	STAMFORD	22/02/2016	480
39		DG - 5	Greaves	Leroy Somer	03-09-1998	400
40		DG-I	VOLVO PENTA	LEROY SOMER	10.02.2012	256
41	Chetlath	DG-II	VOLVO PENTA	LEROY SOMER	11.02.2012	256
42		DG-III	CUMMINS	STAMFORD	12.02.2013	500
43		DG - 5	Mahindra	Crompton Greaves	08-08-2021	100
44	Bitra	DG - 6	Mahindra	Crompton Greaves	09-08-2021	100
45		DG-4	CUMMINS	Stamford	28.02.2013	100
46		DG-3	CUMMINS	Kirlosker	20-12-2009	66
47	Bangaram	DG-4	Ashok Leyland		13-10-2021	100
48		DG-5	Ashok Leyland		13-10-2021	100
49		DG-6	Ashok Leyland		13-10-2021	100
m #(07. A*)	A SALENTA		TOTAL			26262



कार्यकारी अभियंता (वि) Executive Engineer (ELE) The details of solar power procurement from SECI are provided below.

- 1. The SECI and the Lakshadweep Electricity Department, SECI had undertaken the feasibility report with regard to the Renewable Energy Development in Lakshadweep.
- On 07.10.2018, the Lakshadweep Electricity Department and SECI entered into a Memorandum of Understanding. The MOU deals with the utilization of the land and lagoon area in the Union Territory of Lakshadweep for setting up of cumulative capacity of 25.14 MW Solar Power Projects comprising of re-powering of the existing Ground Mounted Solar PV System, Lagoon based floating Solar PV Projects as well as and Rooftop Solar PV Installation with upto 75.71 MWh Battery Energy Storage System (hereinafter referred to as 'BESS'
- 3. In pursuance of the above MOU, SECI executed a Power Purchase Agreement (hereinafter referred to as 'PPA') dated 09.01.2019 where under it has been agreed between the parties that SECI would establish the Solar Power Projects of 25.14 MW cumulative contracted capacity with BESS Capacity up to 75.71 MWh and sale of such energy generated from the projects would entirely be to the Lakshadweep Electricity Department.
- 4. The capacity, as mentioned hereinabove, is to be established with Solar Power Projects inclusive of empowering the existing Ground Mounted Solar PV System, Roof Top Solar PV System as well as by setting up lagoon based floating Solar PV System presently identified to be located in 11 islands of the Union Territory of Lakshadweep. The project details are as under:

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Table 24: Proposed Installed Capacity of Solar

Islands	Solar (MW)	Ground PV Based (MW)	Roof-Top PV (MW)	Floating PV (MW)	Storage (MWh)
Agatti	3.00	0.31	0.30	2.39	9.00
Amini	2.75	0.25	0.25	2.25	8.55
Andrott	3.70	0.50	1.50	1.70	11.00
Bangaram	0.08	0.08	0.00	0.00	0.25
Bitra	0.13	0.09	0.04	0.00	0.41
Chetlat	0.75	0.15	0.20	0.40	2.10
Kadmat	2.00	0.55	0.13	1.32	6.40
Kalpeni	1.80	0.25	0.17	1.38	5.60
Kavaratti	5.80	1.40	1.90	2.50	17.00
Kiltan	1.43	0.35	0.25	0.83	4.40
Minicoy	3.70	0.40	1.50	1.80	11.00
Total	25.14	4.33	6.24	14.57	75.71

- 5. In this regard, the PPA dated 09.01.2019 sets out the scheme of purchase and sale of solar power from the solar power projects of SECI to Lakshadweep Electricity Department as under:
  - A. Whereas an MOU has been executed between SECI and Lakshadweep Electricity Department on 07.10.2018, for setting up of cumulative 25.14 MW Solar Power Project (which includes repowering of existing ground mounted solar PV systems, Lagoon based floating solar PV system and rooftop solar PV system) with upto 75.71 MWh battery storage in 11 islands of UT Lakshadweep as per the details attached at Schedule-II.
  - B. Whereas, SECI shall Build, Own & Operate the Project(s) and will also make all required investments for the Projects.
  - C. Whereas, the proposed Project being setup at 11 islands of UT Lakshadweep and will be connected to designated LED grid at 11 kV voltage level or any other voltage level as consented by the LED.

- D. Whereas, SECI shall also complete all other assignments required for setting up, commissioning and successful operation of the Project, considering point of sale of power at the delivery point at the outgoing feeder from the project.
- E. Whereas, SECI shall operate and maintain the Project(s) for the period of minimum (25) years (or extended period as mutually agreed) from the date of Commercial Operation date (COD) of the project(s).
- F. Whereas, SECI has agreed to sell entire energy generated from project to LED and the LED has agreed to purchase such Power from the Projects as per terms and conditions contained herein and at a tariff to be determined as per provisions contained herein.
- G. Whereas, LED has agreed to pay for the energy purchased from SECI at a tariff to be determined as per provisions contained herein;
- H. Whereas, the tariff for sale of power will be determined as per JERC tariff determination model specified for Solar PV projects including technical constrains (like auxiliary consumption, grid availability etc). For determination of tariff, the EPC cost arrived through bidding along with other charges like IDC, Project Development Charges, incidental expenses during construction, Insurance and Contingency etc. will be considered in arriving at the final project cost.
- I. Whereas based on the final Project Cost, tariff will be computed taking into consideration other factors like guaranteed generation as per bid documents, financing Cost as per actual in line with terms of Lending Institutions, Returns on equity, O&M charges and Depreciation as per JERC/CERC parameters.
- J. Whereas any implication of Change in Law as per Clause 8 which shall result in a revision of the tariff accordingly, applicable from the month subsequent to such change.
- K. Whereas, the agreed contracted (cumulative) Capacity by SECI to LED for Solar Projects with battery storage shall be 25.14 [with BESS capacity of upto 75.71 MWh.
- 6. In terms of the MOU and PPA, SECI has proceeded with the process for selection of Engineering, Procurement and Construction Contractor (EPC) Contractor through e-tendering followed by e-reverse auction process for development of the projects. Considering the location of the power projects proposed, being away from the mainland and endeavor being made for the first time in Lakshadweep, the establishment of the Power Projects is necessarily to be in a phased manner and it is not possible to proceed with the selection of the developer

for the cumulative capacity of 25.14 MW in one go.

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7. As at present, out of the cumulative capacity of 25.14 MW agreed to in between the parties, SECI has proceeded with the development of 1.7 MW ground mounted solar PV Power Project with 1.4 MWh BESS at the following two (2) locations:

Table 25: Capacity of Solar

S. No.	Island	Solar capacity (KW)	BESS Capacity (kWh)
1.	Agatii	300	0
2.	Kavaratti	1400	1400
	TOTAL	1700	1400

The power from the above planned sources have been considered to project the power availability during the control period FY 2025-26 to FY 2029-30.

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The expected power generation/procurement sources for FY 2025-26, FY 2026-27, FY 2027-28, FY 2028-29 and FY 2029-30 are provided in the table below.

Table 26: Details of Power Procurement Sources – FY 2025-26, FY 2026-27, FY 2027-28, FY 2028-29 and FY 2029-30

Energy Balance	FY 23-24 (Actual) MU's	FY 24-25 (Estimated) MU's	FY 25-26 (Projected) MU's	FY 26-27 (Projected) MU's	FY 27-28 (Projected) MU's	FY 28-29 (Projected) MU's	FY 29-30 (Projected) MU's
Power Purchase (Solar)	1.30	3.46	4.21	8.11	31.38	61.03	75.30
Own Generation (DG-NET)	63.24	60.77	62.04	60.25	39.19	11.85	0.00
Total	64.53	64.22	66.25	68.36	70.57	72.88	75.30

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#### 4.2 PROCUREMENT PLAN

4.2.1 The Generation forecast is based on the plant availability and energy demand for the period. Accordingly, generation for FY 2021-22, FY 2025-26, FY 2026-27, FY 2027-28, FY 2028-29 and FY 2029-30 is estimated.

Table 27: Projected Power Generation—FY 2025-26, FY 2026-27, FY 2027-28, FY 2028-29 and FY 2029-30

		(MUs)		enerated a	& Sent Ou	t	
	FY	FY	FY	FY	FY	FY	FY
Particulars	2023-24	2024-25	2025- 26	2026- 27	2027- 28	2028- 29	2029- 30
	Actual	Estimated			Projected	T TENE	
Units Generated (DG-Gross)	63.69	61.20	62.48	60.68	39.47	11.93	0.00
Auxiliary Consumption	0.45	0.43	0.44	0.43	0.28	0.08	0.00
Sent Out	63.24	60.77	62.04	60.25	39.19	11.85	0.00

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#### 4.3 RENEWABLE PURCHASE OBLIGATION

- 4.3.1 Apart from the above allocations, LED shall also procure power from roof-top solar power plants as covered under the power procurement from renewable energy segment. Renewable power obligation for the utilities has been prescribed by the Hon'ble Commission vide JERC for State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010, amended from time to time.
- 4.3.2 The RPO targets for the control period to be achieved by the LED during the Control Period as specified in the Regulations is as follows:

Table 28: RPO Obligation

FY	Wind RPO (%)	HPO RPO (%)	Distributed RPO (%)	Other RPO (%)
2025-26	1.45	1.22	2.10	28.24
2026-27	1.97	1.34	2.70	29.94
2027-28	2.45	1.42	3.30	31.64
2028-29	2.95	1.42	3.90	33.10
2029-30	3.48	1.33	4.50	34.02

4.3.3 The LED submits that it intends to meet the RPO as per the directions of the Hon'ble Commission in the MYT Control period. LED has planned to meet the Solar RPO from the generation of solar power from own power plants, rooftop solar & solar power procurement from SECI. Further, it is submitted that in absence of any non-solar power plants, LED shall not be able meet the RPO towards non-solar. However, the Hon'ble Commission in the tariff order for the FY 2018-19 had approved clubbing of RPO of solar & non-solar energy to meet the targets set by the Commission. Accordingly, projected RPO compliance by LED during the Control Period is summarized in the table below:

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Table 29: Renewable Purchase Obligation Compliance

	RPO Compliance							
Sr. No.	Particulars	2025-26	2026-27	2027-28	2028-29	2029-30		
1	Wind RPO Target (%)	1.45	1.97	2.45	2.95	3.48		
2	HPO Target (%)	1.22	1.34	1.42	1.42	1.33		
3	Distributed RPO Target (%)	2.10	2.70	3.30	3.90	4.50		
4	Other RPO Target (%)	28.24	29.94	31.64	33.10	34.02		
Α	Total Renewable Purchase Obligation (%)	33.01	35.95	38.81	41.37	43.33		
В	Projected Sales (Mus)	60.12	62.04	64.04	66.14	68.33		
	<b>第二人员工的第三人称单数</b>	M. Mary		THE IN	E CALL			
1	Wind RPO Target (MUs)	0.87	1.22	1.57	1.95	2.38		
2	HPO Target (MUs)	0.73	0.83	0.91	0.94	0.91		
3	Distributed RPO Target (MUs)	1.26	1.68	2.11	2.58	3.08		
4	Other RPO Target (MUs)	16.98	18.57	20.26	21.89	23.25		
С	Total Power for clubbed RPO compliance (MUs)	19.85	22.30	24.86	27.36	29.61		
D	Breakup of Sources for RPO Compliance							
	Total Power to be procured to meet RPO (MUs)	19.85	22.30	24.86	27.36	29.61		
Е	Projected Procurement from Solar Sources	4.21	8.11	31.38	61.03	75.30		

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#### **CHAPTER 5: CAPITAL INVESTMENT PLAN**

As per the MYT Regulations 2024, the Distribution Licensee is required to file the Business Plan for Control Period of five financial years from April 1, 2025 to March 31, 2030, which shall comprise but not be limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets before the Hon'ble Commission as part of the Tariff Filing before the beginning of the Control Period.

Based upon the above mandate, the CAPEX Plan proposals (scheme wise) for FY 25-26 to FY 29-30 under the MYT Control Period FY 2025-30 have been formulated by Lakshadweep Electricity Department in order to enable better planning, budgeting and monitoring at macro & micro levels. The capital expenditure plan has been prepared for 11 KV and below works.

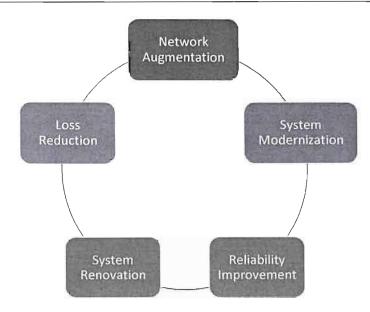
Lakshadweep Electricity Department has prepared the CAPEX plan taking into consideration all the factors which would affect the operations of the company. The CAPEX plan includes the details of various capital expenditure schemes in the identified areas and their respective estimates for each year of the MYT control period from FY25-26 to FY29-30.

The capital investments of the Lakshadweep Electricity Department can largely be categorized in following areas:

- Investments in New Transmission Infrastructure to support the demand requirements or power evacuation from generation projects.
- § System augmentation and strengthening including renovation and modernization to maintain the performance of the existing system.

The figure below provides a wider overview of the capital investment avenues planned by the Lakshadweep Electricity Department.

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Since capital investment is an ongoing activity for any transmission and distribution licensee, LED has categorized the schemes under the followings two categories i.e. On-going schemes and new schemes. But in case of LED mainly all the capital expenditures are being completed within a year, hence there will be no ongoing scheme. The year wise details of proposed capital expenditure under the two categories have been furnished below.

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#### 5.1 ONGOING PROJECTS

5.1 There is no spill over of the Capital expenditure as all the Capital expenditure works is being completed in the same financial year hence there is no ongoing schemes.

#### 5.2 NEW PROJECTS PLANNED

5.2.1 LED has planned for 12 new 11kV schemes in view of the system upgradation requirement and improvement of reliability. The Cap-ex Plan proposal (Scheme wise) for FY 2025-26 to FY 2029-30 under the MYT control period FY-2025-30 have been formulated by Lakshadweep Electricity Department keeping in view various parameters that come into play to ensure better supply of power to end consumers. The details of the new 11kV capital schemes along with the investment rationale and their approval status is provided in table below:

Table 30: 11 KV New Schemes proposed for the Control Period

Sr. No.	11KV New Scheme	Total Exp. (In lakhs)					
1	Installation/Augmentation/Replacement of DG generating Capacity	4100					
Scheme Details	Supply installation testing and commissioning of DG sets for augmentation/replacement of existing DG generating capacity at Islands.  Rationale: The scheme will help to meet the future load demand due to growth of consumers and also due to derating of DG sets due to ageing and for cost effective.						
2	Old and obsolete Panel board and other allied equipment's in the Power House.	420					
Scheme Details	Replacement of old and obsolete Panel board and other allied equipment's in the Power House						
3	Step up Transformer at 11 KV existing sub-station	350					
Scheme Details	Improvement and augmentation of StepUp Transformer at 11 KV Stations at Lakshadweep Islands.  Rationale: The scheme will help to meet the increasing load demand due to growth of consumers and also for replacement of defective transformer so as to reduce T&D loss.						

Sr. No.	11KV New Scheme	Total Exp. (In lakhs)					
4	Step down Transformer at 11KV existing system including RMU	600					
Scheme Details	tails Rationale: The scheme will help to meet the increasing load demand due to gr						
5	consumers and also for replacement of defective transformer so as to  HT Cable line	reduce T&D loss.					
	Supply of 11 KV HT Cable line in the phased manner in all the island, 6	km in each year.					
Scheme Details	Rationale: The scheme will help to provide transmission of power f (Step up Transformer) to distribution transformers (Step down Transformer places.	•					
6	Supply of LT cable	245					
Scheme Details	Supply of LT Cable line in the phased manner in all the island, 20 km in Rationale: The scheme will help to provide new service connections are replacement of defective cables.	,					
7	Consumer cable / Street Light cable	175					
Scheme Details	Supply and Laying of new cable line and also replacement of old and defective cables in all the Island (Consumer Service Cables).  Rationale: The scheme will help to provide new service connections to domestic and commercial consumers and also for replacement of defective lines.						
8	of RCC slab for cable laying work	125					
Scheme Details	Requirement of RCC slab for cable laying work for all the Island.						



Sr. No.	11KV New Scheme	Total Exp. (In lakhs)				
9	Supply of Street light Poles & street light sets	.355				
Scheme Details	Supply of Street light Pole and street light sets  Rationale: The scheme will help to smoothen the installation and rep minimise the cable fault due to improper digging by water authoriti authorities and in saving of energy by replacing with LED type street light	es and telephone				
10	Installation and replacement of Distribution boxes.	285				
Scheme Details	Installation and replacement of Distribution boxes.  Rationale:					
11	Supply of Electronics Energy Meters (3 Phase/Single Phase)	120				
Scheme Details						
12	Power House Tools and Line Tools	95				
Scheme Details						



#### 5.2.2 SCHEME WISE PROPOSED CAPITAL EXPENDITURE FOR THE CONTROL PERIOD

- 5.2.2.1 With respect to the 11kV schemes, 100% capitalization of the amount proposed in the concerned year for schemes such as General Service connections and industrial service connections, augmentation distribution transformers and LT OH conductors, installation of shunt capacitors and replacement of meters has been considered.
- 5.2.2.2 Scheme-wise and year-wise proposed capitalization for the Control Period is summarized in Table below:

Table 31: Proposed Capital Expenditure for 11 KV New Schemes

A.F.II. A. S.			Proposed Expenditure				
Sr.	New Schemes	(Rs Lakh)					
No.		2025-26	2026-27	2027-28	2028- 29	2029- 30	
1	Supply installation testing and commissioning of DG sets for augmentation/replacement of existing DG generating capacity at Islands	1000	900	800	800	600	
2	Replacement of old and obsolete Panel board and other allied equipment's in the Power House.	200	100	120	0	0	
3	Improvement and augmentation of StepUp Transformer at 11 KV Stations at Lakshadweep Islands	70	80	75	75	50	
4	Improvement and augmentation of Step Down Transformer in the Sub Stations including 11 KV Switch Gear Pannels (RMU)	135	135	180	100	50	
5	Supply of 11 KV HT Cable line in the phased manner in all the island, 6km in each year.	70	70	60	35	35	
6	Supply of LT Cable line in the phased manner in all the island, 20 km in each year.	65	65	65	25	25	

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13.18		Proposed Expenditure					
Sr.	New Schemes	(Rs Lakh)					
No.		2025-26	2026-27	2027-28	2028- 29	2029- 30	
7	Supply and Laying of new cable line and also replacement of old and defective cables in all the Island (Consumer Service Cables).	35	35	35	35	35	
8	Requirement of RCC slab for cable laying work for all the Island.	25	25	25	25	25	
9	Supply of Street light Pole and street light sets.	75	80	80	70	50	
10	Installation and replacement of Distribution boxes.	60	65	70	50	40	
11	Supply of Electronics Energy Meters (3 Phase/Single Phase)	20	25	30	25	20	
12	Improvement and Augmentation of Power House/Line Tools in all the Island.	15	20	25	20	15	
	Total	1770	1600	1565	1260	945	

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5.2.2.3 With respect to the FY 2024-25, it is submitted that the Lakshadweep Electricity Department has incurred the capital expenditure for system improvement. The following table provides details of the target cost of such schemes and expenditure which has already being incurred on these schemes for the FY 2024-25.

Table 32: Ongoing Scheme's Original Cost and Incurred Expenditure

Sr. No.	Works	Target for FY 2024-25 Original Project Cost (Rs Lacs)	Expenditure for FY 2024-25 till September 2024 (Rs Lacs)
1	Supply, installation, testing and commissioning of DG sets for augmentation/replacement of existing DG Sets at Islands	300.00	73.80
2	Supply, installation, Testing and Commissioning of step up Transformer	109.00	
3	Supply, installation, Testing and Commissioning of of step down Transformer	106.00	
4	Supply and installation of Ring Main Units	0.00	
5	Supply of Energy Meters	36.00	
6	Supply of HT Cables	30.00	2.60
7	Supply of LT Cables	90.00	
8	Supply of consumer/street light cable	31.00	
9	Supply of Street Light	15.00	
10	Supply of Street Light poles	0.00	
11	Supply of pole mounting street box	200.00	
12	Supply of Cable Fault Locator	50.00	
_13	Supply of Fire Fighting Equipments	33.00	
14	Requirement of RCC slab for cable laying work for all the Island.	0.00	
2	4801 04 052 04 00 71 – ICT	10.00	
3	4801 04 052 04 00 72 – BS	100.00	26.00
4	4801 04 052 04 00 73 – IA	50.00	16.70
5	4801 04 052 04 00 74 – FF	5.00	
6	4801 04 052 04 00 78 – LAND	5.00	3.70
1	4810 00 101 07 00 52 - Mach. & Equipments	2.00	
2	4810 00 101 07 00 71 – ICT	2.00	
3	4810 00 101 07 00 74 – FF	2.00	
	TOTAL	1176.00	122.80

The table below presents overview of the planned capital expenditure and capitalization schedule over the first control period.

Table 33: Year Wise Overall Capital Expenditure and Capitalization

Particulars (In Rs Lakh)	2025-26	2026-27	2027-28	2028-29	2029-30
Capital Expenditure	1,770	1,600	1,565	1,260	945
Capitalization	1,770	1,600	1,565	1,260	945

### 5.2.3 PHYSICAL TARGET ACHIEVEMENT FOR THE CONTROL PERIOD

5.2.3.1 In accordance with the proposed capitalization schedule, LED expects to roll out infrastructure as presented in the table below:

Table 34: Expected Physical Target Achievement for the control period

Year	Distribution Transformer		New Sub-Stations (11KV)		Lines (In KM's)	
	Nos.	kVA	Nos.	MVA	LT	HT
2025-26	2	500	Nil	Nil	20	Nil
2026-27	2	500	Nil	Nil	20	Nil
2027-28	2	500	Nil	Nil	20	Nil
2028-29	2	500	Nil	Nil	20	Nil
2029-30	2	500	Nil	Nil	20	Nil

#### 5.2.4 STATUS OF TENDER PROCESSING FOR SUPPLY/SERVICES

5.2.4.1 All activities to prepare DNIT, Tender & their execution is done by Department at their own level after getting approval from the Administrator. The normal lead time to complete the work is 12 Months after award of work.

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#### 5.2.5 FINANCING OF THE CAPITAL SCHEMES

- 5.2.5.1 The entire capital expenditure incurred by LED had been funded through equity infusion by Central Govt. through budgetary support without any external borrowings. There are no loan borrowings by the Lakshadweep Electricity Department for the capital expenditure.
- 5.2.5.2 As per the of MYT Regulations, any equity deployed in excess of 30% of the capital cost of the project is required to be treated a normative loan. Since the entire capital expenditure in the various schemes shall be infused by the Government of India, LED requests the Hon'ble Commission to consider the funding of the various schemes in line with the Regulations and provide approval for the same.
- 5.2.5.3 The breakup of the financing of the capital expenditure undertaken during the Control Period is provided in table below:

Table 35: Proposed Funding Details

Particulars	FY 2025-26 (In Rs Lakhs)		FY 2027-28 (In Rs Lakhs)	FY 2028-29 (In Rs Lakhs)	FY 2029-30 (In Rs Lakhs)
Proposed Capital Expenditure	1,770	1,600	1,565	1,260	945
Actual Funding					
100% Equity from Central Govt.	1,770	1,600	1,565	1,260	945
Proposed Funding in line with Regulation of JERC MYT					
Equity (30%)	531	480	469.50	378	283.50
Debt (Normative Debt in excess of 30% equity)	1,239	1,120	1,095.50	882	661.5
Total Funding	1,770	1,600	1,565	1,260	945

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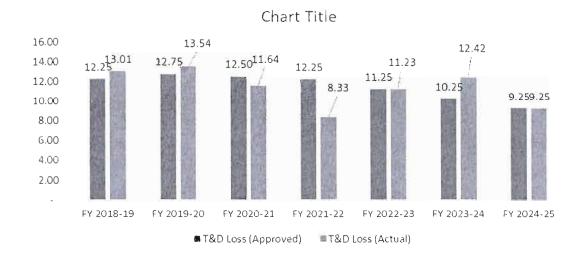
#### **CHAPTER 6: TARGETS**

#### 7.1 T&D LOSS TRAJECTORY FOR THE CONTROL PERIOD

6.1.1 LED has been trying to reduce the distribution losses during recent years. LED submits that the system improvement works executed every year under the plan schemes have also contributed to the reduction of distribution losses. However, it may also be noted that reduction of distribution losses may not be possible beyond a certain level due to topographical conditions and technical limitations.

The LED has been able to largely meet the loss targets & trajectory approved by the Hon'ble Commission in the tariff orders. As can be seen, LED has been successfully reducing the T&D loss over the past years in-spite of lower existing loss levels & having consumer profile where majority of the consumers are LT category consumers.

### T&D Loss Target Achieved vis-a-vis Targets



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6.1.2 While in future LED shall make all efforts to achieve the loss targets set up by the Hon'ble Commission, it is requested that Commission may set realistic targets in view of the fact that the current loss level is very low and reduction of loss below the current levels shall be difficult.

Accordingly, for the purpose of FY 2022-23, 2023-24 and 2024-25, LED proposes to restrict the T&D loss to 9.25% for the Control Period in view of the difficultly in loss reduction below 9.25% as approved. The T&D loss target proposed by LED is as below and the Hon'ble Commission is requested to approve the same:

Table 36: T&D Loss Trajectory for the Control Period

Loss %	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30
T&D Losses	9.25%	9.25%	9.25%	9.25%	9.25%



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#### **CHAPTER 7: OTHER INITIATIVES**

#### 7.1 PROMOTION OF RENEWABLE POWER

To promote the use of renewable power in Lakshadweep, LED plans to purchase of solar power from SECI. SECI and the Lakshadweep Electricity Department, SECI had undertaken the feasibility report with regard to the Renewable Energy Development in Lakshadweep.

Accordingly, on 07.10.2018, the Lakshadweep Electricity Department and SECI entered into a Memorandum of Understanding. The MOU deals with the utilization of the land and lagoon area in the Union Territory of Lakshadweep for setting up of cumulative capacity of 25.14 MW Solar Power Projects comprising of re-powering of the existing Ground Mounted Solar PV System, Lagoon based floating Solar PV Projects as well as and Rooftop Solar PV Installation with upto 75.71 MWh Battery Energy Storage System (hereinafter referred to as 'BESS' In pursuance of the above MOU, SECI executed a Power Purchase Agreement (hereinafter referred to as 'PPA') dated 09.01.2019 where under it has been agreed between the parties that SECI would establish the Solar Power Projects of 25.14 MW cumulative contracted capacity with BESS Capacity up to 75.71 MWh and sale of such energy generated from the projects would entirely be to the Lakshadweep Electricity Department. The details of Island wise solar projects and procurement of power during the control period is provided preceding paras of the petition.

#### 7.2 ENERGY AUDIT

LED has been conducting energy audit as per the mandate of BEE to identify energy loses and implement the recommended steps to reduce the same.

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#### 7.3 CGRF EXPENSE DETAILS

The details of the expense incurred towards CGRF for the FY 2023-24 is provided as below:

Table 37: CGRF Expense Details

Sr No	Item	Amount (In Rs)
1	Salary	6,08,575.00
2	Others	16,637.00
	Total	6,25,212.00

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