TARIFF ORDER

Review of ARR of FY 2012-13
and
Determination of Aggregate Revenue Requirement
&
Retail Tariff for FY 2013-14,
For
Electricity Department Lakshadweep

(Petition no. 101/2013)

JOINT ELECTRICITY REGULATORY COMMISSION

For the State of Goa and Union Territories

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22nd May 2013

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List of Abbreviations

Abbreviation		Full Form
A&G	:	Administration & General Expenses
Act	:	The Electricity Act, 2003
ARR	:	Aggregate Revenue Requirement
CAGR	:	Compound Annualized Growth rate
Capex	:	Capital Expenditure
CEA	:	Central Electricity Authority
CERC	:	Central Electricity Regulatory Commission
COD	:	Commercial Operation Date
Commission/JERC	:	Joint Electricity Regulatory Commission for the state of Goa and union territories
CKt. Km	:	Circuit Kilometer
D/C	:	Double Circuit
DS	:	Domestic Supply
EA 2003	:	The Electricity Act, 2003
FC	:	Fixed Charges
FY	:	Financial Year
GFA	:	Gross Fixed Assets
HP	:	Horse Power
HSD	:	High Speed Diesel Engines
HT	:	High Tension
LED	:	Electricity Department, Lakshadweep
JERC	:	Joint Electricity Regulatory Commission for the state of Goa and union territories
KVA	:	Kilo Volt Ampere
KWh	:	Kilo Watt Hour
LPS	:	Late Payment Surcharge
LT	:	Low Tension
MU	:	Million Unit
MW	:	Mega Watt
MYT	:	Multi Year Tariff
NDS	:	Non Domestic Supply
O/H	:	Over head

Abbreviation		Full Form
O&M	:	Operation & Maintenance
PLF	:	Plant Load Factor
RoE	:	Return on Equity
RPO	:	Renewable Purchase Obligation
R&M	:	Repair & Maintenance
S/C	:	Single Circuit
SBI PLR	:	SBI Prime Lending Rate
T&D	:	Transmission & Distribution
UoM	:	Unit of Measurement
VAR	:	Volt Ampere Reactive
VC	:	Variable Charges

LIST OF ANNEXURES

Annexure	Particulars
1	Relevant Extracts of the OP no 1
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Before the

Joint Electricity Regulatory Commission
for the State of Goa and Union Territories
Gurgaon

CORAM
Dr. V.K. Garg, Chairperson
Sh. S.K. Chaturvedi, Member
Petition No. 101/2013

In the matter of

Review of ARR of FY 2012-13 and Aggregate Revenue Requirement (ARR) & Retail Tariff for the Financial Year 2013-14, of the Electricity Department of Lakshadweep

And in the matter of

Electricity Department of Lakshadweep…….…………………………………………………..Petitioner

ORDER

Date: 22nd May 2013

1. INTRODUCTION

1.1 JERC Formation

In exercise of the powers conferred by Section 83 of the Electricity Act, 2003 the Central Government constituted a two member (including Chairperson) Joint Electricity Regulatory Commission for all Union Territories except Delhi to be known as "Joint Electricity Regulatory Commission for Union Territories'' with headquarters at Delhi as notified vide notification no. 23/52/2003 – R&R dated May 2' 2005. Later on 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" as notified on May 30' 2008. The Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Andaman & Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman & Diu, Lakshadweep and Puducherry) started functioning with effect from September 2008. Office of the Commission is presently located in the district town of Gurgaon, Haryana.

1.2 Electricity Department, UT of Lakshadweep

The Electricity Department, UT of Lakshadweep herein called LED, is responsible for power supply in the Union Territory of Lakshadweep.

The Electricity Department of Lakshadweep (LED) is engaged in generation, transmission and distribution of electricity to the various consumer categories in the UT of Lakshadweep.

As submitted by the Petitioner –

Quote *"The Union Territory (UT) of Lakshadweep is an archipelago consisting of 12 atolls, three reefs and five submerged banks. 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, Bangaram and Minicoy. The Electricity Department of Lakshadweep (LED) is engaged in generation, transmission and distribution of electricity to the various consumer categories in the UT of Lakshadweep. As the UT is an archipelago consisting of 11 inhabited islands and located far from the mainland of India, Lakshadweep is entirely dependent on its own generation for supply of power. The power in the UT of Lakshadweep is generated mainly from its Diesel Generating (DG) sets."* **Unquote**

1.3 Filing of Petition

The Commission in this regard would like to place reference to the Section 64 of the Electricity Act, 2003 which requires the licensee to file the Tariff petition as per the regulations notified under the Act. The relevant section is reproduced below:

Quote *"64. (1) An application for determination of tariff under section 62 shall be made by a generating company or licensee in such manner and accompanied by such fee, as may be determined by regulations."* **Unquote**

Also based on the section 12 of Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009 licensee is required to file its petition before 30th November each year. The extracts of the same is provided below:

Quote ***"12. Filing*** *(1) Each generating company and the licensee shall file Tariff Application on or before* ***30th November*** *each year with the Commission, in the format as may be laid down by the Commission which shall include statements containing calculation of the expected aggregate revenue from charges under its currently approved tariff and the expected cost of providing services i.e. Aggregate Revenue Requirement (ARR) during the Previous Year, Current Year and Ensuing Year. The information for the Previous Year should be based on audited accounts, if available"* **Unquote**

In addition to the above regulations, the Hon'ble APTEL has also stressed on the compliance of state regulators to issue tariff orders before 1st April of the tariff year. The state commission's on the same principle is provided with one hundred and twenty days, from the receipt of such application, to issue a tariff order or reject the application. The extracts of the relevant section is provided below from the judgment of APTEL dated 11th November, 2011:

Quote *"(ii) It should be the endeavour of every State Commission to ensure that the tariff for the financial year is decided before 1st April of the tariff year. For example, the ARR & tariff for the financial year 2011-12 should be decided before 1st April, 2011. The State Commission could consider making the tariff applicable only till the end of the financial year so that the licensees remain vigilant to follow the time schedule for filing of the application for determination of ARR/tariff."* **Unquote**

In compliance of the above regulations and conditions, Commission has been issuing tariff orders for different licenses in its purview time to time. On a similar role, JERC had directed U.T Lakshadweep to file its tariff application for the FY 2013-14 through letter dated 3rd January 2013 and reminder letters of 15th Jan 2013,12th Feb 2013, 13th March 2013 and 18th March 2013 and also emails.

The extracts of the communication sent to ED-Lakshadweep on 3rd January 2013 for payment of fee before allowing the utility to plea for extension of time for submission of petition for approval of ARR & Tariff determination for FY 2013-14 is provided below:

Quote

"Sub: Extension of Time for Submission of Aggregate Revenue Requirement (ARR) & Tariff Proposal of ED- Lakshadweep for FY 2013-14 under section 61, 62, & 64 of Electricity Act 2003

Sir,

Reference is drawn to the petition sent by the Electricity Department through Email on 22nd December 2012, in regard to extension of time for submission of ARR & Tariff Proposal for Lakshadweep.

Please note that a formal petition has to be submitted along with the required fee of Rs 10,000/- (Ten thousand only) by Demand draft favoring the commission, before the Commission allows extension of time for submission of petition for approval of Aggregate Revenue Requirement (ARR), & Tariff Determination for ED-Lakshadweep for FY 2013-14."

Unquote

Commission based on the above communication sent, waited for two weeks and issued a reminder letter on 15th January 2013. The extracts of the communication sent to ED-Lakshadweep on 15th January 2013 is provided below:

Quote "*Reference is drawn to the request received through e mail on 22 Dec 2012 for extension of time in respect of the submission of ARR & Tariff Proposal for FY 2013-14 pertaining to Lakshadweep. Following the Commission's letter, as referred above, please note that the Commission awaits a formal Petition for the extension from ED (Lakasdweep), submitted along with the requisite fee of Rs. 10,000/- (Rupees Ten thousand only) in the form of a demand draft favouring the Commission, before the Commission considers the case for extension of time in submission of the petition for approval of Aggregate Revenue Requirement (ARR) & Tariff determination for ED- Lakshadweep for FY 2013-14.*

The Petition for ARR & Tariff Proposal for FY 2013-14 also need to be expedited in view of APTEL's order dated 11 Nov 2011 in respect of OP-1, of 2011. The relevant extracts of OP-1 are as at ***Annexure 1*** *attached*

The extract of the annexure 1 is also provided below

In view of the analysis and discussion made above, we deem it fit to issue the following directions to the State Commissions:

(i) Every State Commission has to ensure that Annual Performance Review, true-up of past expenses and Annual Revenue Requirement and tariff determination is conducted year to year basis as per the time schedule specified in the Regulations.

(ii) It should be the endeavour of every State Commission to ensure that the tariff for the financial year is decided before 1st April of the tariff year. For example, the ARR & tariff for the financial year 2011-12 should be decided before 1st April, 2011. The State Commission could consider making the tariff applicable only till the end of the financial year so that the licensees remain vigilant to follow the time schedule for filing of the application for determination of ARR/tariff.

(iii) In the event of delay in filing of the ARR, truing-up and Annual Performance Review, one month beyond the scheduled date of submission of the petition, the State Commission must initiate suo-moto proceedings for tariff determination in accordance with Section 64 of the Act read with clause 8.1 (7) of the Tariff Policy.

66. We direct all the State Commissions to follow these directions scrupulously, and send the periodical reports by 1st June of the relevant financial year about the compliance of these directions to the Secretary, Forum of Regulators, who in turn will send the status report to this Tribunal and also place it on its website." **Unquote**

Commission, after period of one month issued a 2nd reminder in the matter of petition for ARR & Tariff for FY 2013-14. The extracts of the letter sent to the utility is provided below: The extracts of the communication sent to ED-Lakshadweep on 12th February 2013 is provided below:

Quote

"Sub: Expediting the submission of Petition for ARR & Tariff Proposal of ED- Lakashdweep for FY 2013-14 under section 61,62,&64 of Electricity Act 2003

Ref: This Commission's Letter no: 15/4/2012- JERC dated: 03.01.2013, Letter of same number dated 15.01.2013 & Email dated 18.01.2013

Sir,

The Commission has so far not heard about the date, when ED-Lakshadweep is filing its Petition.

No formal request about the date of filing the petition has been received along with the requisite fee of Rs. 10,000/- (Rupees Ten thousand only) in the form of a demand draft favouring the Commission, to enable the Commission to consider the case for extension of time in submission of the petition for approval of Aggregate Revenue Requirement (ARR) & Tariff determination for ED- Lakshadweep for FY 2013-14.

The Petition for ARR & Tariff Proposal for FY 2013-14 also need to be expedited in view of APTEL's order dated 11 Nov 2011 in respect of OP-1, of 2011. The relevant extracts of OP-1 were sent along with the Commission's letter dated 15.01.2013."

Unquote

In this regard it was noted that the licensee had failed to file any ARR & Tariff petition till date, even after several communications sent. The Commission did not stall the process of the Tariff determination due to the non-submission of requisite petition by the licensees as elaborated above. Delay in determination of Tariff would affect the interest of both the consumers and the licensee. Therefore the Commission felt that the process for determination of Tariff should not be kept in abeyance due to inefficiencies of the licensee.

The Commission had powers to initiate a suo-motu proceeding under the Regulation 11 of the JERC (Conduct of Business) Regulations, 2009 and under Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009.

The extracts of the regulation has been provided below:

Quote ***"12. Filing***
(2) In case a generating company or the licensee does not submit the Tariff Application within the time allowed by the Commission, the Commission may consider taking up the matter suo motu." **Unquote**

From JERC (Conduct of Business) Regulations, 2009:
Quote ***"11. Initiation of Proceedings***
(i) The Commission may initiate any Proceedings suo-motu or on a Petition filed by any affected or interested person.
(ii) The notice of the initiation of the proceedings may be issued by the Commission, and the Commission may give such orders and directions as may be deemed necessary, for service of notices to the affected parties, the filing of replies and rejoinders in opposition or in support of the Petition in such form as it may direct. The Commission may, if it considers appropriate, issue orders for publication of the petition inviting comments on the issues involved in the proceedings in such form as the Commission may direct.
(iii) While issuing the notice of inquiry, the Commission may, in appropriate cases, designate an Officer of the Commission or any other person whom the Commission considers appropriate to present the matter in the capacity of a petitioner in the case." **Unquote**

Therefore the Commission under the power conferred to it under the Section 11 of the JERC (Conduct of Business) Regulations, 2009 and under section 12 of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 in the interest of the public, licensee and various stakeholders, decided to initiate suo-motu proceeding for the determination of the ARR / Tariff for FY 2013-14 in the month of March 2013.

In the interim Electricity Department of Lakshadweep filed its petition on 9th April 2013 which was admitted by the Commission on 9th April 2013. As the data contained in the petition would be used for the analysis of this order the Commission has considered the Petition and had set aside the Suo Motu proceedings.

1.4 Admission of Petition

After initial scrutiny and analysis of the petition, the Commission as per its letter dated April 10' 2013 sent the initial data gaps for approval of Aggregate Revenue Requirement (ARR) and Tariff for FY 2013-14. The Petitioner was directed to submit the data gaps before 16th April 2013 and their presence was required on 16th April 2013 for technical validation.

1.5 Interaction with the petitioner

This Order has referred at numerous places to various actions taken by the "Commission". It is pertinent to mention for the sake of clarity, that the term "Commission" unless otherwise specified in most of the cases refers to the Staff of the Commission for carrying out the technical due diligence & validation of data of the petitions filed by the utilities, obtaining and analyzing information and clarifications received from the utilities and submitting relevant issues for consideration of the 'Commission'.

The Commission's Staff held discussions with the Petitioner/Petitioner's representative, , but the representative of LED did not carry with him any document / information for Technical validation. The Commission is proceeding without any such Technical Validation.
Commission's staff interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for the analysis of the tariff petition. The Commission's staff and the Petitioner also discussed key issues related to the petition, which included Power purchase cost, estimated sales and revenue submitted to the Commission, etc.

Table 1: Formal Interactions with the Petitioner

S No.	Date	Action by	Subject
1.	22.12.2012	Commission	To expedite filing of the Petition as the last date is over by 30th Nov 2012
2.	03.01.2013	Commission	Reminding for expediting filing of the Petition
3.	15.01.2013	Commission	Reminding for expediting filing of the Petition ,
4.	12.02.2013	Commission	Reminding for expediting filing of the Petition, alternatively Commission will go for Suo Moto.
5.	13.03.2013	Commission	Reminding for expediting filing of the Petition, alternatively Commission will go for Suo Moto.
6.	09.04.2013	LED	Filing of the Petition
After Receipt of Petition at the Commission			
7.	10.04.2013	Commission	Admission of the Petition- Letter sent to LED
8.	10.04.2013	Commission	Data Gaps in respect of Petition (101/2013) for Approval of Aggregate Revenue Requirement (ARR) & Tariff in respect of LED for FY 2013-14,Info Required by 16.04.2013
9.	11.04.2013	Commission	For uploading of the Petition on Web Site and publishing in two news papers, reminding Commitments made / directives of FY 2012-13 Tariff Order.
10.	15.04.2013	Commission	DG Set Wise Diesel Consumption and Power Generated
11.	18.04.2013	Commission	Tabular Submission of the DG set data.
12.	23.04.2013	Commission	Mismatch of data noticed between FY 2012-13 & FY 2013-14

S No.	Date	Action by	Subject
13.	24.04.2013	LED	Notice sent to all AEs / JEs for Publicity amongst Stakeholders
14.	24.04.20132013	LED	Matter for Telecast on Local TV network , message to OSD
15.	25.04.2013	Commission	Letter to Administrator for reminding for expediting the information required by the Commission vide letters of 10th April, 11th April, 15th April, 18th April, 23rd April 2013
16.	25.04.2013	Commission	Secretary Power requested to be present during hearing
17.	25.04.2013	Commission	Secretary CGRF requested to be present during hearing
18.	25.04.2013	Commission	Responsibility Matrix for Public hearing arrangements
19.	10.05.2013	LED	Replies to Commission's letter dated 11.04.2013,, written replies to the Stake holders' comments
20.	10.05.2013	LED	Replies to Commission's letter dated 17.04.2013
21.	10.05.2013	LED	Data about assets
22.	10.05.2013	LED	Billing Franchising and Rebate for Prepaid meters[1]

1.6 Quality of Filing

Absence of Audited Data

The ED-LED has provided no information on its actual performance in the FY 2012-13, which was sought by the Commission for analysis purpose. Further, most of the calculations done by the petitioner for the purpose of projecting ARR for FY 2013-14 are not based on any audited historical data as per the tariff regulation of 2009.

The extract of the same is provided below:

" (2) The data should be provided for three years.
(i) Audited figures for the previous year; Information for the previous year shall be based on the audited accounts; in the absence thereof, the audited accounts for the immediately preceding year shall be filed along with the un-audited accounts for the previous year.
(ii) Estimated figures for the current financial year should be based on actual figures for the first six months and the estimated figures for the second six-months of the year. The estimated figures for the second half year of the current financial year should be based on the actual audited figures for the second half of the previous year with adjustments that reflect known and measurable changes expected to occur between them. These adjustments must be specifically documented and justified.
(iii) Forecasted figures for the ensuing year should be based on the current year figures with adjustments that reflect known and measurable changes expected to occur between them. These adjustments must be specifically documented and justified."

[1] These issues were neither submitted in the petition nor were raised in the Public hearing

As per the above regulation (Tariff Regulation 2009) the utility is required to present its audited figures for the previous year and in the absence of such data the audited figures of immediately preceding year along with the petition.

Absence of half yearly actual data for FY 2012-13

The petitioner has stated that it has done projections for most of the ARR components for the FY 2013-14 based half yearly performance of the utility in FY 2012-13. The Commission had desired such information for verification purpose and also for the purpose of estimating the ARR for the FY 2013-14. But even after number of communication sent, the ED-LED has not been able to provide any such data. The Commission, considering such noncompliance of the regulations and Commissions directives, has taken the approved figures of the FY 2012-13 based on the tariff order issued in the previous year (31st October 2012).

The list of communications sent by Commission for additional data is provided below:

Date	Subject
15th April 2013	DG Set Wise Diesel Consumption and Power Generated
10th April 2013	Data Gaps in respect of Petition (101/2013) for Approval of Aggregate Revenue Requirement (ARR) & Tariff in respect of LED for FY 2013-14,Info Required by 16.04.2013

Apart from the above communication a technical validation session was also fixed for 17th April 2013, where representatives from ED-LED came without any information as directed by the Commission.

The commission has pointed out all the errors and discrepancies present in the petition in their respective sections. Some of the most important ones are discussed below:

Power Purchase

In the generation data ED-LKD in the previous filing has proposed replacement of old DG sets with new DG sets. On the similar line Commission has approved the generation quantum based on the given data where new plants were considered in the generation data for the FY 2012-13. In the petition filed for the FY 2013-14 the ED-LKD has not shown the new generation stations approved in the previous year. Also, ED-LKD is desired to reconcile the data of old and new DG-sets added or replaced from the previous data island wise.

In case of Bitra the capacity has been shown as 40 KW for FY 2013-14 while the DG Size is 400KW. Further, Generation data was different in format number 2 compared to data provided in petition.

Table 2 Approved for FY 2012-13

	DG Size (KW)	No.s	KW	Old	New
Minicoy	1000	2	2000	800	1500
Kavaratti	1000	2	2000	0	0
	600	2	1200	0	
Amini	750	2	1500	400	750
Andrott	750	1	750	250	0
	250	1	250		
	1000	1	1000		
Kalpeni	250	2	500	750	0
Agatti	400	2	800	900	750
Kadmat	400	1	400	1000	750
	250	1	250		
Kiltan	400	2	800	200	0
Chetlat	250	2	500	200	400
Bitra	0		0	80	0
Bangaram	0		0	180	0

Table 3: Proposed for FY 2013-14

	DG Size (KW)	No.s	KW	Old
Minicoy	1000	2	2000	800
Kavaratti	1000	2	2000	0
	600	2	1200	
Amini	750	2	1500	400
Andrott	750	3	2250	0
	1000	1	1000	0
Kalpeni	250	2	500	750
Agatti	400	3	1200	400
	750	1	750	
Kadmat	400	1	400	750
	250	5	1250	
Kiltan	400	2	800	200
Chetlat	250	2	500	
Bitra	400	1	40	80
Bangaram	0	0	0	

Discrepancy in the data provided in the petition and the formats:

Particulars	FY 12-13	FY 2013-14
Petition Data Units	46.51	50.55
Formats Data Units	46.53	50.57
Distribution loss based on formats data	21.43%	21.04%
Distribution loss based on petition data	21.39%	21.04%

O&M cost

The monthly employee expense while computing working capital for FY 2013-14 has been taken as Rs 1 Crore. Whereas based on the format 16.1 the employee cost has been projected at Rs 12.31 Crores, where monthly cost would be Rs 1.03 Crores. Further, petition has two sets of O&M cost which needs to be confirmed by the petitioner.

1.7 Public hearing process

The Commission specified to the petitioner to publish the summary of the ARR and Tariff proposal in the abridged form and manner as approved in accordance with section 64 of the Electricity Act, 2003 to ensure public participation.

The Notice for Public hearing was read out on Public address system and run on the local TV during 3 days prior to the Public hearing. This was in addition to the insertion of Notice in the following newspaper:

Table 1.7.1 : Details of public notice published by the Petitioner

S.No.	Date	Language	Name of Newspaper
1.	27.04.2013	English	Lakshadweep Times

The petitioner uploaded the petition on the Lakshadweep website (http://www.lakshadweep.gov.in) and on the Electricity Department, Lakshadweep website – http://powerlak.gov.in for inviting objections and suggestions on their petition.

Interested parties / stakeholders were requested to file their objections / suggestions on the petition by 3rd May 2013. The copy of paper cutting of public notice is attached as **Annexure 2** to this order.

1.8 Notice for public hearing

The Commission also published public notices in the leading newspapers giving due intimation to stake holders, consumers, objectors and the public at large about the public hearing to be conducted by the Commission on 3rd May 2013 as under:

Table 1.8.1 : Schedule of public hearing at Lakshadweep

S.No.	Date & Time	Venue of Hearing	Subject & Category of Consumers
1.	03-05-2013 From 0930 onwards	Seminar Hall of District Institute of Educational Training (near Stadium Ground) **at Kavaratti**	All Categories of Consumers. Petition no. 101/2013 ARR & Tariff for FY 2013-14 , i. Annual Performance Review FY 2012-13 ii. ARR for FY 2013-14 iii. Tariff for FY 2013-14 iv. Energy Efficiency/ Renewable Energy

Table 1.8.2 : Details of public notice published by Commission

S.No.	Date	Language	Name of Newspaper
1.	25. 04..2013	Malayalam	Mathrubhumi, Kochi edition
2.	25.4.10.2013	Malayalam	Malayalam Manorama

The copies of public notice published by the Commission for intimation of public hearing are attached as **Annexure 3** to this order. The public notice was also published on the website of the Commission (www.jercuts.gov.in).

During the public hearing, each objector was provided 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 objection or not, were given opportunity to express their views. The list of objectors is attached as **Annexure 4** to this order. The issues and concerns expressed by stakeholders have been examined by the Commission. The major issues discussed during the public hearing(s), the comments/replies of the utility and the views of the Commission thereon, have been summarized in Chapter 4 of this order.

The list includes the stakeholders:

1. Those who gave their written objections & did not intend to present orally during the public hearing

2. Those who gave their written objections & expressed to present orally also during the public hearing

3. Those who gave their written objections but had not desired to express orally, but later chose to present orally also. They were also given an opportunity to present orally before the Commission during the public hearing;

4. Stakeholders who did not give their written objection or prior intimation, but participated in the hearing on the spot

5. Stakeholders who did not give their written objection or prior intimation, but participated in the hearing on the spot and also gave written submissions after expressing their views

All these objections / suggestions were responded to by the Licensee in addition to prior written replies, during the hearing itself. Licensee submitted written reply to all written objections / suggestions of the stakeholders.

2. BRIEF SUMMARY OF ARR & TARIFF PETITION FOR FY 2013-14

2.1 Introduction

In exercise of powers conferred on Joint Electricity Regulatory Commission for the Goa and Union Territories under Section 61 read with Section 181 of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in this behalf, the Joint State Electricity Regulatory Commission for the State of Goa and Union Territories notified the (Terms and Conditions for Determination of Tariff) Regulations, 2009. These regulations came into force from the date of their publication in the official Gazette i.e. February 9' 2010. These Regulations were applicable to the State of Goa and the Union Territories of Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman and Diu, Lakshadweep and Pondicherry.

As discussed in para no. 1.3 and 1.4 of Chapter no. 1, Electricity Department, UT of Lakshadweep filed its petition for determination of Aggregate Revenue Requirement and Tariff for FY 2013-14 to the Commission on 9th April 2013 under 61, 62 & 64 of the Electricity Act 2003 and relevant provisions mentioned in JERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2009. In accordance with the directions given by the Commission, the ED-LED had also submitted its Revised estimates of FY 2012-13 along with revised actuals of FY 2011-12. The data was not supported by any auditing.

After initial scrutiny & analysis of the information submitted with ARR and Tariff Petition filed by ED-LED; the petition was admitted subject to removal of infirmities to the extent possible. The Commission has taken the aforesaid petition on record as 'petition no. 101/2013' on 9th April 2013.

2.2 Summary of the Petition for Aggregate Revenue Requirement for FY 2013-14

The Petitioner has submitted the ARR & tariff petition for FY 2013-14 based on the actual of FY 2011-12 and revised estimates of FY 2012-13. Petitioner has submitted that it has considered the past trends and taken cognizance of other internal and external developments to estimate the likely performance for FY 2013-14. Based on the estimates and projections for FY 2013-14, the ARR for ED-LED for FY 2013-14 has been proposed at Rs. 122.42 Crores. The summary of the proposal is presented below.

Table 3 : Aggregate Revenue Requirement submitted by the petitioner for FY 2013-14 (Rs Crores)

S. No.	Particulars	Petitioner Submission FY 2013-14
1	Cost of fuel	91.60
2	Cost of power purchase for full year	-
3	Employee costs	11.95
4	Repair & Maintenance Expenses	3.19
5	Administration and general expenses	1.35
6	Depreciation	5.68
7	Interest and finance charges	4.96
8	Interest on working capital	2.45
9	Interest on Security Deposit	-
10	Return on NFA /Equity	1.31
11	Provision for Bad Debt	0.12
12	Advance Against Depreciation	-
13	Total Revenue Requirement	**122.62**
14	Less: Non-Tariff Income	0.20
15	**Net Revenue Requirement (FY2013-14)**	**122.42**

Further, the petitioner has submitted the Average Cost of Supply (ACOS) and the average revenue realization per unit as below.

Table 4 : Average Cost of Supply and Average Revenue Realization submitted by the petitioner (Rs/kWh)

Average Realization & Cost of Supply (Rs/Unit)	FY 2012-13	FY 2013-14
Average Cost of Supply of the LED	**25.53**	**30.64**
Average Realization	**3.08**	**3.08**
Revenue Gap at Existing Tariff	-22.45	-27.56

The petitioner has submitted that –

Quote

"The LED submits that the average cost supply of the department is much higher in comparison to other utilities in India. The reasons for such high average cost of supply are high generation cost due to usage of HSD and high O&M cost of the generation, transmission and distribution assets. Since, the departments operates in the islands, which are located far from the mainland, it is not possible for the department to opt for cheaper sources of power. Further, the department has to maintain its O&M resources within the islands due to constraints in transportation of materials and equipments between the islands. As a result of that the average O&M expenses of the department is comparatively higher than other utilities in India." **Unquote**

2.3 Summary of the Tariff Proposal for FY 2013-14

The Petitioner has not proposed any tariff revision for the FY 2013-14 keeping in mind the interest of consumers.

The petitioner has submitted that –

Quote"

1. *It is evident from Table 35 and Table 36 that there is a wide gap between the expenditure and revenue of the LED. The LED by a large extent is dependent on the budgetary support of the Government of India.*

2. *Table 37 summarizes the Revenue Gap at existing tariff at Rs. 82.13 Crore for FY 2012-13 and Rs. 110.13 Crore for FY 2013-14. The estimated gap has been computed by deducting the ARR from Revenue at Existing Tariff.*

3. *LED has projected ARR for FY 2013-14 at Rs. 122.43 Crores and the revenue at existing tariff from projected sales compute to Rs 12.30 Crores. Thus the resultant gap works out to Rs. 110.13 Crores.* ***LED does not propose to increase the tariff for the FY 2013-14 as this may result in huge burden on the consumers****."* **Unquote**

Table 5 : Existing and Proposed Tariff for FY 2013-14 submitted by the Petitioner

Tariff Structure	Existing FY 2012-13		Proposed FY 2013-14	
	Energy Charges (Rs/kWh)	Fixed Charges	Energy Charges ((Rs/kWh)	Fixed Charges
BPL/Kutir Jyoti		Rs. 25.00/ connection/month		Rs. 25.00/ connection/month
Domestic				
0- 50 units	1.00	Rs. 10 / connection/per month, Rs. 50/connection/per month for 3 phase connections	1.00	Rs. 10 / connection/per month, Rs. 50/connection/per month for 3 phase connections
51 to 100 units	1.25		1.25	
101 to 200 units	2.50		2.50	
201 units and above	4.00		4.00	
Commercial				
0 - 100 kWh	4.25	Rs. 25 / connection/per month, Rs. 100/connection/per month for 3 phase connections	4.25	Rs. 25 / connection/per month, Rs. 100/connection/per month for 3 phase connections
101-200 kWh	5.00		5.00	
201 and above	6.00		6.00	
HT Consumers	6.00	Rs. 100/KVA	6.00	Rs. 100/KVA
Industrial	4.50	Rs. 30/KVA/month	4.50	Rs. 30/KVA
Street Lighting	4.00		4.00	
Temporary Connections	7.00		7.00	

2.4 Prayer to the Commission

The petitioner has respectfully prayed to the Commission as follows:

Quote

"

- *Admit and approve the Aggregate Revenue Requirement of FY 2013-14 as submitted herewith.*
- *Condone any inadvertent omissions/ errors/ shortcomings and permit the Petitioner to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date.*
- *Submit necessary additional information required by the Commission during the processing of this petition*
- *And pass such other and further orders as are deemed fit and proper in the facts and circumstances of the case*

"

Unquote

3. APPROACH OF THE ORDER FOR DETERMINATION OF ARR & TARIFF FOR FY 2013-14

3.1 Introduction

As discussed in an earlier section of this order, Electricity Department of UT Lakshadweep has filed its petition for determination of Aggregate Revenue Requirement and Tariff for FY 2013-14 to the Commission vide affidavit submitted on 9th April 2013 in accordance with section 61, 62 & 64 of the Electricity Act, 2003 and relevant provisions mentioned in JERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2009.

3.2 Approach for Review for FY 2012-13

The Commission has considered the submission of the petitioner dated 9th April 2013, which was admitted on 9th April 2013. Commission based on first petition filed by the ED-LED determined the ARR and tariff for FY 2012-13 in the order dated 31st October 2012. Further to this the Review of ARR for FY 2012-13 is to be carried out as per the provisions of regulation 8 of JERC Tariff Regulations, 2009, which is as under:

Quote

"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''.

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"
Unquote

The petitioner has not filed the true up petition for the FY 2011-12 due to the lack of audited accounts. 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. However the Commission would not like to stall the process of this tariff order due to lack of accounts. In the interest of the consumers and the utility the Commission has proceeded with the Review of ARR for FY 2012-13 and ARR for FY 2013-14.

The Commission directs the Petitioner to file the true up petition separately along with the audited accounts latest by 30th September 2013, failing which appropriate action would be taken under the provisions of the Electricity Act 2003 and the JERC Tariff regulations.

In view of the above, the Commission has reviewed the variations between approvals and revised estimates of sale of electricity, income and expenditure for FY 2012-13.

The detailed analysis & treatment of each component based on the revised estimates is provided in **Chapter 5 (Review of ARR for FY 2012-13)** of this Order.

3.3 Approach for Determination of ARR & Retail Tariff for FY 2013-14

In this regard various provisions of the JERC's Tariff Regulations 2009 pertaining to business of the integrated utility are relevant and Commission is guided by the principles contained in Section 61 of the Act among other things to examine the Sales forecast, Power purchase quantum, Self-generation and other income & expenditure.

The Commission, while determining the tariff is guided by the principles contained in Section 61 of the Act, namely

a) The principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;

b) The generation, transmission, distribution and supply of electricity are conducted on commercial principles;

c) The factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;

d) Safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;

e) The principles rewarding efficiency in performance;

f) Multi-year tariff principles;

g) That the tariff progressively reflects the cost of supply of electricity and also, reduces and eliminates cross-subsidies within the period to be specified by the Appropriate Commission;

h) The promotion of co-generation and generation of electricity from renewable sources of energy;

i) The National Electricity Policy and tariff policy;

j) In addition to above the Commission is bound by the Renewable Energy purchase obligations, as specified in JERC (Procurement of Renewable Energy) Regulations, 2010.

k) Relevant directions given by the Hon'ble APTEL in the judgment in O.P. no. 1 of 2011.

The Commission has considered the actual unaudited figures of income & expenditure submitted by the Petitioner for FY 2011-12 and revised estimates for FY 2012-13 to form the basis of projection of income and expenditure for FY 2013-14. The detailed analysis & treatment of each component is provided in **Chapter 6 (Aggregate Revenue Requirement of FY 2013-14) of this order.**

4. SUMMARY OF OBJECTIONS RAISED, RESPONSE FROM THE PETITIONER AND COMMISSION'S VIEWS

4.1 Objections/Suggestions and response of Electricity Department, Lakshadweep

4.1.1 Tariff Related Objections

Stakeholders Objections/Comments:

Mr. M Yousuf pointed out the problems faced by the general public in the islands due to its isolation from mainland. He also pointed out the scarcity of opportunity, due to the above reason, which has led to low economic and social development in the region.
Based on the above reasons cited by the consumer, he requested the Commission to provide concessional tariff for the consumers in the region as most of them , fall under poor and deprived class.

Mr. Mohammed Iqbal (Kiltan Island) also requested the Commission to consider the paying capacity of poor people in the region before setting the tariff. Further, he pointed out that tariff slabs are not being printed on the bills.

Abdul Qadri (Amini Island) requested commission to consider the income of an individual before setting the tariff. He also requested commission to increase the tariff based on the increase in income. Due to low job opportunity and decrease in wages in the region the tariff should actually be reduced.

Mr. Bashir requested to consider the condition of poor people in the islands and set the tariff.

Thangal Koya contested against meter testing charges levied by ED-LED even though meters are the property of the department. Further, it is unjustifiable to charge fixed charges even though utility is charging 500 Rs for A/C.

Petitioner's Reponses

The following are the reply provided by the petitioner on the above objections:
Quote
"

- *The LED would like to submit that the department has not proposed any tariff hike for any of the consumer categories in its tariff petition for FY 2013-14."* ***Unquote***

Commission's View

Commission has considered the view and suggestions provided by consumers in the island. Most of the consumers are against any increase in tariff due to low income and very less economic development as pointed. The above problems and limitations are island specific which is not under the purview of the Commission. But, Commission would like to point out some of the facts which are specific to tariff formulation. Every year ED-LED has to file its petition with its actual expenditure along with the projected expenses based on the historical trend, so that commission can rationalize its expenses based on facts and fix tariff for recovery of such cost. This is a general practice followed by every utility in India in line with Electricity Act 2003.. Therefore, it's the right of utility to recover all its cost from the consumer based on approved Annual Revenue Requirement. But, due to very high cost of service in the islands it is not possible for commission to approve the whole cost to be recovered from tariff as projected by the ED-LED. Therefore, Commission has not proposed any tariff increase in the state, which is also in line to what petitioner has requested.

Further, most of the cost is borne by the administration as stated by the utility therefore any additional burden shall have to be borne by the utility for supplying quality power to the consumers.

4.1.2 General Objections

Stakeholders Objections/Comments:

Mr. Mohammed Iqbal (Kiltan Island) pointed out the condition of islands to be very poor other than Kavaratti. He also requested Commission to investigate the conditions in other islands for better understating.

Abdul Qadri (Amini Island) also requested commission not to penalize the consumer for inefficiency of the ED-LED.

Mr. Musin contested ED-LED to exempt from JERC jurisdiction and regulations, which has also been filed by ED-LED.

Thangal Koya pointed out LED's electrification being uneconomical since 1959 where most of the rural area is still run by Panchayati Raj. Further, he contested ED-LED to exempt from JERC jurisdiction and regulations, which has also been filed by ED-LED.

Abu Bakkar Koya requested commission to limit the tariff as most of the consumers in the island are poor and the only source of income in the region is copra trade. He also requested JERC to spread awareness among the people on the functioning of the Commission and its powers towards the ED-LED.

Mr. Mohammad requested to raise the wages of Electricity Department workers who are doing a good job.

Mr. Mohammad requested all to consume electricity responsibly for its efficient usage.

Petitioner's Reponses

The following is the response provided by the petitioner on the above objections

Quote

"

- *The LED would like to submit that the empty barrels are first pressure tested and then reconditioned to look for any leakages. Any leakage which takes place is during the transportation of diesel. The department is coming up with oil storage facility in Kavaratti and Minicoy islands for the direct supply of diesel to the islands through IOC instead of filling it in the barrels and transporting it to the islands to curb the loss in transportation.*
- *The LED has noted the objections of the petitioner.*
- *The LED would like to submit that the meter testing fees charged from the consumers is for the labor charges incurred during meter testing. Further the department returns the meter testing fees if the meter is found to be in working condition.*
- *The LED would like to submit that the Hon'ble Kerala High Court and the CGRF have put a stay in the levy of the AC surcharge. The department has also requested the Hon'ble Commission to withdraw the AC surcharge from the Tariff Schedule."*

Commission's View

The Commission has found that many consumers are not aware of its functioning. Commission in this respect would like to request consumers to log on the JERC website (http://www.jercuts.gov.in/) for all such details. Further, for making people / Stakeholders aware of our jurisdictions commission has listed some of its important areas of functioning:

- Joint Electricity Regulatory Commission is an Electricity Regulatory Body set up for all Union Territories and the State of Goa as per Para 1.1 aboove.The Commission determines the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail
- The Commission regulates electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State
- The Commission issues licenses to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State/ Union Territories
- The Commission specify State Electricity Grid Code in consistent with the Indian Electricity Grid Code (IEGC) specified by Central Electricity regulatory Commission
- The Commission functioning also include promotion of competition, efficiency and economy in activities of the electricity industry
- The Commission facilitates and Improve access to information for all Stakeholders

The Commission has covered only some of its functions; the detailed functions are available on the web site of JERC as stated above.

4.1.3 Rationalization of power purchase and Solar Power Related

Mr. Abu Bakkar suggested using solar power to a greater extent rather than diesel in the islands. In addition to this, he advised ED-LED to power all the street lights through solar power and provide concession to consumers who are installing solar panels on rooftop. This way tariff won't be required to be increased on the islands.

Mr. Abu Bakkar had also requested ED-LED to curb the wastage of diesel (HSD) while transporting it to the island. He suggested filling the fuel in the barges rather than in the barrel which can help in saving some amount of fuel.

Abu Bakkar Koya also raised his concern over the feasibility of solar power in the region considering its availability for only 6 months.

Mr. Abu Bakkar Koya suggested procuring fuel directly from IOC/B.P to reduce the overall cost. Further, he raised doubts towards the sanctity of data provided towards fuel consumption of ED-LED, which should be audited by third party agency.

Mr. Abbas raised doubts towards the sanctity of data provided towards fuel consumption of ED-LED, which should be audited by third party agency. He also pointed out at the wastage of fuel by the ED-LED.

Petitioner's Reponses

The following is the response provided by the petitioner for the above objections

Quote

"

- *The LED would like to submit that it is coming up with solar roof top SPV system and biomass plants to lessen its dependency on diesel. The department has already installed street lights with solar panels throughout the islands in various locations wherever sufficient sunlight available.*
- *The LED would like to submit that the department has not proposed any tariff hike for any of the consumer categories in its tariff petition for FY 2013-14.*
- *Solar streetlights have been provided in the unshaded area*
- *The LED would like to submit that the Administration is in consultation with the IOC for direct supply of diesel to the islands and it is also coming up with oil storage facilities in Kavaratti and Minicoy islands.*
- *The LED would like to submit that it will conduct awareness campaigns about the functioning of the Commission and their Powers for the general public in the future.*
- *The LED is coming up with biomass generation which can generate power throughout the year and also reduce the dependency on diesel thus bringing down the cost of supply.*
- *The LED would like to submit that the entire activity of the department is monitored at various levels including CAG Auditing."*

Unquote

Commission's View

Commission appreciates the suggestions of stakeholders. It is a fact that huge dependency on diesel not only increases the average cost of supply for the consumers but also impacts the utility's financial health. The Commission has noticed that the Petitioner has taken some initiatives in this regard but firm execution is required so as to speed up the process of the construction and achievement of commercial operation of renewable generation plants. It is inevitable for the distribution licensee to explore alternative sources of power like installation of roof top solar, wind or hybrid equipment's etc. to reduce the load on the existing DG power stations of the utility.

The petitioner is directed to submit a quarterly progress report for the initiatives taken in this regard and submit the report by 30th July 2013. The report should also contain the monthly consumption of fuel, fuel purchased, fuel used and fuel wasted station wise.

The petitioner should explore possibilities of sourcing the fuel from a station other than Beypore, if that is logistically and physically possible keeping the overall cost of transportation lower than the present cost.

The Commission understands the difficulties faced by the islanders in the consumption of basic goods and amenities, considering the geographical location of the islands. The Commission has endeavored to fix tariff in such a way so as to balance the interests of all the stakeholders.

5. REVIEW OF Annual Revenue Requirements (ARR) FOR FY 2012-13

The review of aggregate revenue requirement involves assessment of quantum of energy sales, energy loss as well as various cost elements like power purchase cost, O&M expenses, interest cost and depreciation etc. This has been done based on the submissions made by the petitioner along with any other additional/supporting information. As regards to various components of ARR, the Commission's analysis thereon and decision in respect of items given below is discussed in the following Paras:

- Review of Energy Requirement
  - i. Sales Projections
  - ii. Loss Trajectory
  - iii. Energy Balance
  - iv. Power Purchase Sources
- Review of the Aggregate Revenue Requirement
  - i. Power Purchase Costs & Transmission Charges;
  - ii. Operation and Maintenance Expenses;
    - Employee Expenses
    - Administration & General expenses
    - Repairs & Maintenance Expenses
  - iii. Capital Expenditure and Asset Capitalisation
  - iv. Gross Fixed Assets;
  - v. Depreciation;
  - vi. Interest on Long Term Loans;
  - vii. Interest on Working Capital & Security Deposits;
  - viii. Return on Capital Base/ Net Fixed Assets;
  - ix. Provision for Bad and Doubtful Debts
  - x. Other expenses.
  - xi. Non-Tariff Income

5.1 Consumers, Connected load and Energy Sales

Petitioner's Submission

Energy Sales

The petitioner has submitted that Electricity Department - Lakshadweep has a consumer mix constituting of domestic, commercial, Industrial, HT-Industrial and Public Lighting. The HT Consumer category has been added after the creation of the same in order dated 31st October 2012.

The LED has stated that its maximum demand is around 8.33MW. LED's demand is primarily composed of domestic and commercial consumers. The maximum demand observed in each island during the last five years is tabulated below:

Table 6: Maximum demand for past 5 years- Petitioner's Submission

Name of Island	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Minicoy	955	1037	1107	1175	1200
Kavaratti	1320	1452	1548	1649	1750
Amini	665	710	748	788	850
Andrott	925	994	1082	1144	1100
Kalpeni	498	538	563	591	650
Agatti	650	695	740	788	850
Kadmat	598	632	670	710	950
Kiltan	329	360	375	390	500
Chetlat	255	265	280	295	400
Bitra	42	44	50	54	60
Bangaram	45	45	70	72	20
Total	**6282**	**6772**	**7233**	**7656**	**8330**

The below table summarizes the category wise actual energy sales from FY 2007-08 to FY 2011-12 for all the consumer segments. LED's overall energy sales are significantly dependent on the domestic consumers to the extent of around 70%. Energy sold to various consumer categories over the past 5 years has grown at approximately 8.28% p.a., mainly contributed by increase in the sales to the domestic categories.

Table 7 Actual sales for LED (MUs) - Petitioner's Submission

S. No.	Category	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
		Actual	Actual	Actual	Actual	Actual
1	Domestic	16.25	15.85	17.78	20.35	23.75
2	Commercial	6.14	5.96	6.16	6.98	7.28
3	Industrial	0.30	0.27	0.33	0.41	0.42
4	Public (Street Light)	1.27	1.29	1.28	1.34	1.52
5	Temporary Connections	0.04	0.02	0.02	0.01	0.02
6	**Total**	**24.00**	**23.38**	**25.56**	**29.09**	**32.99**

The petitioner has submitted that the factors affecting the actual consumption of electricity are numerous and often beyond the control of the utility/ licensee including factors such as Government policy, general economic development / growth , weather conditions and force majeure events like natural disasters, etc. Therefore, energy sales for FY 2012-13 has been determined based on the actual energy sales during the first six months of FY 2012-13 and the CAGR for past three to four-year actual energy sales in various consumer categories.

The petitioner has considered the adjusted CAGR of various consumer categories for growth rate (%) for projecting the Energy Sales (MUs) as mentioned in the following table:

Table 8 : Growth rate considered for FY 2012-13 (in %age) by the Petitioner

S. No.	Category	CAGR (Four years)	CAGR (Three years)	CAGR (Considered)
1	Domestic	9.94%	14.44%	9.94%
2	Commercial	4.35%	6.87%	4.35%
3	Industrial	9.15%	16.52%	9.15%
4	Public (Street Light)	4.55%	5.62%	5.62%
5	Temporary Connections	-15.16%	9.13%	0.00%
	Total	**8.28%**	**7.90%**	**10.81%**

The petitioner has submitted that actual energy sales in the LED periphery in FY 2011-12 were 32.99 MU. The table below summarizes category wise energy sales estimated for FY 2012-13 for the LED. As can be observed, the overall energy sales in UT of Lakshadweep are significantly dependent upon the domestic and commercial consumption.

Table 9 : Projected category wise sales by the Petitioner for FY 2012-13 (Sales in Million Units)

S. No.	Category	FY 2011-12	FY 2012-13
		Actual	Revised estimates
1	Domestic	23.75	26.19
2	Commercial	7.28	8.39
3	HT Industrial	0.00	0.34
4	Industrial	0.42	0.32
5	Public (Street Light)	1.52	1.27
6	Temporary Connections	0.02	0.05
	Total	**32.99**	**36.56**

Number of Consumers

The petitioner has submitted that the department has a consumer mix of domestic, commercial, industrial, HT-Industrial and public lighting. The number of consumers as on January 2013 submitted by the Petitioner is summarized below.

Table 10 : Number of consumers as on January 2013- Petitioner's Submission

S. No.	Category	No. of consumers
1	Domestic	16,302
2	Commercial	2,987
3	HT- Industrial	20
4	Industrial	303
5	Public (Street Light)	73
6	Temporary Connections	107
7	**TOTAL**	**19,792**

The Petitioner as per the regulatory formats submitted number of estimated consumers for the FY 2011-12 and FY 2012-13.

Table 11 Number of consumers - Petitioner's Submission

S. No.	Category	FY 2011-12 Actual	FY 2012-13 Estimated
1	Domestic	15998	16302
2	Commercial	2933	2987
3	HT- Industrial	0	20
4	Industrial	301	303
5	Public (Street Light)	59	73
6	Temporary Connections	25	107
7	**TOTAL**	**19316**	**19792**

Connected Load

The Petitioner has not submitted the past trends of the connected load of the various consumer categories. However, as per the regulatory formats, submitted along with the petition, the estimated connected load for FY 2011-12 and FY 2012-13 has been submitted by the petitioner. The below table summarizes the same:

Table 12 : Connected Load as submitted by the Petitioner (in kVA) - Petitioner's Submission

S. No.	Category	FY 2011-12 Estimated	FY 2012-13 Estimated
1	Domestic	50634	51125
2	Commercial	11952	11221
3	HT- Industrial		1200
4	Industrial	3105	3528
5	Public (Street Light)	165	166
6	Temporary Connections	0	0
7	**TOTAL**	**65855**	**67240**

Commission's analysis

Energy Sales

In order to make a realistic estimate for the FY 2012-13 the Commission in addition to the submission made by the petitioner requires actual sales for first half of the FY 2012-13 for estimating the total sales. The additional data submitted by the petitioner on 10th May 2013, containing island wise and monthly sales for different consumers had no data on sales to HT consumers, while in the same submission petitioner has projected revenue for the same. Also, the sales data was incomplete for some of the months and island's due to which complete analysis of the same was not possible. Therefore, Commission has not considered the additional data as submitted and has taken the sales as approved in the tariff order dated 31st October 2012 for the purpose of computing the total sales for the FY 2012-13.

However, as the HT-Industrial category is newly formed therefore the Commission has considered the estimated sales figure for the category based on the petitioner's submission. The category wise sales approved for FY 2011-12 and FY 2012-13 has been provided in the table below:

Table 13 : Energy Sales approved by the Commission for FY 2012-13 (in Million Units) - Petitioner's Submission

S. No.	Category	FY 2011-12	FY 2012-13			
		Actual	Petitioner's Submission	Approved in Tariff Order	Revised estimates	Approved
1	Domestic	23.75	25.89	26.11	26.19	26.11
2	Commercial	7.28	7.86	7.60	8.39	7.60
3	HT Consumer				0.34	0.34
4	Industrial	0.42	0.45	0.46	0.32	0.46
5	Public (Street Light)	1.52	1.60	1.59	1.27	1.59
6	Temporary Connections	0.02	0.02	0.02	0.05	0.02
	Total	**32.99**	**35.82**	**35.78**	**36.56**	**36.12**

Number of Consumers

The Commission has observed that the petitioner did not furnish the past trend of the number of consumers besides actual figures for FY 2011-12, in the absence of which the Commission has approved the actual of FY 2011-12 submitted by the petitioner.

The Petitioner has also submitted the total number of consumers as on January 2013 as 19,792. In the absence of audited figures along with the historical data Commission has approved the number of consumers as submitted by the petitioner for January 2013 for FY 2012-13.

The Commission directs the Petitioner to submit complete information as per the regulatory formats of the ARR & tariff approval process of the Commission along with audited slab-wise details of the number of consumers, load and sales in each category in the next ARR filing. Further, the past trends of atleast the last 3 years based on actual should be submitted to enable the Commission to analyze the data for appropriate measures. Non-compliance of the directives would be viewed seriously in terms of the prevalent rules and regulation.

Table 14 : Number of Consumers approved by the Commission for FY 2012-13- Petitioner's Submission

S. No.	Category	FY 2011-12	FY 2012-13	FY 2012-13	FY 2012-13	FY 2012-13
		Actual	Petitioner's estimates	Approved in Tariff Order	Revised estimates	Approved
1	Domestic	15998	16798	16798	16302	16302
2	Commercial	2933	3080	3080	2987	2987
3	HT Consumers				20	20
4	Industrial	301	316	316	303	303
5	Public (Street Light)	59	62	62	73	73
6	Temporary Connections	25	20	20	107	107
	Total	**19316**	**20276**	**20276**	**19792**	**19792**

Connected Load

The Commission has observed that the petitioner did not furnish the past trend of the connected load of the various consumer categories, in addition to the above petitioner has revised the data for FY 2011-12. Commission, keeping in view the data gaps and changes proposed by the petitioner in the historical data for FY 2011-12, has considered no change in the approved connected load for the FY 2011-12 and FY 2012-13. In addition to the above, Commission has approved the connected load for HT-Industrial consumer as estimated by the petitioner due to unavailability of historical data.

Table 15 : Connected Load approved by the Commission for FY 2012-13 (in kVA) - Petitioner's Submission

Category	FY 2011-12 Petitioner's Revised estimates	FY 2011-12 Approved by commission	FY 2012-13 Petitioner's estimates	FY 2012-13 Approved in tariff order	FY 2012-13 Revised estimates	FY 2012-13 Approved
Domestic	50634	44892	49381	49381	51125	49381
Commercial	11952	7665	8431	8431	11221	8431
HT Consumer		0			1200	1200
Industrial	3105	3078	3386	3386	3528	3386
Public (Street Light)	165	148	162	162	166	162
Temporary Connections	0	0	0	0	0	0
Total	**65855**	**55782**	**61360**	**61360**	**67240**	**62560**

5.2 Transmission & Distribution Loss

Petitioner's Submission

The petitioner has submitted the actual T&D loss level for FY 2011-12 at 21.82% compared to the approved T&D loss of 26.50%. Similarly LED has proposed to reduce the T&D losses to 21.40% for FY 2012-13. Further, ED-LED as has considered collection efficiency of 98% and 99% for the FY 2011-12 and FY 2012-13 provided in the format 2 along with the petition. The AT&C losses computed based on the above information is shown in the table below:

Table 16 : T&D losses submitted by the Petitioner for FY 2011-12

S. No.	T&D Losses	FY 2011-12 Actual	FY 2012-13 Revised Estimate
1	T&D losses (%age)	21.82%	21.40%
2	Collection Efficiency	98.00%	99.00%
3	**AT&C losses**	**23.38%**	**22.21%**

Commission's Analysis

As per the regulation 15 of JERC Tariff regulations, 2009

"15. AT& C Losses

1. *The licensee shall give information of total AT&C losses in Previous Year and Current Year and the basis on which such losses have been worked out.*

2. *The licensee shall also propose a loss reduction programme for the Ensuing Year as well as for the next three years giving details of the measures proposed to be taken for achieving the same.*

3. *Based on the information furnished and field studies carried out and the loss reduction program proposed by the licensee, the Commission shall fix separate targets for reduction of Transmission and Distribution losses and for commercial efficiency for the period specified by the Commission:*

   Provided further that in the event of unbundling of the integrated utility, the Commission may fix separate transmission and distribution loss targets and commercial efficiency targets, as the case may be, for each successor licensee taking into account its area of operation, its consumer mix, state of the network, level of metering, metering initiatives planned, etc.

4. *The licensee shall conduct regular energy audit to substantiate its estimation of T&D losses. The licensee shall also furnish six monthly energy audit reports to the Commission.*

   The energy audit report for the first six months of the year shall be provided by November end of the same year. Similarly energy audit report for the last six months of the year shall be provided by May end of the next year.

5. *In the absence of energy audit, the Commission may not accept the claim of the licensee and may proceed to fix the loss levels on the basis of any other information available and its own judgment.''*

The petitioner has not provided the energy audit report and neither any basis for reduction of T&D loss level from 26.00% as approved in the tariff order to 21.40% for FY 2012-13. Further, petitioner has not provided any justification on the proposed collection efficiency for FY 2012-13 at 99% and any basis for such computation.

The Petitioner has submitted the actual energy generation of 45 MU in the data submitted post public hearing on May 10'2013. Considering the actual generation and the estimated sales of 36.12 MU the distribution losses for the FY 2012-13 has been computed at 19.74%. Therefore for the purpose of this order Commission has approved the loss level based on the approved sales and power generation at 19.74% for FY 2012-13.

Commission would like to direct ED-LED to conduct energy audit of the system for calculating the actual T&D losses in the region. In addition to the above, calculation of category wise revenue billed and revenue realized needs to be submitted to the Commission for the purpose of calculating collecting efficiency of the utility.

5.3 Energy Balance

Petitioner's Submission

Petitioner has submitted the T&D losses at 21.82% based on which energy requirement for the sale within the islands was 42.20 Million Units for FY 2011-12. The Petitioner has also submitted the overall energy sales to various consumer categories based on actual half yearly data for FY 2012-13 and estimated the overall energy requirement at 46.53 MU in FY 2012-13 with a T&D loss of 21.40%.

Commission's Analysis

Based on the approved energy sales of 36.12 million units and T&D losses of 19.74%, the energy requirement for sale within the islands is approved at 45.00 million units for FY 2012-13.

Based on the data available, the Commission has projected the net energy availability of 45.00 million units for FY 2012-13. This includes the units of Power generated from solar plants. The table below captures the values as submitted by the petitioner and that approved for FY 2012-13.

Table 17 : Energy Balance approved by the Commission for FY 2012-13- Petitioner's Submission

S. No.	Category	FY 2011-12 Actual	Revised Submission (FY 2012-13)	Approved FY 2012-13
A)	**ENERGY REQUIREMENT** (MU)			
1	**Total sales within the UT**	32.99	36.56	36.12
I	AT&C losses %		22.21%	20.55%
II	T&D Loss %	26.50%	21.40%	19.74%
	MU	11.89	9.95	8.88
2	**Energy required for Sale to Retail Consumers (MU)**	**44.88**	**46.51**	**45.00**
3	**Total Energy Requirement for UT (MU)**	**44.88**	**46.51**	**45.00**
B)	**ENERGY AVAILABILITY / PURCHASED**			
1	**Net Generation after auxiliary consumption (MUs)**			
I	Own Generation	**44.88**	46.51	45.00
2	**Energy Surplus/(Gap) (MU)**	**0.00**	**0.00**	**0.00**

5.4 Power Quantum and Cost

Petitioner's Submission

Sources of Power and Power Generation Quantum

The petitioner has submitted that it sources its power entirely from its own power generating stations. It is submitted that out of the total capacity of 18890 kW, the department utilizes around half of its total installed capacity. The remaining installed capacity is utilized as back-up.

The petitioner has submitted that the source-wise gross generation, auxiliary consumption and net generation of power in UT of Lakshadweep from FY 2007-08 and FY 2011-12 is as shown in the table below:

Table 18 : Generation Quantum from FY 2007-08 to FY 2011-12 as submitted by the Petitioner

Year	Gross generation	Auxiliary consumption	Auxiliary consumption	Net generation
	MU	MU	%age	MU
FY 2007-08 (Actual)	28.82	0.40	1.39%	28.42
FY 2008-09 (Actual)	31.14	0.42	1.36%	30.72
FY 2009-10 (Actual)	35.14	0.44	1.27%	34.70
FY 2010-11 (Actual)	40.33	0.56	1.39%	39.77
FY 2011-12 (Actual)	42.70	0.95	2.21%	41.75

For projection of the generation quantum for FY 2012-13, the LED has considered 350 days of operation for all the DG sets. The remaining 15 days would be required for repair and maintenance for the DG sets.

In FY 2012-13 it is estimated that the solar plants in Minicoy, Kavaratti, Andrott, Agatti and Kadmat will generate 1.25 MUs of power. Generation from Amini, Kalpeni, Kiltan, chetlath, Bitra and Bangaram has not been considered.

The table below shows the estimated island wise gross power generation quantum, auxiliary consumption and net power generation quantum of the LED for FY 12-13 as submitted by the Petitioner.

Table 19 : Power generation quantum as submitted by the Petitioner for FY 2012-13

Island	Gross generation	Auxiliary Consumption	Net generation
DG sets			
Minicoy	7.57	0.04	7.53
Kavaratti	10.56	0.04	10.38
Amini	4.49	0.05	4.44
Andrott	7.10	0.07	7.03
Kalpeni	3.48	0.24	3.24
Agatti	5.27	0.08	5.19
Kadmat	3.66	0.23	3.43
Kiltan	2.35	0.02	2.33
Chetlat	1.36	0.05	1.31
Bitra	0.28	0.01	0.27
Bangaram	0.19	0.05	0.14
Subtotal	**46.33**	**1.05**	**45.28**
Solar generation			
210 kWp Minicoy SPV			0.123
760 kWp Kavaratti SPV			0.688
100 kWp Amini SPV			0.000
320 kWp Andrott SPV			0.210
100 kWp Kalpeni SPV			0.000
100 kWp Agatti SPV			0.090
260 kWp Kadmat SPV			0.139
Subtotal 2			**1.250**
Total Net Generation			**46.51**

Fuel Purchase Cost

The Petitioner has submitted that it procures its fuel (HSD oil) from Indian Oil Corporation's (IOC) Beypore depot (Kerala). The fuel procured from the Beypore depot is then transported to various islands by ships. During FY 2011-12, and from April 2012 to October 2012 the ED-LED has paid Rs. 34.18 per liter of HSD to IOC. In FY 2011-12, the petitioner has incurred Rs. 55.63 Crore for procurement of 13.37 thousand KL of HSD.

In addition to the HSD fuel, ED-LED utilized 37,316 liters of Lube oil at a cost of Rs. 0.90 Crore for the generation of power during FY 2011-12. The petitioner has considered the price of Lube oil at Rs. 240.00 per liter inclusive of the transportation cost.

Similarly, the Petitioner has to pay additional charges towards transportation of fuel from the Beypore depot to the islands such as filing and sealing charges of the barrels, transportation charges for Beypore depot to the port, freight charge, port duties and crane charges at port, local transportation charges at the island etc. The average fuel cost, inclusive of all charges incurred by the LED for FY 2011-12 is as presented in the table below.

Table 20 : Average Fuel Purchase Cost for FY 2011-12- Petitioner's Submission

S. No.	Particulars	Amount (in Rs.)
1	Cost of HSD oil/per barrel including local transportation, Service Tax @ 4% and SSC @1%	7392.00
2	Cost of filling and sealing of the barrels	6.10
3	Transportation charge/per barrel from KSCC yard to wharf including loading to the ships	44.90
4	Freight charge/barrel	160.00
5	Port duties and crane charges/barrel	17.71
6	Average cost of empty barrel	499.33
7	Transportation charge/per barrel from wharf to KSCC yard at Beypore	18.95
8	Restaking of empty barrel -Cost per barrel	3.50
9	Cost of cap seal (big and small)-cost per barrel	4.15
10	Leak testing charge/barrel	4.00
11	Welding and reconditioning charge/barrel	1.50
12	Scrapping, cleaning, painting and marking charge/ barrel	31.00
13	Cost of Bunk washer (big and small)/barrel	2.50
14	**Total cost/barrel**	**8185.64**
15	Average cost of Oil S.No14/200 per litre	40.93
16	Add: Local transportation cost at the islands @2% of HSD price / litre	0.68
17	**Average cost of HSD (15+16) per litre**	**41.61**

* 1 barrel = 200 litres

In November 2012 the price of HSD was revised by IOC. The revised average fuel cost, inclusive of all charges incurred by the LED during November 2012 and December 2012 is presented in the table below:

Table 21 Average Fuel Purchase Cost during November 2012 and December 2012- Petitioner's Submission

S. No.	Particulars	Amount (in Rs.)
1	Cost of HSD oil/per barrel including local transportation, Service Tax @ 4% and SSC @1%	8455.38
2	Cost of filling and sealing of the barrels	9.00
3	Transportation charge/per barrel from KSCC yard to wharf including loading to the ships	59.00
4	Freight charge/barrel	160.00
5	Port duties and crane charges/barrel	17.71
6	Average cost of empty barrel	499.33

S. No.	Particulars	Amount (in Rs.)
7	Transportation charge/per barrel from wharf to KSCC yard at Beypore	24.80
8	Restaking of empty barrel – cost per barrel	3.50
9	Cost of cap seal (big and small)- cost per barrel	4.15
10	Leak testing charge/barrel	4.00
11	Welding and reconditioning charge/barrel	1.50
12	Scrapping, cleaning, painting and marking charge/ barrel	31.00
13	Cost of Bunk washer (big and small)/barrel	2.50
14	**Total cost/barrel**	**9271.87**
15	Average cost of Oil (14/200) per litre	46.36
16	Add: Local transportation cost at the islands @2% of HSD price/ litre	0.85
17	**Average cost of HSD (15+16) per litre**	**47.21**

In January 2013 the price of HSD was again revised by IOC. The revised average fuel cost, inclusive of all charges incurred by the LED from January 2013 is presented in the table below:

Table 22 : Average Fuel Purchase Cost from January 2013- Petitioner's Submission

Sl. No.	Particulars	Amount (in Rs.)
1	Cost of HSD oil/per barrel including transportation, Service Tax @ 4% and SSC @1%	10453.91
2	Cost of filing and sealing of the barrels	9.00
3	Transportation charge/per barrel from KSCC yard to wharf including loading to the ships	59.00
4	Freight charge/barrel	160.00
5	Port duties and crane charges/barrel	17.71
6	Average cost of empty barrel	499.33
7	Transportation charge/per barrel from wharf to KSCC yard at Beypore	24.80
8	Restaking of empty barrel- cost per barrel	3.50
9	Cost of cap seal (big and small)- Cost per barrel	4.15
10	Leak testing charge/barrel	4.00
11	Welding and reconditioning charge/barrel	1.50
12	Scrapping, cleaning, painting and marking charge/ barrel	31.00
13	Cost of Bunk washer (big and small)/barrel	2.50
14	**Total cost/barrel**	**11270.40**
15	Average cost of Oil (14/200) per litre	56.35
16	Add: Local transportation cost at the islands @2% of HSD price / litre	1.05
17	**Average cost of HSD (15+16) per litre**	**57.40**

Petitioner while computing cost of fuel for FY 2012-13 took an average of the fuel purchase costs as shown in the above tables. The actual fuel purchase cost for FY 2011-12 and fuel expenses estimated for FY 2012-13 is summarized in the table below:

Table 23 : Fuel Purchase Cost for FY 2011-12 and FY 2012-13- Petitioner's Submission

Particulars	FY 2011-12 (Actual)			FY 2012-13 (Revised Estimate)		
	Quantity procured (KL)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/Lit)	Quantity procured (KL)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/Lit)
Total HSD Purchase Cost*	13,371	55.63	41.60	14,516	66.87	46.07
Lube oil	37,316	0.90	0.24	40,944	0.98	0.24

* Inclusive of other charges

Note: The quantity and cost of Oil shown in the above table for FY 2011-12 and FY 2012-13 are exclusive of the quantity and cost of the HSD maintained in the stock by the LED.

The per unit generation cost for FY 2011-12 and FY 2012-13 is presented in the table below.

Table 24 : Per unit generation cost submitted by the Petitioner- Petitioner's Submission

Particulars	Unit	FY 2011-12	FY 2012-13
		Actual	(Revised Estimate)
Gross Generation	MU	42.70	46.33
Net Generation	MU	41.75	45.28
Fuel cost/Gross unit	Rs./kWh	13.24	14.65
Fuel cost/Net unit	Rs./kWh	13.54	14.98

Commission's Analysis

<u>Power Generation Quantum and Cost</u>

Own Generation

Petitioner after the public hearing submitted additional data on 10th May 2013 containing monthly fuel consumption, auxiliary consumption, except for two DG sets, and energy generated from DG sets & from solar. Based on the above submission, Commission has taken actual generation and auxiliary consumption for the purpose of calculating the net energy generated.

While estimating the energy availability and cost for FY 2012-13, the following has been considered:

- Auxiliary Consumption and gross energy generation submitted by the petitioner (in additional submission) has been considered for FY 2012-13 for each power station, except for Kalpani and Bangaram. In case of Kalpani and Bangaram the auxiliary consumption has been based on the previous year's performance due to non-availability of the actual information.

- The Commission has considered the following parameters of the HSD fuel oil for estimating the consumption on the basis of units generated by each of the generating unit:

    - Commission has analyzed the specific fuel consumption i.e. the quantity of fuel required to generate one unit of electricity for FY 2012-13 based on the actual submitted and has accordingly considered the specific fuel consumption based on actual for FY 2012-13.

    - Commission has taken calorific value of oil based on the actual submitted by the petitioner for FY 2012-13.

    - Cost of HSD including transportation and other charges has been considered based on the weighted average cost for 12 months, which comes to 46.49 Rs. / lit.

    - The average cost of lube oil as submitted by the Petitioner for FY 2012-13 at Rs 240 /litre has been found to be reasonable considering the actual of FY 2011-12.

    - Consumption of lube oil has been based on the specific consumption at 1.1 gm per unit and density at 0.889.

Renewable Energy

As per JERC (Procurement of Renewable Energy) Regulations 2010 clause 1 sub clause (1)

"

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

"

The petitioner has to procure 3% energy or equivalent REC of total consumption of all the consumers in its area as power purchase from renewable sources for FY 2012-13 including 0.40% for Solar and 2.60% for Non-Solar.

On the basis of submission made by petitioner, it evident that RPO targets of Solar Power for FY 2012-13 will be met. However, it is observed that the Petitioner is not meeting its RPO target of 2.60% to be met from non-solar sources of renewable power generation. The Petitioner is meeting its overall target of 3% to be met from renewable sources of generation. **In view of this, the Commission directs the Petitioner to encourage and incentivize generation from renewable sources to meet its non-solar RPO targets.**

Commission has considered generation from Minicoy, Kavaratti, Andrott, Agatti and Kadmat for FY 2012-13 as estimated by the petitioner.

The Commission directs the petitioner to submit the details of solar power plants and their running cost in the next ARR and tariff petition.

Summary of Total Approved Power Purchase Cost for FY 2012-13

The Commission approves the total cost of generation including fuel cost of Rs. 63.52 Crores for procuring 45.00 million units of energy for FY 2012-13. The summary of total cost of generation is as mentioned below.

Table 25 : Summary of own generation cost for FY 2012-13-Commission's Approval

	Plant Load Factor	Gross Generation	Auxiliary Consumption	Net Generation	Actual Oil Consumption	Cost of Oil	Cost of Lube Oil	Total Fuel Cost
	%	**Mus**	**Mus**	**Mus**	**Kltr**	**Rs Crores**	**Rs. Crores**	**Rs Crores**
Minicoy	31.30%	7.36	0.07	7.29	2,046	9.51	0.22	9.73
Kavaratti	38.17%	10.26	0.12	10.14	2,797	13.00	0.30	13.31
Amini	27.86%	4.45	0.05	4.39	1,393	6.48	0.13	6.61
Andrott	22.96%	6.27	0.22	6.05	1,897	8.82	0.19	9.01
Kalpeni	30.30%	3.18	0.22	2.96	1,032	4.80	0.09	4.89
Agatti	25.08%	4.95	0.10	4.85	1,523	7.08	0.15	7.23
Kadmat	19.47%	3.93	0.19	3.74	1,258	5.85	0.12	5.96
Kiltan	28.50%	2.39	0.03	2.37	827	3.85	0.07	3.92
Chetlat	37.97%	1.59	0.04	1.56	492	2.29	0.05	2.34
Bitra	20.28%	0.20	0.00	0.20	78	0.36	0.01	0.37
Bangaram	5.85%	0.06	0.02	0.04	34	0.16	0.00	0.16
Total		**44.64**	**1.05**	**43.59**				**63.52**
Solar Generation								
210 kWp Minicoy				0.18				
760 kWp Kavaratti				0.72				
320 kWp Andrott				0.24				
100 kWp Agatti				0.10				
260 kWp Kadmat				0.16				
100 kWp Chetlath				0.00				
Sub total				**1.41**				

	Plant Load Factor	Gross Generation	Auxiliary Consumption	Net Generation	Actual Oil Consumption	Cost of Oil	Cost of Lube Oil	Total Fuel Cost
Total				**45.00**				**63.52**

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 fact in view, the Commission opines that any variation in cost of their own generation (including variation in cost of power purchase, if any) should, for the time being, be borne by the utility.

Further, the utility is directed to propose a scheme for sharing of the increase in cost of power with the consumers for Commission's consideration and approval.

5.5 Operation and Maintenance Expenses

Petitioner's Submission

The petitioner has submitted that the Operation and Maintenance (O&M) expenses comprise of three components namely:

a) Employee cost
b) Repairs & Maintenance expenses and
c) Administrative and General Expenses

The Petitioner has submitted that in the past, it has not maintained segregation between the three cost elements for the purpose of accounting and had booked all cost including salaries, medical expenses, office expenses, domestic traveling expenses, and other charges towards repairs and supply of materials under the operation and maintenance expense head. However, efforts are being made by LED to segregate the O&M expenses under different accounting heads.

5.5.1 Employee Expenses

Petitioner's submission

The Employee expenses submitted by the Petitioner comprise of all costs related to employees like basic salary, dearness allowances, medical cost, leave travel allowances, honorarium, etc. Based on the various expense head related to employee booked during six months of FY 2012-13, ED-LED has estimated the total employee cost for full year of FY 2012-13 as Rs. 10.97 Crore.

Commission's Analysis

As per the regulation 27 of JERC tariff regulations 2009 -

"

27. Operation and Maintenance Expenses

1) *'Operation & Maintenance expenses' or 'O&M expenses' shall mean repair and maintenance (R&M) expenses, employee expenses and administrative & general (A&G) expenses including insurance.*

   While determining the O&M expenses for generation functions within the State, the Commission shall be guided, as far as feasible, by the principles and methodologies of CERC on the manner, as amended from time to time.

2) *While determining the O&M expenses for transmission functions within the State, the Commission shall be guided, as far as feasible by the principles and methodologies specified by CERC on the matter, as amended from time to time:*

   Provided further that the Commission may, if it considers it just, practical and proper considering the size of the total transmission system of, and the quantum of electricity handled by, an integrated utility, treat its transmission system as an integral part of its distribution system itself.

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

   - *O&M expenses as approved by the Commission for the first time for a year shall be considered as base O&M expenses for determination of O&M expenses for subsequent years;*
   - *Base O&M expenses as above shall be adjusted according to variation in the rate of WPI per annum to determine the O&M expenses for subsequent year, where WPI is the Wholesale Price Index on April 1 of the relevant year;*
   - *In case of unbundling of the Electricity Department and formation of separate distribution companies, the Commission will make suitable assessment of base O&M expenses of*

individual distribution companies separately and allow O&M expenses for subsequent years for individual companies on the basis of such estimation and above principle.

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

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

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

Commission's Analysis

The Commission has considered the employee expenses of Rs 8.55 Crores for FY 2011-12 as a base and further approves the employee cost for FY 2012-13 at Rs 9.30 Crores. Commission is of the view that base year data for FY 2011-12 approved in the previous order should not be changed unless ED-LED provides audited figures of the same. In addition to the above, half yearly data for FY 2012-13 has not yet been provided by the petitioner due to which Commission has not revised the employee cost for the FY 2012-13.

The number of employees and employee expenses as submitted by the petitioner and approved is given below.

Table 26 : Number of employees approved by the Commission for FY 2012-13

Sr. No.	Particulars	Petitioner Resubmission FY 2011-12	Approved FY 2011-12	Approved in Tariff order (FY 2012-13)	Petitioner Resubmission FY 2012-13	Approved FY 2012-13
1	Number of employees as on 1st April	415	415	415	415	415
2	Employees on deputation/ foreign service as on 1st April	-	-	-	-	-
3	Total number of employees (1+2)	415	415	415	415	415
4	Number of employees retired/retiring during the year	-	-	-	-	-
5	Number of employees added	-	-	-	-	-
6	**Number of employees at the end of the year (3-4+5)**	**415**	**415**	**415**	**415**	**415**

Table 27 : Employee expenses approved by the Commission for FY 2012-13 (in Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order FY 2011-12	Revised Submission FY 2011-12	Approved FY 2011-12	Approved in Tariff Order FY 2012-13	Petitioner Resubmission FY 2012-13	Approved FY 2012-13
	Salaries& Allowances						
1	Basic Pay	4.04	4.76	4.04	4.39	5.18	4.39
2	Dearness Pay	-	-	-	-	-	-
3	Dearness Allowance	2.12	2.50	2.12	2.31	2.73	2.31
4	House Rent Allowance	-	-	-	-	-	-
5	Fixed medical allowance	-	-	-	-	-	-
6	Medical reimbursement charges	0.15	0.17	0.15	0.16	0.19	0.16
7	Over time payment	-	-	-	-	-	-
8	Other allowances	-	-	-	-	-	-
A	Washing allowance	-	-	-	-	-	-
B	Transport allowance	0.35	0.41	0.35	0.39	0.44	0.39
C	L.T.C.	-	-	-	-	-	-
D	Children Education All.	-	-	-	-	-	-
E	Family Planning Allow.	-	-	-	-	-	-
F	Other allowance	1.80	2.12	1.80	1.96	2.31	1.96
9	Generation incentive	-	-	-	-	-	-
10	Bonus	0.09	0.10	0.09	0.10	0.11	0.10
11	**Total**	**8.55**	**10.07**	**8.55**	**9.30**	**10.97**	**9.30**
	Terminal Benefits						
12	Leave encashment	-	-	-	-	-	-
13	Gratuity	-	-	-	-	-	-
14	Commutation of Pension	-	-	-	-	-	-
15	Workmen compensation	-	-	-	-	-	-
16	Ex-gratia	-	-	-	-	-	-
17	**Total**	-	-	**-**	-	-	**-**
	Pension Payments						
18	Basic Pension	-	-	-	-	-	-
19	Dearness Pension	-	-	-	-	-	-
20	Dearness Allowance	-	-	-	-	-	-
21	Any other expenses	-	-	-	-	-	-
22	**Total**	-	-	**-**	-	-	**-**
23	**Total (11+17+22)**	**8.55**	**10.07**	**8.55**	**9.30**	**10.97**	**9.30**
24	Amount capitalized	-	-	-	-	-	-

Sr. No.	Particulars	Approved in Tariff Order FY 2011-12	Revised Submission FY 2011-12	Approved FY 2011-12	Approved in Tariff Order FY 2012-13	Petitioner Resubmission FY 2012-13	Approved FY 2012-13
	Salaries& Allowances						
25	Net amount	8.55	10.07	8.55	9.30	10.97	9.30
26	Add prior period expenses	-	-	-	-	-	-
27	**Grand total**	**8.55**	**10.07**	**8.55**	**9.30**	10.97	**9.30**

5.5.2 Administration and General Expenses

Petitioner's submission

The petitioner has submitted that the A&G expenses comprise of the following broad sub-heads of expenditure, viz.

- Telephone, postage & telegrams charges;
- Travel and conveyance expenses;
- Office expenses; and
- Consultancy and regulatory fees

The Petitioner has submitted that the actual A&G expenses for FY 2011-12 were Rs 1.14 Crores. LED has estimated the A&G expense for FY 2012-13 at Rs. 1.24 Crores. The escalation of A&G expenses is on account of inflation and regulatory and consultancy fees payable during FY 2012-13. The LED has requested the Commission to approve the net A&G expenses estimated for FY 2012-13.

Commission's Analysis

The Commission has considered the actual administration & general expenses of Rs 0.83 Crores for FY 2011-12 as a base and further approves the administration & general expenses for FY 2012-13 at Rs 0.90 Crores. Commission is of the view that base year data for FY 2011-12 approved in the previous order should not be changed unless ED-LED provides audited figures of the same. In addition to the above, half yearly data for FY 2012-13 has not yet been provided by the petitioner due to which Commission has not revised the administration & general expenses for the FY 2012-13.

The detailed breakup of the A&G expenses as per the regulatory formats has not been provided by the Petitioner. The Commission directs the Petitioner to maintain segregation of the O&M expenses under different accounting heads and maintain the information as desired as per the regulatory formats and submit the same along with the next ARR/tariff filing.

Table 28 : A&G expenses approved by the Commission for FY 2012-13 (in Rs. Crores)

Particulars	Approved in Tariff Order FY 2011-12	Petitioner Resubmission FY 2011-12	Approved FY 2011-12	Approved in Tariff Order FY 2012-13	Revised Estimates FY 2012-13	Approved FY 2012-13
A&G Expenses	**0.83**	**1.14**	**0.83**	**0.90**	**1.24**	**0.90**

Commission considers the Administration & General expense of Rs. 0.90 Crores as reasonable and approves the same for FY 2012-13.

5.5.3 Repair and Maintenance Expenses

Petitioner's submission

The petitioner has submitted that the Repairs and Maintenance expense comprise of expenses with regard to maintenance and upkeep of the generation, transmission and distribution system. Adequate R&M activities help in reduction of transmission and distribution losses and reduce the occurrence of breakdowns of the DG sets.

The R&M expense for FY 2011-12 for LED was Rs. 2.89 Crores. The R&M expense for FY 2012-13 is computed at 2.5% of the gross fixed assets of FY 2012-13, which is calculated at Rs. 3.22 Crores.

The petitioner has therefore requested the Commission to approve R&M expenses of Rs. 3.22 Crores for FY 2012-13 as the same is necessary for proper maintenance and strengthening the generation, transmission and distribution system and improve the quality of supply in the region to ensure consumer satisfaction.

Commission's Analysis

The Commission is of the view that adequate R&M expenses are necessary for maintenance of infrastructure and for ensuring proper Standard of Performance of the integrated utility.

Commission has approved the actual repair & maintenance expenses of Rs 2.89 Crores for FY 2011-12 and estimated R&M expense of Rs 3.14 Crores (against revised Petitioner's resubmission of Rs. 3.22 Crs. As these are without any auditing) as approved in the tariff order for FY 2012-13. Further, the detailed breakup of the R&M expenses as per the regulatory formats has not been provided by the Petitioner. **The Commission directs the Petitioner to maintain segregation of the O&M expenses under different accounting heads and maintain the information as desired as per the regulatory formats and submit the same along with the next ARR/tariff filing as also indicated above**

Table 29 : R&M expenses approved by the Commission for FY 2012-13 (in Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order FY 2011-12	Resubmission (Actual) FY 2011-12	Approved FY 2011-12	Approved in Tariff Order FY 2012-13	Petitioner Resubmission FY 2012-13	Approved FY 2012-13
1	**R&M Expenses**	**2.89**	**2.89**	**2.89**	**3.14**	**3.22**	**3.14**

5.5.4 Summary of O&M Expenses

The overall summary of Operation & Maintenance expenditure as estimated by the petitioner vis-à-vis approved by the Commission for FY 2012-13 is given below:

Table 30 : Summary of O&M expenses approved by the Commission for FY 2012-13 (in Rs. Crores)

Sr. No.	Particulars	Petitioner Resubmission FY 2011-12	Approved FY 2011-12	Approved in Tariff Order FY 2012-13	Petitioner Resubmission FY 2012-13	Approved FY 2012-13
1	Employee Expenses	10.07	8.55	9.30	10.97	9.30
2	A&G Expenses	1.14	0.83	0.90	1.24	0.90
3	R&M Expenses	2.89	2.89	3.14	3.22	3.14
4	**Total O&M Expenses**	**14.10**	**12.27**	**13.34**	**15.43**	**13.34**

5.6 Capital Expenditure and Capitalization

Petitioner's Submission

The petitioner has submitted that the present transmission and distribution infrastructure does not have adequate standby source arrangement for restoring the power supply in case of major breakdowns. Further, considering the increase in demand from the consumers, LED would be required to undertake significant capital expenditure for system augmentation and strengthening. System augmentation would not only help LED in handling increased load but would also ensure better quality of supply and network reliability to the consumers. The capital expenditure would help in further reduction of T&D losses.

The capital expenditure and capitalization for FY 2011-12 and FY 2012-13 as submitted by the Petitioner is as in the table below:

Table 31 : Capital Expenditure and Capitalization for FY 2011-12 and FY 2012-13 (in Rs. Crores)

S. No.	Particulars	Petitioner Submission (FY 2011-12)	Projected (FY 2012-13)
1	Capital Expenditure	25.50	13.00
2	Asset Capitalization	22.39	19.26
3	Capital Work in Progress	23.43	17.17

Commission's analysis

Commission observes that the capital expenditure and the capitalization submitted by the petitioner for FY 2012-13 is required to maintain reliable supply for the consumers of UT of Lakshadweep.

As per the Regulation 21 of JERC for the State of Goa and UTs (Terms and conditions for determination of Tariff), Regulation 2009 specifies that the licensee shall propose in their filings, a detailed capital investment plan, showing ongoing projects separately that will spill into the ensuing year and new projects (along with their justification) that will commence in the ensuing year. The petitioner has not submitted the capital investment plan as per the regulations. The petitioner has not submitted the capital investment plan as per the regulations and has not given the present status of the capital expenditure incurred /capitalized. Further, in its additional data submission the petitioner has not provided the amount of capital expenditure incurred on each DG set it has procured and cost incurred for buying other equipment's. Therefore, capital expenditure approved in the tariff order for FY 2012-13 has been considered for the purpose of calculating ARR.

This expenditure is being permitted as a special case to ensure the creation of infrastructure for adherence to Standard of Performance and Supply Code Regulations.

5.7 GFA and Depreciation

Petitioner's Submission

The petitioner has submitted that the value of opening gross fixed assets (GFA) for 2011-12 was Rs 90.14 Crores and addition of Rs 22.39 Crores took place during FY 2011-12. Thereafter, planned additions during FY 2012-13 have been added and accordingly GFA has been computed for FY 2012-13. The closing Work-in-Progress by the end of FY 2011-12 was Rs. 23.43 Crores. For FY 2012-13, LED has estimated to incur Rs. 13.00 Crores capital expenditure and Rs. 19.26 Crores estimated to be capitalized.

A summary of the opening and closing GFA and capitalization has been summarized in the table below.

Table 32 : Opening and closing GFA submitted by the Petitioner (in Rs. Crores)

Particulars	Opening GFA	Additions during the Year	Closing GFA
FY 2011-12 (Actual)	69.82	22.39	92.21
FY 2012-13 (Revised Estimated)	92.21	19.25	111.46

For purposes of depreciation, LED has applied the following depreciation rates as specified by CERC in the Tariff Regulations for FY 2009-14.

Table 33 : Depreciation Rate considered by the Petitioner (in %age)

Asset Category	Depreciation Rate %
Plant & Machinery	5.28%
Buildings	3.34%
Vehicles	9.50%
Furniture & Fixtures	6.33%
Computers & Others	6.33%
Land	0.00%

Depreciation for the FY 2012-13 has been determined by applying aforesaid category-wise assets depreciation rates on the opening balance of Gross Fixed assets and average of the addition during the FY 2011-12 and FY 2012-13. The table below summarizes the depreciation considered by LED.

Table 34 : Depreciation submitted by the Petitioner (in Rs. Crores)

Particulars	FY 2011-12	FY 2012-13
Rs. Crore	Actual	Estimated
Opening GFA	69.82	92.21
Additions	22.39	19.25
Closing GFA	**92.21**	**111.46**
Average GFA	81.01	101.83
Depreciation Amount	**3.77**	**4.80**
Average Depreciation Rate	4.08%	4.31%

Commission's analysis

The Petitioner has not produced any fixed asset register to support the claim of the Gross Fixed Assets. The Commission is of the view that fixed asset register records the asset wise details and various types of information can be extracted from the same including the aging schedule of the asset, present value and capital works in progress etc. As such in the absence of updated fixed asset registers, the opening value of fixed assets is on an assumption basis. As a standard practice, and as per the Regulation 26 of the JERC (Terms and conditions for determination of Tariff), Regulation 2009, depreciation shall be computed on the average value of assets at the end of the year which is reasonable and appropriate method.

In absence of updated fixed asset registers, the Commission is unable to allow the depreciation as proposed by the petitioner based on the assumed value of assets. **The Commission therefore directs the petitioner to maintain the fixed asset register to arrive at the actual historical value of assets and file the same along with the next ARR and tariff petition.** In the absence of updated fixed asset registers to arrive at the historical value of assets, the Commission has considered the addition in GFA as approved by the Commission for FY 2011-12 as the opening value of assets for FY 2012-13. As discussed in earlier Para, Commission has considered addition in GFA of Rs. 25.50 Crores and Rs. 13.00 Crores during FY 2011-12 and FY 2012-13 respectively.

Regulation 26 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The effective rate of depreciation for assets linked to Plant & Machinery & Vehicles is 5.28%, Buildings is 3.34% and Furniture is 6.33% vide Appendix-III (Depreciation schedule of CERC Terms and Conditions of Tariff Regulations, 2009). The depreciation for FY 2012-13 has been worked out as Rs. 1.83 Crores.

As discussed in earlier para, Rs. 13.00 Crores has been considered as addition in GFA for FY 2012-13. In view of above, Commission considers the depreciation of Rs. 1.83 Crores as reasonable considering Rs. 25.50 Crores as the opening value of assets at the beginning of the year as being the addition in GFA as approved by the Commission for FY 2011-12.

The depreciation approved by the Commission is as below.

Table 35 : GFA and Depreciation approved by the Commission for FY 2012-13 (in Rs. Crores)

S. No.	Particulars	Opening GFA	Additions	Closing GFA	Average Assets	Rate of depreciation	Depreciation
1	2	3	4	5	6	7	8
1	Plant & Machinery	22.80	11.62	34.42	28.61	5.28%	1.51
2	Buildings	-	0.00	-	-	3.34%	-
3	Vehicles	2.70	1.38	4.08	3.39	**9.50%**	0.32
4	Furniture and Fixtures	-	0.00	-	-	6.33%	-
5	Computers & others	-	0.00	-	-	6.33%	-
6	Land	-	0.00	-	0.00	0.00%	-

7	**Total**	**25.50**	**13.00**	**38.50**	**32.00**		**1.83**

The Commission therefore considers the depreciation of Rs. 1.83 Crores as reasonable and approves the same for FY 2012-13.

5.8 Interest and Finance Charges

5.8.1 Interest on Loan

Petitioner's Submission

The petitioner has submitted that the entire capital employed till date has been funded by the Central Government through Budgetary support without any external borrowings. LED is now migrating to regulatory regime under the aegis of the Commission and would begin to function as a commercial utility under the Electricity Act, 2003 and would therefore be utilizing the debt facilities from FY 2012-13 onwards.

Assets capitalized during FY 2012-13 have been considered based on normative debt-equity ratio of 70:30 as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. Interest rate of 14.75% has been considered for computation of interest cost for long-term loans which is similar to the prevailing SBI Prime Lending Rate. The petitioner has claimed an amount of Rs 3.50 Crores as interest cost on long term loans and requests the Commission to approve the same.

Commission's analysis

As per the JERC tariff regulations 2009:

"25. Interest and Finance Charges on Loan

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

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

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

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

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

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

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

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

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

Further, the Commission would like to place reliance on Section 23 of the JERC Tariff regulations which is reproduced below:

"23. Debt-Equity Ratio

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

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

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

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

The Petitioner has not borrowed any loans in the past up to FY 2011-12 and has proposed to utilize the debt facilities from FY 2012-13 onwards.

The basic requirement for consideration of interest on loans is adequate information of the value of fixed assets of the utility in service (net fixed assets) at the beginning of such year and funding pattern as well as terms & conditions of funding of capital assets.

In the instant case, the licensee has not provided the actual value of fixed assets, hence the servicing of assets in the form of interest on loan and return on assets is indeterminate at this stage on the opening GFA submitted by the Petitioner, hence has not been considered on the assumed value of assets. The same shall be considered at true-up stage if full details are made available.

However, the Commission has considered an opening normative loan of Rs. 17.85 Crores for FY 2012-13 (being 70% of Rs. 25.50 Crores considered to be addition in GFA during FY 2011-12) and added normative loan for FY 2012-13 of Rs. 9.10 Crores being 70% of addition in GFA considered for FY 2012-13 (70% of Rs 13.00 Crores considered to be added in the GFA for FY 2012-13) to calculate the interest on normative loan amount. Commission has considered the SBI PLR rate at 14.75% for FY 2012-13. The Commission approves the total interest charges for the year at Rs. 3.17 Crores as given below:

Table 36 : Interest on Loans approved by the Commission for FY 2012-13 (in Rs. Crores)

S. No.	Particulars	Petitioner Resubmission FY 2012-13	Approved (FY 2012-13)
1	Opening Normative Loan/WIP	17.85	17.85
2	Add: Normative Loan during the year/GFA during the year	13.48	9.10
3	Less: Normative Repayment	1.79	1.79
4	**Closing Normative Loan/GFA**	**29.54**	**25.17**
5	Average Normative Loan	23.70	21.51
6	Rate of Interest (@SBI SBAR rate)	14.75%	14.75%
7	**Interest on Normative Loan**	**3.50**	**3.17**

The Commission considers the interest on normative loan of Rs. 3.17 Crores as reasonable and approves the same for FY 2012-13.

5.8.2 Interest on Working Capital

Petitioner's Submission

The petitioner has submitted the Interest on Working Capital for FY 2012-13 computed on normative basis. As per the JERC Tariff Regulations, for the purpose of computation of normative working capital and interest on working capital, the components of working capital are as follows:

- Sum of two month requirement for meeting the fuel cost
- One month employee costs
- One month Administration & General expenses
- One month R&M Cost

A rate of interest of 14.75% has been considered for FY 2011-12 and FY 2012-13 on the working capital requirement, being the SBI Prime Lending Rate as on 1st April of the year. The interest on normative working capital for FY 2012-13 has been claimed at Rs. 1.87 Crores.

Commission's analysis

As per the regulation 29 of JERC tariff regulations

"

29. WORKING CAPITAL AND INTEREST RATE ON WORKING CAPITAL

1) *For generation and transmission business, the working capital shall be as per CERC norms.*

2) *Subject to prudence check, the working capital for distribution business shall be the sum of one month requirement for meeting:*

   a. *Power purchase cost.*

   b. *Employees cost.*

   c. *Administration & general expenses and*

   d. *Repair & Maintenance expenses.*

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

   a. *Power purchase cost*

   b. *Employees cost*

c. Administration & general expenses

d. Repair & Maintenance expenses.

e. Sum of two month requirement for meeting Fuel cost.

4) The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures."

The Commission has considered the approved fuel cost expenses of FY 2012-13 and approved O&M expenses to work out the normative working capital required for FY 2012-13. In accordance with Section 47(4) of the Electricity Act 2003, the distribution licensee is required to pay interest on security deposit collected from the consumers. If this security deposit is invested in the form of interest earning fixed deposits or other similar instruments, the interest earned from such investment could be utilized to pay the interest to the consumers under section 47(4) of the Electricity Act 2003, alternatively, the funds could be retained by the Licensee to meet its working capital needs. It is noted that the petitioner has not invested any of the security deposit held and the said amount is available to the petitioner. Accordingly, the Commission has allowed the interest payable to the consumer as an expense in this order. The Commission has considered the security deposit available with the Petitioner as a source to meet working capital requirements and has deducted this amount from the working capital requirement considered for interest on working capital for FY 2012-13.

Further, Commission considered the SBI PLR rate at 14.75% for FY 2012-13. Commission has computed the requirement of working capital based on the provisions of the regulations. Working capital has been reduced by the amount of Consumer Security Deposit/Misc. deposit available with the petitioner considering its usage for meeting part of working capital requirements

Table 37 : Interest on Working Capital approved by the Commission for FY 2012-13 (in Rs. Crores)

S. No.	Particulars	Approved in Tariff Order (FY 2012-13)	Petitioner Resubmission (FY 2012-13)	Approved (FY 2012-13)
1	Fuel Cost for 2 months	10.98	11.41	10.59
2	Power Purchase Cost for one month	-	-	-
3	Employee Cost for one month	0.78	0.91	0.78
4	A&G Expenses for one month	0.08	0.10	0.08

5	R&M Expenses for one month	0.26	0.23	0.26
6	**Total Working Capital for one month**	**12.03**	**12.66**	**11.64**
7	**Net Working Capital for one month after deducting security deposit**	**11.96**		**11.57**
8	SBI PLR Rate	14.75%	14.75%	14.75%
9	**Interest on Working Capital**	**1.76**	**1.87**	**1.71**

The Commission considers Rs. 1.71 Crores as Interest on Working Capital as reasonable and approves the same for ARR for FY 2012-13.

5.8.3 Interest on Security Deposit

Petitioner's Submission

The petitioner has not claimed any interest on security deposit as part of the Aggregate Revenue Requirement (ARR) for FY 2012-13.

Commission's analysis

The Commission has assessed the need and availability of funds to the licensee. Consumer's security deposit is the quantum of consumer's funds available to the licensee and hence deducted from the funds available to meet working capital requirements and the interest on working capital is allowed on the balance amount. The cost of available security deposit of the consumer is allowed as an interest on security deposit to be paid to the consumer as per section 47(4) and regulation 25 of the JERC Tariff Regulations 2009 and the same is allowed as expenditure in the ARR.

Further, based on the additional information submitted by the petitioner, the opening and closing amount of consumer deposit has been taken as Rs. 0.06 Crores for the FY 2012-13.

Table 38 : Interest on Security Deposit approved by the Commission for FY 2012-13 (in Rs. Crores)

S. No.	Particulars	Petitioner Submission (FY 2012-13)	Approved (FY 2012-13)
1	Opening Security Deposit/Misc. Deposit	Not Claimed	0.06

2	Add: Deposits during the Year		-
3	Less: Deposits refunded		-
4	Closing Security Deposit		0.06
5	Bank Rate		9.50%
6	**Interest on Security Deposit**		**0.01**

The Commission allows Rs 0.01 Crores as the interest on security deposit and considered as expenditure in the ARR for FY 2012-13.

5.9 Return on Capital Base/Equity

Petitioner's Submission

The petitioner has submitted that as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009, LED is entitled for a Return on Equity (RoE). However, the rate of return has not been specified in the Regulations issued by JERC.

The petitioner has submitted that Distribution Business has always been perceived to be a business having a greater inherent risk than the Generation or Transmission Business due to various factors amongst which the direct interface with the retail consumers is the biggest risk. The same has been recognized by many Commissions across the country and they have proposed a higher rate of return on the equity invested in distribution business as compared to generation and transmission business. This has been demonstrated by the various Commissions by offering rate of return @16% for distribution business and accordingly LED has claimed RoE of 16% for FY 2012-13.

Return on equity has been computed based on 30% normative equity for capitalization during FY 2012-13 in line with the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The petitioner has claimed return of equity of Rs 0.46 Crores for FY 2012-13.

Commission's analysis

LED is an integrated utility in its present form as defined in Regulation 2(9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 and is not restructured and corporatized till date. As of now, it is an integrated utility and is entitled to return on capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide provision under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement for consideration of either return on capital base or return on equity for historical assets is information in the form of audited annual accounts and assets & depreciation registers. The Petitioner has not been maintaining the adequate information.

As discussed in earlier sections; the Commission has considered Rs. 25.50 Crores as the gross block at the beginning of FY 2012-13 and accumulated depreciation of Rs. 1.46 Crores. The Commission has therefore considered the reasonable return of Rs 0.72 Crores at the rate of 3% on net fixed asset of Rs. 24.04 Crores at the beginning of FY 2012-13.

Table 39 : Return on capital base approved by the Commission for FY 2012-13 (in Rs. Crores)

Sr. No.	Particulars	Approved in Tariff Order FY 2012-13	Petitioner Resubmission (FY 2012-13)	Approved (FY 2012-13)
1	Gross block at beginning of the year	25.50	RoE amount of Rs 0.46 Crores has been claimed	25.50
2	Less accumulated depreciation	1.46		1.46
3	Net block at beginning of the year	24.04		24.04
4	Less accumulated consumer contribution	-		-
5	**Net fixed assets at beginning of the year**	**24.04**		**24.04**
6	**Reasonable return @3% of NFA**	**0.72**	**0.46**	**0.72**

Commission considers the Return on Net Fixed Assets of Rs. 0.72 Crores as reasonable and approves the same for FY 2012-13.

5.10 Provision for bad & doubtful debts

Petitioner's Submission

The petitioner has submitted that it has considered the provision for Bad and Doubtful Debts at 1% of the receivables for FY 2012-13. The petitioner has submitted the provision for bad debts at Rs 0.11 Crores for FY 2012-13.

Table 40 : Provision for bad and doubtful debts submitted by the Petitioner for FY 2012-13 (in Rs. Crores)

Provision for Bad & Doubtful Debts	FY 2012-13 Revised Estimates
Receivables	11.26
Provision for Bad &Doubtful Debts as % of Receivables	1%
Provision for Bad & Doubtful Debts	**0.11**

Commission's analysis

As specified in the regulation no. 28 of JERC Tariff regulations, read with the format -

"28. Bad and Doubtful Debts

The Commission may, after the generating company/licensee gets the receivables audited, allow a provision for bad debts up to 1% of receivables in the revenue requirement of the generating company/licensee. (Information to be furnished in format 18)"

Format -18

S.No.	*Particulars*	*Amount (Rs. in Crores)*
1.	*2.*	*3.*
1.	*Amount of receivable bad and doubtful debts (audited)*	
2.	*Provision made for debts in ARR*	

In the absence of audited accounts showing the trend of the actual write-off of the bad/doubtful debts for the past year(s), the Commission has considered the provision of 0.5% (against up to 1% in the regulation) of the receivables towards bad and doubtful debts subject to availability (at the time of true up) of audited accounts & auditor's certificate of actual write off of bad & doubtful debts.

Commission has considered a provision of 0.5% of the receivables from the retail sales for FY 2012-13 , as bad and doubtful debt at Rs 0.05 Crores as reasonable and approves the same as per the regulations, for ARR of FY 2012-13 subject to final adjustment in true-up when audited accounts become available and auditor's certificate of write off of bad and doubtful debts is furnished.

The submission of the petitioner vis-à-vis the approved value for FY 2012-13 is as shown below

Table 41 : Provision for bad and doubtful debts approved by the Commission for FY 2012-13 (in Rs. Crores)

S. No.	Particulars	Approved In tariff	Revised Estimates	Approved

		Order FY 2012-13	FY 2012-13	FY 2012-13
1	Receivables	8.47	11.26	10.18
2	Provision for Bad &Doubtful Debts as % of Receivables	0.5%	1%	0.5%
3	**Provision for Bad & Doubtful Debts**	**0.04**	**0.09**	**0.05**

5.11 Non-Tariff Income

Petitioner's Submission

The petitioner has estimated Rs. 0.19 Crores for FY 2012-13 based on the actuals of FY 2011-12 as the non-tariff income in the form of meter rent, late payment charges & misc. charges from various categories of consumers. The petitioner has submitted that the actual non-tariff income for FY 2011-12 was Rs 0.18 Crores and has considered an increase of 5% over the actual non-tariff income of FY 2011-12 for projecting the non-tariff income of FY 2012-13.

Commission's analysis

Commission finds the estimates to be reasonable and approves the non-tariff income as estimated by the petitioner. The details of approved and estimated non-tariff income are shown in the below table:

Table 42:Non-Tariff Income (Rs Crores)- Commission's Approval

S. No.	Particulars	Petitioner Submission (FY 2012-13)	Approved In Tariff Order (FY 2012-13)	Petitioner Revised estimates (FY 2012-13)	Approved (FY 2012-13)
16	**Total non-tariff income**	**0.19**	**0.19**	**0.19**	**0.19**

5.12 Revenue at existing tariff for FY 2012-13

Petitioner's Submission

The LED has computed the revenue for FY 2012-13 based on the tariff rate approved by the Commission in its Order dated 31st October, 2012.

Revenue from sale of power for FY 2012-13 is determined based on the energy sales estimated and category wise tariff prevalent in the UT of Lakshadweep.

The Revenue from sale of power at existing tariff has been estimated to be Rs. 11.26 Crores for FY 2012-13, as shown in the table below.

Table 43 : Revenue at existing tariff projected by the petitioner for FY 2012-13 (Rs Crores)

Sr. No.	Particulars	FY 2012-13
		Revise Estimates
1	Domestic	5.91
2	Commercial	4.41
3	HT Industrial	0.28
4	Industrial	0.15
5	Public (Street Light)	0.43
6	Temporary connections	0.08
	Total revenue from existing tariff	**11.26**

Commission's analysis

Commission has estimated the revenue on the basis of approved sales for FY 2012-13. Commission has considered the slab wise sales as provided in the latter submissions by the utility for computing the revenue.

Further, In case of HT Industrial category revenue has been computed based on sales and connected load submitted by the petitioner in the formats.

Table 44 : Revenue at existing tariff approved by the Commission for FY 2012-13

S. No.	Particulars	Sales (MU) FY 2012-13	Average Revenue Realization (Rs/kWh) FY 2012-13 (Existing tariff)	Revenue at existing tariff (Rs Crores) FY 2012-13
1	Domestic	26.11	1.85	4.83
2	Commercial	7.60	5.29	4.02
3	HT Industrial	0.34	10.24	0.35
4	Industrial	0.46	7.17	0.33
5	Public (Street Light)	1.59	4.00	0.64
6	Temporary Connections	0.02	7.00	0.01
	Total	**36.12**	**2.82**	**10.18**

5.13 Aggregate Revenue Requirement and Revenue Surplus/Deficit for FY 2012-13

Petitioner's Submission

The petitioner has submitted Rs. 93.82 Crores as the Aggregate Revenue Requirement for FY 2012-13 in the ARR & tariff petition on the basis of the revised estimates of the various components of the ARR as discussed above.

Commission's analysis

The Commission has considered and approved the ARR for FY 2012-13 based on the items of expenditure discussed in the preceding sections and the same has been summarized in the table below.

Table 45 : Aggregate Revenue Requirement approved by the Commission for FY 2012-13 (Rs. Crores)

S. No.	Particulars	Approved In Tariff Order FY 2012-13	Revised Estimates FY 2012-13	Approved FY 2012-13
1	Cost of fuel	65.87	67.85	63.52
2	Cost of power purchase for full year	-		
3	Employee costs	9.30	10.97	9.30
4	Repair & Maintenance Expenses	3.14	3.22	3.14
5	Administration and general expenses	0.90	1.24	0.90
6	Depreciation	1.83	4.80	1.83
7	Interest and finance charges	3.17	3.50	3.17
8	Interest on working capital	1.76	1.87	1.71
9	Interest on Security Deposit	0.01	-	0.01
10	Return on NFA /Equity	0.72	0.46	0.72
11	Provision for Bad Debt	0.04	0.11	0.05
12	Advance Against Depreciation	-	-	-
13	**Total Revenue Requirement**	**86.75**	**94.01**	**84.36**
14	Less: Non-Tariff Income	0.19	0.19	0.19
15	**Net Revenue Requirement (13-14)**	**86.57**	**93.82**	**84.17**

The estimated revenue deficit at existing tariff as approved for FY 2012-13 is given below.

Table 46 : Revenue Gap approved by the Commission for FY 2012-13 (Rs. Crores)

S. No.	Particulars	Approved In Tariff order FY 2012-13	Revised Estimates FY 2012-13	Approved FY 2012-13

1	Net Revenue Requirement	86.57	93.82	84.17
2	Less: Revenue from Retail Sales at Existing Tariff	9.67	11.26	10.18
3	**Net Gap at existing tariff for FY 2012-13 (1-2)**	**76.90**	**82.56**	**73.99**
4	Gap of the previous year	-	-	-
5	**Total Gap at existing tariff of FY 2012-13 (3+4)**	**76.90**	**82.56**	**73.99**

As seen from the table above, there is a revenue gap of Rs 73.99 Crores at the end of FY 2012-13 at existing tariff as estimated by the Commission against the gap of Rs. 82.56 Crores estimated by the petitioner at the existing tariff for FY 2012-13. The major reason for the reduction in gap for FY 2012-13 as assessed by the Commission is the reduction in the O&M cost and non-consideration of full amount of depreciation as claimed by the Petitioner. It is expected that in future ARRs and True-ups, when the Petitioner submits the actual figures of revenue for FY 2012-13, fixed asset registers, separate accounts of the cost of the generation from respective diesel generating sets; the gap assessed (as of now) in the revenue requirement as above shall be appropriately considered.

6. AGGREGATE REVENUE REQUIREMENT OF FY 2013-14

6.1 Background

The Petitioner has submitted the ARR & Tariff Petition for FY 2013-14 broadly on the basis of the principles outlined in the Tariff Regulations notified by JERC. The Petitioner in its petition has considered the past trends and taken cognizance of other internal and external developments to project the likely performance for FY 2013-14. In this chapter, the Commission has analyzed the petition of LED based on the provisions mentioned in the regulations and performance in the FY 2011-12 and revised estimates of FY 2012-13.

The Commission has taken into consideration the following for ARR and tariff determination for FY 2012-14:

i. Actual Performance in FY 2011-12 (Actual Un-audited Figures)

ii. Revised estimates approved by the commission for FY 2012-13

6.2 Analysis of Aggregate Revenue Requirement of FY 2013-14

The determination of Aggregate Revenue Requirement requires assessment of quantum of energy sales, loss as well as various cost elements like power purchase cost – (Nil in this case), O&M expenses, interest cost and depreciation etc. Revised estimates/actual submitted by the petitioner as regards to various components of ARR of previous year, the Commission's analysis thereon and decision in respect of items given below is as discussed in the following paras:

- Assessment of Energy Requirement
  - i. Sales Projections
  - ii. Loss Trajectory
  - iii. Energy Balance
  - iv. Power Purchase Sources-(Nil in this case)
- Assessment of the Aggregate Revenue Requirement
  - i. Power Purchase Costs & Transmission Charges;- (Nil in this case)
  - ii. Operation and Maintenance Expenses;
    - Employee Expenses
    - Administration & General expenses
    - Repairs & Maintenance Expenses
  - iii. Capital Expenditure and Asset Capitalization
  - iv. Gross Fixed Assets;
  - v. Depreciation;
  - vi. Interest on Long Term Loans;
  - vii.Interest on Working Capital & Security Deposits;
  - viii. Return on Capital Base/ Net Fixed Assets;
  - ix. Provision for Bad and Doubtful Debts
  - x. Other expenses.
  - xi. Non-Tariff Income

As per the regulation no. 13 of JERC Tariff regulations 2009,
"

1) *The Aggregate Revenue Requirement of the generating company or the licensee shall comprise of the following:*

   i. *Fuel Cost for own generation, if applicable.*

   ii. *Cost of Power Purchase, if any*

   iii. *Operation and Maintenance Expenses,*

   iv. *Depreciation, including Advance Against Depreciation,*

   v. *Interest and Cost of Finance,*

   vi. *Return on Equity,*

   vii. *Income Tax*

   viii. *Provision for Bad & Doubtful Debts*

   ix. *Other Expenses.*

2) *The data should be provided for three years*

   i. *Audited figures for the previous year; Information for the previous year shall be based on the audited accounts; in the absence thereof, the audited accounts for the immediately preceding year shall be filed along with the un-audited accounts for the previous year.*

   ii. *Estimated figures for the current financial year should be based on actual figures for the first six months and the estimated figures for the second six-months of the year. The estimated figures for the second half year of the current financial year should be based on the actual audited figures for the second half of the previous year with adjustments that reflect known and measurable changes expected to occur between them. These adjustments must be specifically documented and justified.*

   iii. *Forecasted figures for the ensuing year should be based on the current year figures with adjustments that reflect known and measurable changes expected to occur between them. These adjustments must be specifically documented and justified."*

   "

4) The Aggregate Revenue Requirement of the generating company or the licensee shall be worked out by adjusting the following in the revenue requirement computed under Clause (1) above:

i. Necessary adjustments under Regulation 9 'Review and Truing Up'.

ii. Income from surcharge and additional surcharge from Open Access Consumers, if any ;

iii. Transmission and/or Wheeling Charges recovered from the Open Access Customers, if any ;

iv. Authorized portion of Income/revenue from Other Business engaged in by the licensee for optimum utilization of assets, if any, in accordance. "

6.3 Consumers, Connected load and Energy Sales

Petitioner's Submission

Energy Sales

The petitioner has submitted that Electricity Department - Lakshadweep has a consumer mix constituting of domestic, commercial, Industrial and Public Lighting.

LED's overall energy sales are significantly dependent on the domestic consumers to the extent of around 70%. Energy sold to various consumer categories over the past 5 years has grown at approximately 8.28% p.a., mainly contributed by increase in the sales to the domestic categories.

The petitioner has submitted that the factors affecting the actual consumption of electricity are numerous and often beyond the control of the utility including factors such as Government policy, economic climate, weather conditions and force majeure events like natural disasters, etc. LED, therefore for projecting the category-wise consumption for FY 2013-14 has considered the past growth trends in each of the consumer category including growth trend in number of consumers and connected load.

The petitioner has considered the past trend for projecting the Energy Sales (MUs) as mentioned in the following table:

Table 47 : Details of Energy Sales during past years (Sales in Million Units) - Petitioner's Submission

S. No.	Category	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
		Actual	Actual	Actual	Actual	Actual
1	Domestic	16.25	15.85	17.78	20.35	23.75
2	Commercial	6.14	5.96	6.16	6.98	7.28
3	Industrial	0.30	0.27	0.33	0.41	0.42
4	Public (Street Light)	1.27	1.29	1.28	1.34	1.52
5	Temporary	0.04	0.02	0.02	0.01	0.02

	Connections					
6	**Total**	**24.00**	**23.38**	**25.56**	**29.09**	**32.99**

The energy sales for FY 2013-14 have been determined based on CAGR for past four to five-year actual energy sales in various consumer categories. Since the energy sales in each category depend upon a number of factors like growth in economy, climate, Government policies etc, normalization in sales has been undertaken in order to remove any wide fluctuations.

The petitioner has considered the adjusted CAGR of various consumer categories for growth rate (%) for projecting the Energy Sales (MUs) as mentioned in the following table:

Table 48 : Growth rate considered for FY 2013-14 (in %age) by the Petitioner

S. No.	Category	Assumed growth rate for FY 2013-14
1	Domestic	11.00%
2	Commercial	4.35%
3	Industrial	9.15%
4	Public (Street Light)	5.62%
5	Temporary Connections	0.00%
	Total	**10.81%**

The table below summarizes category wise energy sales projection for FY 2013-14 for the LED. As can be observed, the overall energy sales in UT of Lakshadweep are significantly dependent upon the domestic and commercial consumption.

Table 49 : Projected category wise sales by the Petitioner for FY 2013-14 (Sales in Million Units)

S. No.	Category	FY 2013-14
		Petitioner's Submission
1	Domestic	29.07
2	Commercial	8.46
3	HT Industrial	0.71
4	Industrial	0.30
5	Public (Street Light)	1.35
6	Temporary Connections	0.05
	Total	**39.93**

Number of Consumers

The petitioner has submitted that the department has a consumer mix of domestic, commercial, industrial, HT-Industrial and public lighting. The number of consumers as on January 2013 submitted by the Petitioner is summarized below.

Table 50 : Number of consumers as on January 2013- Petitioner's Submission

S. No.	Category	No. of consumers
1	Domestic	16,302
2	Commercial	2,987
3	HT Industrial	20
4	Industrial	303
5	Public (Street Light)	73
6	Temporary Connections	107
	Total	**19,792**

The Petitioner as per the regulatory formats submitted along with the petition for FY 2013-14 has submitted the number of consumers for FY 2013-14 as 19,792. The past trend of the number of consumers has however not been provided by the Petitioner.

Connected Load

The Petitioner has not submitted the past trends of the connected load of the various consumer categories. However, as per the regulatory formats submitted along with the petition for FY 2013-14, the Petitioner has considered the following connected load values for FY 2013-14.

Table 51 : Connected Load as submitted by the Petitioner (in kVA) - Petitioner's Submission

S. No.	Category	Petitioner's Submission FY 2013-14
1	Domestic	51620
2	Commercial	11474
3	HT Industrial	1227
4	Industrial	4272
5	Public (Street Light)	167
6	Temporary Connections	0
	TOTAL	**68761**

The ED-LED has submitted its maximum demand to be around 8.33MW in its region. The same has been tabulated below for last five years:

Table52: Maximum Demand (KW) - Petitioner's Submission

Name of Island	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Minicoy	955	1037	1107	1175	1200
Kavaratti	1320	1452	1548	1649	1750
Amini	665	710	748	788	850
Andrott	925	994	1082	1144	1100
Kalpeni	498	538	563	591	650
Agatti	650	695	740	788	850
Kadmat	598	632	670	710	950
Kiltan	329	360	375	390	500
Chetlat	255	265	280	295	400
Bitra	42	44	50	54	60
Bangaram	45	45	70	72	20
Total	**6282**	**6772**	**7233**	**7656**	**8330**

Commission's analysis

Energy Sales

The Commission has considered the actual figures of past 4 years and the actual for FY 2011-12 (submitted by the petitioner) for estimating the category wise energy sales for FY 2013-14. The modified CAGR (%) for a period of four years (FY 2011-12 over FY 2007-08) for different consumer categories has been considered and the growth rate so determined has been applied on the approved sales of FY 2012-13 to assess the Energy Sales for FY 2013-14. In case the four year CAGR was negative, the Commission has assumed zero growth rate in that case (modified CAGR). The details are given in the table below. Further, In case of HT Industrial category, Commission has found an increase of ~100% in the sales figure compared to the previous year. There has been no justification provided for such increase. Therefore, Commission has approved the sales for HT Industrial consumer as per the sales approved in the FY 2012-13.

Table 53 : CAGR (%) considered by the Commission for estimation of Sales for FY 2013-14 (in percentage)

S. No.	Category	Assumed growth rate for FY 2013-14
1	Domestic	9.95%
2	Commercial	4.35%
3	HT Industrial	0.00%
4	Industrial	8.78%

S. No.	Category	Assumed growth rate for FY 2013-14
5	Public (Street Light)	4.59%
6	Temporary Connections	0.00%

Table 54 : Energy Sales approved by the Commission for FY 2013-14 (in Million Units)

S.No.	Category	FY 2013-14	FY 2013-14
		Petitioner's Submission	Approved
1	Domestic	29.07	28.71
2	Commercial	8.46	7.93
3	HT Industrial	0.71	0.34
4	Industrial	0.30	0.50
5	Public (Street Light)	1.35	1.66
6	Temporary Connections	0.05	0.02
	Total	**39.93**	**39.16**

Number of Consumers

The Commission, in the absence of any significant historical data for projection, based on the submission made by the petitioner has approved the actual number of consumers seen in the month of January 2013 for FY 2013-14.

Table 55 : Number of Consumers approved by the Commission for FY 2012-13

S. No.	Category	FY 2013-14	FY 2013-14
		Petitioner's Submission	Approved
1	Domestic	16,302	16302
2	Commercial	2,987	2987
3	HT Industries	20	20
4	Industrial	303	303
5	Public (Street Light)	73	73
6	Temporary Connections	107	107
	Total	**19792**	**19792**

Connected Load

The Commission has observed that the petitioner did not furnish the past trend of the connected load of the various consumer categories, in the absence of which the Commission has considered the approved connected load for FY 2012-13 in its tariff order dated 31st October 2012 applicable for FY 2013-14 also.

The Commission directs the Petitioner to submit complete information as per the regulatory formats of the ARR & tariff approval process of the Commission along with slab-wise details of the connected load in each category in the next ARR filing. Further, the past trends of atleast the last 3 years based on actual should be submitted to enable the Commission to analyze the data and arrive at realistic projections.

Table 56 : Connected Load approved by the Commission for FY 2013-14 (in kVA)

S. No.	Category	Petitioner's Submission FY 2013-14	Approved FY 2013-14
1	Domestic	51620	49381
2	Commercial	11474	8431
3	HT Industries	1227	1200
4	Industrial	4272	3386
5	Public (Street Light)	167	162
6	Temporary Connections	0	0
	TOTAL	**68761**	**62560**

Further, based on the island wise maximum load submitted by the ED-LED Commission has projected the maximum demand for the FY 2013-14. The growth rates considered for the purpose of projection has been provided below:

Table 57 CAGR computation- Petitioner's Submission

Name of Island	5 years	4 years	3 years	FY 2011-12 over FY 2010-11	optimum growth rate
Minicoy	6%	5%	4%	2%	4%
Kavaratti	7%	6%	6%	6%	7%
Amini	6%	6%	7%	8%	7%
Andrott	4%	3%	1%	-4%	1%
Kalpeni	7%	7%	7%	10%	8%
Agatti	7%	7%	7%	8%	7%
Kadmat	12%	15%	19%	34%	20%
Kiltan	11%	12%	15%	28%	17%
Chetlat	12%	15%	20%	36%	20%
Bitra	9%	11%	10%	11%	10%

Bangaram	-18%	-24%	-47%	-72%	0%

The maximum demand computed by the Commission for different islands is shown below:

Table 58: Projected Maximum Demand - Petitioner's Submission

Name of Island	FY 2011-12 (Actual)	FY 2012-13 Projected	FY 2013-14 projcted
Minicoy	1200	1,251	1,305
Kavaratti	1750	1,865	1,987
Amini	850	907	969
Andrott	1100	1,113	1,127
Kalpeni	650	700	754
Agatti	850	911	977
Kadmat	950	1,139	1,366
Kiltan	500	583	679
Chetlat	400	482	580
Bitra	60	66	73
Bangaram	20	20	20
Total	**8330**	**9,038**	**9837**

Based on the above table it can be seen that maximum demand in the region will increase to 9837 KW for the FY 2013-14. Commission has also calculated Island wise capacity from DG sets and from solar SPVs for comparison purpose.

Table 59 Island wise capacity and demand- Commission's analysis

Island wise generation (MU)	Capacity DG sets	solar SPV capacity	total capacity	Maximum load	PLF to be maintained by each plant
Minicoy	2,800.00	210.00	3,010	1,305	43%
Kavaratti	3,200.00	760.00	3,960	1,987	50%
Amini	1,900.00	100.00	2,000	969	48%
Andrott	3,250.00	320.00	3,570	1,127	32%
Kalpeni	1,250.00	100.00	1,350	754	56%
Agatti	2,350.00	100.00	2,450	977	40%
Kadmat	2,400.00	260.00	2,660	1,366	51%

Kiltan	1,000.00	100.00	1,100	679	62%
Chetlat	500.00	100.00	600	580	97%
Bitra	120.00	50.00	170	73	43%
Bangaram	120.00	50.00	170	20	12%
Total	**18,890.00**	**2,150.00**	**21,040**	**9,837**	

From the table above it can be seen that most of the islands have maximum PLF below 50% except for Kavaratti, Kalpeni, Kadmat, Kiltan and Chetlat. Commission directs ED-LED to augment the current capacities in the above mentioned islands for strategic needs and consumers well being as 50% of the generation capacity is kept for backup purpose. Further, the UT of Lakshadweep has a strategic importance in terms of maintaining internal security in this region. Military bases of the Indian Navy and Indian Coast Guard are being maintained in most of the Islands in the UT of Lakshadweep. Due to these aforementioned reasons, the LED has to maintain additional/back-up capacity for generation of power.

6.4 Transmission & Distribution Loss

Petitioner's Submission

The petitioner has submitted that T&D losses at the LED periphery are comparatively high due to the high level of transformation losses at Kadmat, Kiltan and Chetlat islands, where the output from the power generating plants step down at 3.3 kV level. To reduce this high level of transformation losses, the LED has undertaken several CAPEX schemes to increase the transformers capacity in these three islands.

The petitioner has submitted that it has achieved significant reduction in transmission & distribution losses in the recent years. The LED has further submitted that the system improvement works executed every year under the plan schemes have resulted in the reduction of T&D losses. However, it may also be noted that reduction of distribution losses may not be possible beyond a certain level due to geographical conditions of the UT of Lakshadweep and technical limitations in the distribution system.

The actual T&D loss level of the LED during FY 11-12 was 21.82%. The estimated T&D losses for FY 2012-13 were around 21.40%. LED has proposed to reduce the T&D losses to 21.00% for FY 2013-14. The Petitioner has submitted that considering the proposed capital expenditure in transmission and distribution network during FY 2013-14, it has proposed to reduce the losses by 0.40% in FY 2013-14, as summarized in the table below:

Table 60 : T&D losses submitted by the Petitioner for FY 2013-14

		FY 2011-12	FY 2012-13	FY 2013-14

		Actual	Revised Estimate	Projected
1	T&D losses (%age)	21.82%	21.40%	21.00%

Commission's Analysis

As per the regulation 15 of JERC Tariff regulations, 2009

"15. AT& C Losses

6. *The licensee shall give information of total AT&C losses in Previous Year and Current Year and the basis on which such losses have been worked out.*

7. *The licensee shall also propose a loss reduction programme for the Ensuing Year as well as for the next three years giving details of the measures proposed to be taken for achieving the same.*

8. *Based on the information furnished and field studies carried out and the loss reduction program proposed by the licensee, the Commission shall fix separate targets for reduction of Transmission and Distribution losses and for commercial efficiency for the period specified by the Commission:*

   Provided further that in the event of unbundling of the integrated utility, the Commission may fix separate transmission and distribution loss targets and commercial efficiency targets, as the case may be, for each successor licensee taking into account its area of operation, its consumer mix, state of the network, level of metering, metering initiatives planned, etc.

9. *The licensee shall conduct regular energy audit to substantiate its estimation of T&D losses. The licensee shall also furnish six monthly energy audit reports to the Commission.*

   The energy audit report for the first six months of the year shall be provided by November end of the same year. Similarly energy audit report for the last six months of the year shall be provided by May end of the next year.

10. *In the absence of energy audit, the Commission may not accept the claim of the licensee and may proceed to fix the loss levels on the basis of any other information available and its own judgment.''*

The petitioner has not provided any energy audit report and neither any basis for reduction of T&D loss level from 21.40% in FY 2012-13 to 21.00% in FY 2013-14.

For FY 2013-14 the power purchase was based on the approved generation data in the FY 2012-13 due to which the overall generation was lower than projected by the petitioner. The estimated losses for the period FY 2012-13 are approved in this order has been considered at 19.74%. The revised generation submitted and considered by the Commission form the basis for approval of the losses for the FY 2013-14. The Commission expects that the losses in such a concise network should be much lower.

However for the purpose of this order the Commission has considered the loss level at 17.59% for FY 2013-14.

6.5 Energy Balance

Petitioner's Submission

The petitioner has submitted that considering the T&D losses of 21.00%, the energy requirement for the sale within the islands is 50.55 Million Units for FY 2013-14. The Petitioner has submitted that overall energy sales to various consumer categories are estimated to grow at approximately 10% during FY 2013-14 and the overall energy requirement has been projected at 50.55 MU in FY 2013-14.

Commission's Analysis

Based on the approved energy sales of 39.16 million units and based on the approved T&D loss, the total energy requirement has been approved.

The LED sources power entirely from its own power generating stations. The detailed analysis of own generation has been discussed in Para 6.6.

Based on the data available, the Commission has projected the net energy availability of 47.51 million units for FY 2013-14. This is inclusive of the units generated from solar plants.

The table below captures the values as submitted by the petitioner and that approved for FY 2013-14.

Table 61 : Energy Balance approved by the Commission for FY 2013-14

S. No.	Category	Petitioner's Submission FY 2013-14	Approved FY 2013-14
A)	**ENERGY REQUIREMENT (MU)**		

S. No.	Category	Petitioner's Submission FY 2013-14	Approved FY 2013-14
1	**Total sales within the UT**	39.93	39.16
I	AT&C Losses (%)	21.83%	18.41%
Ii	T&D losses (%)	21.00%	17.59%
Iii	MU	10.61	8.36
2	**Energy required for Sale to Retail Consumers (MU)**	**50.55**	**47.51**
3	**Total Energy Requirement for UT (MU)**	**50.55**	**47.51**
B)	**ENERGY AVAILABILITY / PURCHASED**		
1	**Net Generation after auxiliary consumption (MUs)**		
I	Own Generation	50.57	47.51
2	**Energy Surplus/(Gap) (MU)**	**0.02**	**-**

6.6 Power Quantum and Cost

Petitioner's Submission

Sources of Power and Power Generation Quantum

The petitioner has submitted that it sources its power entirely from its own power generating stations. It is submitted that out of the total capacity of 18890 kW, the department utilizes around half of its total installed capacity. The remaining installed capacity is utilized as back-up.

The petitioner has submitted that the source-wise gross generation, auxiliary consumption and net generation of power in UT of Lakshadweep from FY 2007-08 and FY 2011-12 is as shown in the table below:

Table 62 : Generation Quantum from FY 2007-08 to FY 2011-12 as submitted by the Petitioner

Year	Gross generation	Auxiliary consumption	Auxiliary consumption	Net generation
	MU	MU	%age	MU
FY 2007-08 (Actual)	28.82	0.40	1.39%	28.42
FY 2008-09 (Actual)	31.14	0.42	1.36%	30.72
FY 2009-10 (Actual)	35.14	0.44	1.27%	34.70
FY 2010-11 (Actual)	40.33	0.56	1.39%	39.77
FY 2011-12 (Actual)	42.70	0.95	2.21%	41.75

Further, the Petitioner has submitted that out of the total installed capacity of 18890 kW, around 3550 kW of the existing installed capacity has become old and is proposed to be phased out by the LED during the 12th Plan. Around 1070 kW of capacity is likely to be added to replace the old plants as well as increase the generation capacity. The existing status of DG sets (i.e. new and old plants) and proposed capacity addition of the LED is shown in the table below:

Table 63 : Existing installed capacity and capacity addition for FY 2013-14- Petitioner's Submission

S. No.	Name of Island	Existing installed capacity			
		New		Old	Total
1.	Minicoy	2X1000	2000	800	2800
2.	Kavaratti	2X1000	2000	0	3200
		2X600	1200	0	
3.	Amini	2x750	1500	400	1900
4.	Andrott	3X750			3250
		1X1000			
5.	Kalpeni	2X250	500	750	1250
6.	Agatti	3X400	1200	400	2350
		1X750	750		
7.	Kadmat	1X400	1650	750	2400
		5X250			
8.	Kiltan	2X400	800	200	1000
9.	Chetlat	2X250	500	0	500
10.	Bitra	1 X 400	40	80	120
11.	Bangaram	0	0	120	180

S. No.	Name of Island	Existing installed capacity			
		New		Old	Total
12.	**Total**		**15390**	**3500**	**18890**

For projection of the generation quantum for FY 2013-14, the LED has considered 350 days of operation for all the DG sets. The remaining 15 days would be required for repair and maintenance for the DG sets.

Further, the Petitioner has considered that 50% of the new DG sets would be utilized as back-up to provide continuous power supply to the important military installations located in the islands and to meet the other consumer demand during break down of the DG sets.

The existing level of auxiliary consumption i.e. 2.21% has been considered for projecting the quantum of auxiliary consumption for FY 2013-14.

For FY 2013-14, solar generation has been considered from the solar plants in Minicoy, Kavaratti, Andrott, Kalpeni, Agatti, Kadmat, Kiltan, Bitra and Bangaram. The solar plants in Amini and Chetlat will not be operational in FY 2013-14. A total of 1.57 MUs of power generation has been projected by the petitioner for FY 2013-14.

The table below shows the projected island wise gross power generation quantum, auxiliary consumption and net power generation quantum of the LED for FY 2013-14 as submitted by the Petitioner.

Table 64 : Power generation quantum as submitted by the Petitioner for FY 2013-14

Island	Gross generation	Auxiliary Consumption	Net generation
DG sets			
Minicoy	8.18	0.05	8.13
Kavaratti	11.13	0.19	10.95
Amini	5.02	0.06	4.96
Andrott	7.65	0.08	7.57
Kalpeni	3.98	0.28	3.70
Agatti	5.86	0.09	5.77
Kadmat	3.85	0.25	3.60
Kiltan	2.55	0.03	2.52
Chetlat	1.36	0.05	1.31
Bitra	0.33	0.01	0.32
Bangaram	0.27	0.08	0.19
Subtotal 1	**50.16**	**1.15**	**49.00**
Solar generation			
210 kWp Minicoy SPV			0.123
760 kWp Kavaratti SPV			0.688
100 kWp Amini SPV			0.000

Island	Gross generation	Auxiliary Consumption	Net generation
320 kWp Andrott SPV			0.210
100 kWp Kalpeni SPV			0.045
100 kWp Agatti SPV			0.090
260 kWp Kadmat SPV			0.139
100 kWp Kiltan SPV			0.090
100 kWp Chetlath SPV			0.000
50 kWp Bitra SPV			0.090
50 kWp Bangaram SPV			0.090
Subtotal 2			**1.566**
Total Net Generation			**50.55**

The Petitioner requests the Commission to approve the generation quantum of 50.55 MU as estimated by the Petitioner.

Fuel Purchase Cost

The Petitioner has submitted that it procures its fuel (HSD oil) from the the Indian Oil Corporation's (IOC) Beypore depot (Kerala). The fuel procured from the Beypore depot is then transported to various islands by ships.

During FY 2011-12, and from April 2012 to October 2012, the LED has paid Rs. 34.18 per liter of HSD to IOC. In addition to this cost, the Petitioner has to pay additional charges towards transportation of fuel from the Beypore depot to the islands such as filing and sealing charges of the barrels, transportation charges for Beypore depot to the port, freight charge, port duties and crane charges at port, local transportation charges at the island etc. The average fuel cost, inclusive of all charges incurred by the LED for FY 2011-12, and from April 2012 to October 2012 is presented in the table below:

Table 65 : Average Fuel Purchase Cost for FY 2011-12- Petitioner's Submission

S. No.	Particulars	Amount (in Rs.)
1	Cost of HSD oil/per barrel including local transportation, Service Tax @ 4% and SSC @1%	7392.00
2	Cost of filling and sealing of the barrels	6.10
3	Transportation charge/per barrel from KSCC yard to wharf including loading to the ships	44.90
4	Freight charge/barrel	160.00
5	Port duties and crane charges/barrel	17.71
6	Average cost of empty barrel	499.33
7	Transportation charge/per barrel from wharf to KSCC yard at Beypore	18.95
8	Restaking of empty barrel	3.50
9	Cost of cap seal (big and small)	4.15

S. No.	Particulars	Amount (in Rs.)
10	Leak testing charge/barrel	4.00
11	Welding and reconditioning charge/barrel	1.50
12	Scrapping, cleaning, painting and marking charge/ barrel	31.00
13	Cost of Bunk washer (big and small)/barrel	2.50
14	**Total cost/barrel**	**8185.64**
15	Average cost of Oil (14/200) per litre	40.93
16	Add: Local transportation cost at the islands @2% of HSD price	0.68
17	**Average cost of HSD (15+16) per litre**	**41.61**

* 1 barrel = 200 litres

In November 2012 the price of HSD was revised by IOC. The revised average fuel cost, inclusive of all charges incurred by the LED during November 2012 and December 2012 is presented in the table below:

Table 66 Average Fuel Purchase Cost during November 2012 and December 2012- Petitioner's Submission

S. No.	Particulars	Amount (in Rs.)
1	Cost of HSD oil/per barrel including local transportation, Service Tax @ 4% and SSC @1%	8455.38
2	Cost of filling and sealing of the barrels	9.00
3	Transportation charge/per barrel from KSCC yard to wharf including loading to the ships	59.00
4	Freight charge/barrel	160.00
5	Port duties and crane charges/barrel	17.71
6	Average cost of empty barrel	499.33
7	Transportation charge/per barrel from wharf to KSCC yard at Beypore	24.80
8	Restaking of empty barrel	3.50
9	Cost of cap seal (big and small)	4.15
10	Leak testing charge/barrel	4.00
11	Welding and reconditioning charge/barrel	1.50
12	Scrapping, cleaning, painting and marking charge/ barrel	31.00
13	Cost of Bunk washer (big and small)/barrel	2.50
14	**Total cost/barrel**	**9271.87**
15	Average cost of Oil (14/200) per litre	46.36
16	Add: Local transportation cost at the islands @2% of HSD price	0.85
17	**Average cost of HSD (15+16) per litre**	**47.21**

In January 2013 the price of HSD was again revised by IOC. The revised average fuel cost, inclusive of all charges incurred by the LED from January 2013 is presented in the table below:

Table 67 : Average Fuel Purchase Cost from January 2013 - Petitioner's Submission

Sl. No.	Particulars	Amount (in Rs.)
1	Cost of HSD oil/per barrel including transportation, Service Tax @ 4% and SSC @1%	10453.91
2	Cost of filing and sealing of the barrels	9.00
3	Transportation charge/per barrel from KSCC yard to wharf including loading to the ships	59.00
4	Freight charge/barrel	160.00
5	Port duties and crane charges/barrel	17.71
6	Average cost of empty barrel	499.33
7	Transportation charge/per barrel from wharf to KSCC yard at Beypore	24.80
8	Restaking of empty barrel	3.50
9	Cost of cap seal (big and small)	4.15
10	Leak testing charge/barrel	4.00
11	Welding and reconditioning charge/barrel	1.50
12	Scrapping, cleaning, painting and marking charge/ barrel	31.00
13	Cost of Bunk washer (big and small)/barrel	2.50
14	**Total cost/barrel**	**11270.40**
15	Average cost of Oil (14/200) per litre	56.35
16	Add: Local transportation cost at the islands @2% of HSD price	1.05
17	**Average cost of HSD (15+16) per litre**	**57.40**

In FY 2011-12, the petitioner has incurred Rs. 55.63 Crore for procurement of 13.37 thousand KL of HSD. The LED would like to submit that it is necessary for the department to maintain 2 months stock of HSD in order to continue its generation on the event of delay in supply of oil from IOC.

Further, for FY 2013-14, the fuel purchase cost as revised on January 2013 has been considered by the petitioner for the full year to project the cost of HSD. Other costs such as bottling and transportation costs have been assumed to be increased by 5%. The escalation is to absorb the normal inflationary increases in the cost of purchase.

In addition to the HSD fuel, LED utilized 37,316 liters of Lube oil at a cost of Rs. 0.90 Crore for the generation of power during FY 2011-12. The price of Lube oil is considered as Rs. 240.00 per liter inclusive of the transportation cost. Petitioner for the purpose of calculating the cost of lube oil has considered the cost at Rs 240 per liter for the FY 2013-14.

The actual fuel purchase cost for FY 2013-14 is summarized in the table below:

Table 68 : Fuel Purchase Cost for FY 2013-14

Particulars	FY 2013-14 (Projected)		
	Quantity of HSD procured (KL)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/Lit)
Total HSD Purchase Cost	15704	90.54	57.65
Lube oil	44179	1.06	240.00

* Inclusive of other charges

Note: The quantity and cost of Oil shown in the above table for FY 2013-14 are exclusive of the quantity and cost of the HSD maintained in the stock by the LED.

The per unit generation cost for FY 2013-14 is presented in the table below.

Table 69 : Per unit generation cost submitted by the Petitioner

Particulars	Unit	FY 2013-14
		Projected
Gross Generation	MU	50.16
Net Generation	MU	49.00
Fuel cost/Gross unit	Rs./kWh	18.26
Fuel cost/Net unit	Rs./kWh	18.69

Commission's Analysis

Power Generation Quantum and Cost

Own Generation

In the additional data submitted by the petitioner on 10th May 2013, island & month wise energy generation and auxiliary consumption was provided for the FY 2012-13. Commission for the purpose of calculating availability of energy for FY 2013-14, has considered the actual generating capacity as submitted for FY 2012-13 and PLF has been increased based on a similar trend as seen in past two years.

Further, the data provided by the ED-LED on fuel cost in its additional data is only for 8720 KL which was bought at a cost of Rs 28.61 Crores in the month of December 2012 and 6756 KL for at Rs 21.98 Crores in the month of February 2012. The commission would like to get the whole data on fuel purchased by the utility for prudent check for the period of 6 months.

The Commission has analyzed the past trend of auxiliary consumption and plant load factor (%) submitted by the petitioner in its additional data submission. The Commission has also noted the growth rate considered by the petitioner in the petition for own generating power plants for estimating the energy availability for FY 2013-14.

While estimating the energy availability and cost for FY 2013-14, the following has been considered:

- Increase in PLF from FY 2011-12 to 2012-13 has been considered while projecting PLF for each DG set in the FY 2013-14
- Average auxiliary consumption of the previous years (FY 2011-12 and FY 2012-13) has been considered for FY 2013-14 for each power station.
- The Commission has considered the following parameters of the HSD fuel oil for estimating the consumption on the basis of units generated by each of the generating unit:
    - For consumption & cost of HSD
        - Commission has analyzed the specific fuel consumption i.e. the quantity of fuel required to generate one unit of electricity for FY 2011-12 and FY 2012-13. Commission based on the analysis considered the specific fuel consumption seen in FY 2011-12 for FY 2013-14
        - Cost of HSD as per the latest rate seen in the month of January 2013 has been considered
        - The average cost of lube oil has been considered to be Rs 240 /lit

The estimated generation, fuel consumption, auxiliary consumption and cost thereof for FY 2013-14 on the basis of above is attached as **Appendix A** to this Order.

Renewable Purchase Obligations

As per JERC (Procurement of Renewable Energy) Regulations 2010 clause 1 sub clause (1)

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

The petitioner has to purchase 3% of total consumption of all the consumers in its area as power purchase from renewable sources for FY 2013-14 as the RPO obligation for FY 2013-14 is same as for the FY 2012-13 including 0.40% for Solar and 2.60% for Non-Solar.

The petitioner would be able to meet its RPO targets of Solar Power for FY 2013-14 based on the capacity addition proposed. However, it is observed that the Petitioner is not meeting its RPO target of 2.60% to be met from non-solar sources of renewable power generation. However, the Petitioner is meeting its overall target of 3% to be met from renewable sources of generation. **In view of this, the Commission directs the Petitioner to encourage and incentivize generation from renewable sources to meet its overall non-solar RPO targets.**

For solar generation, the generation from Minicoy, Kavaratti, Andrott, Kalpeni, Agatti, Kadmat, Kiltan, Bitra and Bangaram has been considered for FY 2013-14. Solar Plants at Amini and Chetlat will not work during 2013-14 as per Petitioner.

As per the O&M contract with BHEL,100,000 kWh/year will be generated from 100 kWp of equivalent capacity and the same has been considered for projecting the solar generation. However, it is observed that cost of O&M cost and installation cost has not been provided by the petitioner. **Therefore, the Commission directs the petitioner to submit the details of solar power plants and their running cost including O&M Contract charges payable to BHEL in the next ARR and tariff petition.**

Summary of Total Approved Power Purchase Cost for FY 2013-14

While estimating the total cost of generation, station wise energy availability and fuel cost as discussed in earlier Para has been considered. The summary of total cost of generation is as mentioned below.

Table 70 : Summary of own generation cost for FY 2013-14- Commission's Approval

OWN GENERATION FY 2013-14	Gross Generation	Net Generation	Auxiliary Consumption	Actual Oil Consumption	Total Fuel Cost
	MUs	MUs	%	Kltr	Rs Crores
Minicoy	7.45	7.40	0.75%	2,096	12.31
Kavaratti	10.53	10.38	1.42%	3,054	17.92
Amini	4.83	4.78	1.16%	1,514	8.87
Andrott	6.53	6.38	2.26%	1,975	11.58
Kalpeni	3.13	2.91	7.00%	1,017	5.95
Agatti	4.92	4.83	1.84%	1,514	8.87
Kadmat	5.46	5.15	5.66%	1,749	10.25
Kiltan	2.61	2.58	1.12%	901	5.27
Chetlat	1.01	0.98	2.81%	312	1.83

Bitra	0.09	0.09	2.00%	36	0.21
Bangaram	0.12	0.09	27.50%	70	0.41
		45.56			
Solar Generation					
210 kWp Minicoy SPV		0.21			
760 kWp Kavaratti SPV		0.76			
100 kWp Amini SPV		0			
320 kWp Andrott SPV		0.32			
100 kWp Kalpeni SPV		0.1			
100 kWp Agatti SPV		0.1			
260 kWp Kadmat SPV		0.26			
100 kWp Kiltan SPV		0.1			
100 kWp Chetlath SPV		0			
50 kWp Bitra SPV		0.05			
50 kWp Bangaram SPV		0.05			
Sub total		**1.95**			
Total		**47.51**			**83.48**

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 fact in view, the Commission opines that any variation in cost of their own generation (including variation in cost of power purchase, if any) should, for the time being, be borne by the utility. Further, the utility is directed to propose a scheme for sharing of the increase in cost of power with the consumers for Commission’s consideration and approval.

6.7 Operation and Maintenance Expenses

Petitioner’s Submission

The petitioner has submitted that the Operation and Maintenance (O&M) expenses comprise of three components for DG Sets and Solar Plant seperately namely:

a) Employee cost
b) Repairs & Maintenance expenses and
c) Administrative and General Expenses

d) O&M Contract Charges

The Petitioner has submitted that in the past, it has not maintained segregation between the above cost elements for the purpose of accounting and had booked all cost including salaries, medical expenses, office expenses, domestic traveling expenses, and other charges towards repairs and supply of materials under the operation and maintenance expense head. However, efforts are being made by LED to segregate the O&M expenses under different accounting heads.

Commission's Analysis

The Commission has found discrepancy in the data submitted by the petitioner in format and in the petition in case of O&M cost projected for FY 2013-14. Due to inconsistency in the data submitted Commission has taken numbers from formats for comparison purpose.

6.7.1 Employee Expenses

Petitioner's submission

The Employee expenses submitted by the Petitioner comprise of all costs related to employees like basic salary, dearness allowances, medical cost, leave travel allowances, honorarium, etc.

Employee cost for FY 2013-14 has been estimated based on the variation in the rate of WPI Index per annum published by the Office of Economic Adviser, Government of India. For projecting the employee cost for FY 2013-14, the Petitioner has considered 8.94% escalation over the estimated employee cost for FY 2012-13. Based on the above factors petitioner has projected employee expense of Rs 11.95 Crores for the FY 2013-14.

Further, ED-LED has prayed to the Commission that salaries/employee cost increase should be considered as uncontrollable factor specially factors like DA/Basic hike through Government etc. Therefore, ED-LED has requested the Commission to approve the employee costs as projected by it.

Commission's Analysis

As per the regulation 27 of JERC tariff regulations 2009 -

"

27. Operation and Maintenance Expenses

7) *'Operation & Maintenance expenses' or 'O&M expenses' shall mean repair and maintenance (R&M) expenses, employee expenses and administrative & general (A&G) expenses including insurance.*

   While determining the O&M expenses for generation functions within the State, the Commission shall be guided, as far as feasible, by the principles and methodologies of CERC on the manner, as amended from time to time.

8) *While determining the O&M expenses for transmission functions within the State, the Commission shall be guided, as far as feasible by the principles and methodologies specified by CERC on the matter, as amended from time to time:*

   Provided further that the Commission may, if it considers it just, practical and proper considering the size of the total transmission system of, and the quantum of electricity handled by, an integrated utility, treat its transmission system as an integral part of its distribution system itself.

9) *O&M expenses for distribution functions shall be determined by the Commission as follows:*

   - *O&M expenses as approved by the Commission for the first time for a year shall be considered as base O&M expenses for determination of O&M expenses for subsequent years;*
   - *Base O&M expenses as above shall be adjusted according to variation in the rate of WPI per annum to determine the O&M expenses for subsequent year, where WPI is the Wholesale Price Index on April 1 of the relevant year;*
   - *In case of unbundling of the Electricity Department and formation of separate distribution companies, the Commission will make suitable assessment of base O&M expenses of individual distribution companies separately and allow O&M expenses for subsequent years for individual companies on the basis of such estimation and above principle.*

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

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

12) *O&M expenses for integrated utility shall be determined by the Commission on the norms and principles indicated above''*

The Commission has considered the approved employee expenses of Rs. 9.30 Crores for FY 2012-13 as a base for estimating the employee expenses for FY 2013-14 after applying escalation of 7.51% being the actual WPI increase for FY 2012-13 over FY 2011-12. The latest WPI index till March 2013 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry for estimation of the increase in the average of WPI index from FY 2011-12 to FY 2012-13. The calculation for WPI index is given below:

Table 71 : Calculation for WPI index considered by the Commission

Year	Average WPI index	%increase
FY 10-11	143.33	
FY 11-12	155.88	8.76%
FY 12-13	167.54	7.51%
Actual WPI increase for FY 2012-13 over FY 2011-12		**7.51%**

The number of employees and employee expenses as submitted by the petitioner and approved is given below.

Table 72 : Number of employees approved by the Commission for FY 2013-14

Sr. No.	Particulars	Petitioner Submission FY 2012-13	Commission's estimates FY 2012-13	Petitioner Submission FY 2013-14	Approved FY 2013-14
1	Number of employees as on 1st April	415	415	415	415
2	Employees on deputation/ foreign service as on 1st April	-	-	-	-
3	**Total number of employees (1+2)**	**415**	**415**	**415**	**415**
4	Number of employees retired/retiring during the year	-	**-**	-	**-**
5	Number of employees added	-	-	-	-
6	**Number of employees at the end of the year (3-4+5)**	**415**	**415**	**415**	**415**

Table 73 : Employee expenses approved by the Commission for FY 2013-14 (in Rs. Crores)

Sr. No.	Particulars	Commission's estimates FY 2011-12	Approved in Tariff order FY 2012-13	Revised estimates FY 2012-13	Approved FY 2012-13	Petitioner Submission FY 2013-14	Approved FY 2013-14
A	**Salaries& Allowances**						

1	Basic Pay	4.04	4.39	5.18	4.40	5.65	4.73
2	Dearness Pay	-	-			-	-
3	Dearness Allowance	2.12	2.31	2.73	2.31	2.97	2.48
4	House Rent Allowance	-	-				-
5	Fixed medical allowance	-	-				-
6	Medical reimbursement charges	0.15	0.16	0.19	0.16	0.21	0.18
7	Over time payment	-	-				-
8	Other allowances (detailed list to be attached)	-	-				-
a.	Washing allowance	-	-				-
b.	Transport allowance	0.35	0.39	0.44	0.38	0.48	0.41
c	L.T.C.	-	-				-
d.	Children Education All.	-	-				-
e.	Family Planning Allow.	-	-				-
f.	Other allowance	1.80	1.96	2.31	1.96	2.52	2.10
9	Generation incentive	-	-				-
10	Bonus	0.09	0.10	0.11	0.10	0.12	0.11
11	**Total**	**8.55**	**9.30**	**10.97**	**9.30**	**11.95**	10.00
	Terminal Benefits						
12	Leave encashment	-	-				-
13	Gratuity	-	-				-
14	Commutation of Pension	-	-				-
15	Workmen compensation	-	-				-
16	Ex-gratia	-	-				-
17	**Total**	**-**	**-**				-
	Pension Payments		-				
18	Basic Pension	-	-				-
19	Dearness Pension	-	-				-
20	Dearness Allowance	-	-				-
21	Any other expenses	-	-				-
22	**Total**	**-**	**-**				-
23	**Total (11+17+22)**	**8.55**	**9.30**	**10.97**	**9.30**	**11.95**	**10.00**
24	Amount capitalized	-	-	-	-	-	-
25	Net amount	**8.55**	**9.30**	**10.97**	**9.30**	**11.95**	**10.00**
26	Add prior period expenses	-	-	-	-	-	-
27	**Grand total**	**8.55**	**9.30**	**10.97**	**9.30**	**11.95**	**10.00**

The Commission considers the employee cost of Rs 10.00 Crores as reasonable and approves the same for FY 2013-14.

6.7.2 Administration and General Expenses

Petitioner's submission

The petitioner has submitted that the A&G expenses comprise of the following broad sub-heads of expenditure, viz.

- Telephone, postage & telegrams charges;
- Travel and conveyance expenses;
- Office expenses; and
- Consultancy and regulatory fees

The Petitioner has submitted that the revised estimates of A&G expenses for FY 2012-13 as Rs 1.24 Crores. LED has projected the A&G expense for FY 2013-14 at Rs. 1.35 Crores. The escalation of A&G expenses is on account of inflation and regulatory and consultancy fees payable during FY 2013-14.

The LED has requested the Commission to approve the net A&G expenses projected for FY 2013-14.

Commission's Analysis

The Commission has considered the administration & general expenses of Rs 0.90 Crores for FY 2012-13 as a base, as approved in the tariff order for the FY 2012-13, for estimating the administration & general expenses for FY 2013-14 after applying escalation equivalent to the increase in the WPI for FY 2012-13 over FY 2011-12 which works out to 7.51%. The latest WPI index till March 2013 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry for estimation of the increase in the average of WPI index from FY 2011-12 to FY 2012-13.

The detailed breakup of the A&G expenses as per the regulatory formats has not been provided by the Petitioner. **The Commission directs the Petitioner to maintain segregation of the O&M expenses under different accounting heads and maintain the information as desired as per the regulatory formats and submit the same along with the next ARR/tariff filing.**

Table 74 : A&G expenses approved by the Commission for FY 2013-14 (in Rs. Crores)

Sr. No.	Particulars	Commission's estimates FY 2011-12	Approved in Tariff order FY 2012-13	Revised estimates FY 2012-13	Approved FY 2012-13	Petitioner Submission FY 2013-14	Approved FY 2013-14

1	**A&G Expenses**	**0.83**	**0.90**	**1.24**	**0.90**	**1.35**	**0.97**

Commission considers the Administration & General expense of Rs. 0.97 Crores as reasonable and approves the same for FY 2013-14.

6.7.3 Repair and Maintenance Expenses

Petitioner's submission

The petitioner has submitted that the Repairs and Maintenance expense comprise of expenses with regard to maintenance and upkeep of the generation, transmission and distribution system. Adequate R&M activities help in reduction of transmission and distribution losses and reduce the occurrence of breakdowns of the DG sets.

The revise estimates of R&M expenses for FY 2012-13 for LED were Rs. 3.22 Crores. The R&M expense for FY 2013-14 is computed at 2.5%[2] of the gross fixed assets of FY 2013-14, which is calculated at Rs. 3.19 Crores.

The petitioner has therefore requested the Commission to approve R&M expenses of Rs. 3.19 Crores for FY 2013-14 as the same is necessary for proper maintenance and strengthening the generation, transmission and distribution system and improve the quality of supply in the region to ensure consumer satisfaction.

Commission's Analysis

The Commission is of the view that adequate R&M expenses are necessary for maintenance of infrastructure and for ensuring proper Standard of Performance of the integrated utility.

Commission has considered the repair & maintenance expenses of Rs 3.14 Crores for FY 2012-13, as approved in the tariff order for the FY 2012-13, as a base for estimating the repair & maintenance expenses for FY 2013-14 after applying escalation equivalent to the increase in the WPI for FY 2012-13 over FY 2011-12 which works out to 7.51%. The latest WPI index till March 2013 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry for estimation of the increase in the average of WPI index from FY 2011-12 to FY 2012-13.

The detailed breakup of the R&M expenses as per the regulatory formats has not been provided by the Petitioner. **The Commission directs the Petitioner to maintain segregation of the O&M expenses under different accounting heads and maintain the information as**

[2] As per the CERC norms

desired as per the regulatory formats and submit the same alongwith the next ARR/tariff filing.

Table 75 : R&M expenses approved by the Commission for FY 2013-14 (in Rs. Crores)

Sr. No.	Particulars	Commission's estimates FY 2011-12	Approved in Tariff order FY 2012-13	Revised estimates FY 2012-13	Approved FY 2012-13	Petitioner Submission FY 2013-14	Approved FY 2013-14
1	**R&M Expenses**	**2.89**	**3.14**	**3.22**	**3.14**	**3.19**	**3.38**

The Commission considers the repair & maintenance expense of Rs. 3.38 Crores as reasonable and approves the same for FY 2013-14.

6.7.4 Summary of O&M Expenses

The overall summary of Operation & Maintenance expenditure as estimated by the petitioner vis-à-vis approved by the Commission for FY 2013-14 is given below:

Table 76 : Summary of O&M expenses approved by the Commission for FY 2013-14 (in Rs. Crores)

Sr. No.	Particulars	Commission's estimates FY 2011-12	Approved in Tariff order FY 2012-13	Revised estimates FY 2012-13	Approved FY 2012-13	Petitioner Submission FY 2013-14	Approved FY 2013-14
1	Employee Expenses	8.55	9.30	10.97	9.30	11.95	10.00
2	A&G Expenses	0.83	0.90	1.24	0.90	1.35	0.97
3	R&M Expenses	2.89	3.14	3.22	3.14	3.19	3.38
4	**Total O&M Expenses**	**12.27**	**13.34**	**15.43**	**13.35**	**16.49**	**14.35**

6.8 Capital Expenditure and Capitalization

Petitioner's Submission

The petitioner has submitted that the present transmission and distribution infrastructure does not have adequate standby source arrangement for restoring the power supply in case of major breakdowns. Further, considering the increase in demand from the consumers, LED would be required to undertake significant capital expenditure for system augmentation and strengthening. System augmentation would not only help LED in handling increased load but would also ensure better quality of supply and network reliability to the consumers. The capital expenditure would help in further reduction of T&D losses.

Every year the LED drafts an Annual Plan for the capital investment for new schemes and continuing schemes which it plans to incur in the ensuing year. For FY 2013-14, the LED has proposed a draft Annual Plan for various schemes to be carried out during the year as submitted by the Petitioner.

The capitalization of new schemes has been considered at 40% of the planned capital expenditure in the same year while the balance 60% has been capitalized in subsequent year. The addition in GFA for FY 2013-14 has been taken as Rs 14.15 Crores.

The capital expenditure and capitalization for FY 2012-13 and FY 2013-14 as submitted by the Petitioner is as in the table below:

Table 77 : Capital Expenditure and Capitalization submitted by the Petitioner for FY 2012-13 and FY 2013-14 (in Rs. Crores)

Particulars	Revised Estimates FY 2012-13	Projected FY 2013-14
Capital Expenditure	13.00	14.15
Asset Capitalization	19.26	15.96
Capital Work in Progress	17.17	15.36

Commission's analysis

Commission observes that the capital expenditure and the capitalization submitted by the petitioner for FY 2013-14 is required to maintain reliable supply for the consumers of UT of Lakshadweep.

Commission has approved the capitalization for FY 2012-13 based on the tariff order issued on 31st October 2012, which has been covered while approving the revised ARR of FY 2012-13. On the similar line Commission approves the capitalization of Rs. 15.96 Crores for FY 2013-14. Further, the Petitioner is directed to submit a detailed statement of the capital expenditure incurred quarterly, the asset capitalized and added in the gross fixed assets upto 31.03.2014 on different dates during the year for review and true-up (Asset book).

This expenditure is being permitted as a special case to ensure the creation of infrastructure for adherence to Standard of Performance and Supply Code Regulations.

6.9 GFA and Depreciation

Petitioner's Submission

The petitioner has submitted that the value of opening gross fixed assets (GFA) for 2012-13 was Rs 92.21 Crores and addition of Rs 19.25 Crores took place during FY 2011-12. Thereafter, planned additions during FY 2013-14 have been added and accordingly GFA has been computed for FY 2013-14. The closing Work-in-Progress by the end of FY 2012-13 was Rs. 17.17 Crores. For FY 2013-14, LED has proposed to incur Rs. 14.15 Crores capital expenditure and Rs. 15.96 Crores estimated to be capitalized.

A summary of the opening and closing GFA and capitalization has been summarized in the table below.

Table 78 : Opening and closing GFA submitted by the Petitioner (in Rs. Crores)

Particulars	Opening GFA	Additions during the Year	Closing GFA
FY 2012-13 (Revised Estimates)	92.21	19.25	111.46
FY 2013-14 (Projected)	111.46	15.96	127.42

For purposes of depreciation, LED has applied the following depreciation rates as specified by CERC in the Tariff Regulations for FY 2009-14.

Table 79 : Depreciation Rate considered by the Petitioner (in %age)

Asset Category	Depreciation Rate %
Plant & Machinery	5.28%
Buildings	3.34%
Vehicles	9.50%
Furniture & Fixtures	6.33%
Computers & Others	6.33%
Land	0.00%

Depreciation for the FY 2013-14 has been determined by applying aforesaid category-wise assets depreciation rates on the opening balance of Gross Fixed assets and average of the addition during the year projected for FY 2013-14. The table below summarizes the depreciation considered by LED.

Table 80 : Depreciation submitted by the Petitioner (in Rs. Crores)

Particulars	FY 2013-14
Rs. Crore	Projected

Particulars	FY 2013-14
Rs. Crore	Projected
Opening GFA	111.46
Additions	15.96
Closing GFA	**127.42**
Average GFA	119.44
Depreciation Amount	**5.68**
Average Depreciation Rate	4.46%

Commission's analysis

The Petitioner has not produced any fixed asset register to support the claim of the Gross Fixed Assets. The Commission is of the view that fixed asset register records the asset wise details and various types of information can be extracted from the same including the aging schedule of the asset, present value and capital works in progress etc. As such in the absence of updated fixed asset registers, the opening value of fixed assets is on an assumption basis. As a standard practice, and as per the Regulation 26 of the JERC (Terms and conditions for determination of Tariff), Regulation 2009, depreciation shall be computed on the average value of assets at the end of the year which is reasonable and appropriate method.

In absence of updated fixed asset registers, the Commission is unable to allow the depreciation as proposed by the petitioner based on the assumed value of assets. **The Commission therefore directs the petitioner to maintain the fixed asset register to arrive at the actual historical value of assets and file the same along with the next ARR and tariff petition.** In the absence of updated fixed asset registers to arrive at the historical value of assets, the Commission has considered the addition in GFA as approved in the previous section for FY 2011-12 and FY 2012-13 as the opening value of assets for FY 2013-14. As discussed in earlier Para, Commission has considered addition in GFA of Rs. 25.50 Crores and Rs. 13.00 Crores during FY 2011-12 and FY 2012-13 respectively.

Regulation 26 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The effective rate of depreciation for assets linked to Plant & Machinery & Vehicles is 5.28%, Buildings is 3.34% and Furniture is 6.33% vide Appendix-III (Depreciation schedule of CERC Terms and Conditions of Tariff Regulations, 2009). The depreciation for FY 2013-14 has been worked out as Rs. 2.66 Crores.

As discussed in earlier para, Rs. 15.96 Crores has been considered as addition in GFA for FY 2013-14. In view of above, Commission considers the depreciation of Rs. 2.66 Crores as reasonable considering Rs. 38.50 Crores as the opening value of assets at the beginning of the year as being the addition in GFA approved for FY 2013-14.

The depreciation approved by the Commission is as below.

Table 81 : GFA and Depreciation approved by the Commission for FY 2013-14 (in Rs. Crores)

S. No.	Particulars	Opening GFA	Additions	Closing GFA	Average Assets	Rate of depreciation	Depreciation
(a	b	c	d	e	f	g	h
1	Plant & Machinery	34.42	14.27	48.69	41.55	5.28%	2.19
2	Buildings	-	-	-	-	3.34%	-
3	Vehicles	4.08	1.69	5.77	4.93	**9.50%**	0.47
4	Furniture and Fixtures	-	-	-	-	6.33%	-
5	Computers & others	-	-	-	-	6.33%	-
6	Land	-	-	-	-	0.00%	-
7	**Total**	**38.50**	**15.96**	**54.46**	**46.48**		**2.66**

The Commission therefore considers the depreciation of Rs. 2.66 Crores as reasonable and approves the same for FY 2013-14.

6.10 Interest and Finance Charges

6.10.1 Interest on Loan

Petitioner's Submission

The petitioner has submitted that the entire capital employed till date has been funded by the Central Government through Budgetary support without any external borrowings. LED is now migrating to regulatory regime under the aegis of the Commission and would begin to function as a commercial utility under the Electricity Act, 2003 and would therefore be utilizing the debt facilities from FY 2012-13 onwards.

Assets capitalized during FY 2012-13 and FY 2013-14 have been considered based on normative debt-equity ratio of 70:30 as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. Interest rate of 14.75% has been considered for computation of interest cost for long-term loans which is similar to the prevailing SBI Prime Lending Rate. The petitioner has claimed an amount of Rs 4.96 Crores as interest cost on long term loans and requests the Commission to approve the same for FY 2013-14.

Commission's analysis

As per the JERC tariff regulations 2009:

"25. Interest and Finance Charges on Loan

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

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

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

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

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

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

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

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

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

Further, the Commission would like to place reliance on Section 23 of the JERC Tariff regulations which is reproduced below:

"23. Debt-Equity Ratio

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

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

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

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

The Petitioner has not borrowed any loans in the past upto FY 2011-12 and has estimated to utilize the debt facilities from FY 2012-13 onwards.

The basic requirement for consideration of interest on loans is adequate information of the value of fixed assets of the utility in service (net fixed assets) at the beginning of such year and funding pattern as well as terms & conditions of funding of capital assets.

In the instant case, the licensee has not provided the actual value of fixed assets, hence the servicing of assets in the form of interest on loan and return on assets is indeterminate at this stage on the opening GFA submitted by the Petitioner, hence has not been considered on the assumed value of assets. The same shall be considered at true-up stage if full audited details are made available.

However, the Commission has considered an opening normative loan of Rs. 25.17 Crores for FY 2013-14 and added normative loan for FY 2013-14 of Rs. 11.17 Crores being 70% of addition in GFA considered for FY 2013-14 (70% of Rs 15.96 Crores considered to be added in the GFA for FY 2013-14) to calculate the interest on normative loan amount. Commission has considered the SBI PLR rate which is now substituted as SBI advance rate, at 14.45%[3] for FY 2013-14. The Commission approves the total interest charges for the year at Rs. 4.25 Crores as given below:

Table 82 : Interest on Loans approved by the Commission for FY 2013-14 (in Rs. Crores)

S. No.	Particulars	Petitioner	Approved

[3] SBI advance rate notified on 14.02.2011; Thereafter four revisions in the SBI advance rate was notified in FY 2011-12 and are as under: 25.04.2011-13.25%; 12.05.2011-14% ; 11.07.2011-14.25%; 13.08.2011 – 14.75%.; 27.09.2012-14.50% and 04.02.2013-14.45%

		Submission (FY 2013-14)	(FY 2013-14)
1	Opening Normative Loan/WIP	29.54	25.17
2	Add: Normative Loan during the year/GFA during the year	11.17	11.17
3	Less: Normative Repayment	2.95	2.70
4	**Closing Normative Loan/GFA**	**37.76**	**33.64**
5	Average Normative Loan	33.65	29.40
6	Rate of Interest (@SBI SBAR rate)	14.75%	14.45%
7	**Interest on Normative Loan**	**4.96**	**4.25**

The Commission considers the interest on normative loan of Rs. 4.25 Crores as reasonable and approves the same for FY 2013-14.

6.10.2 Interest on Working Capital

Petitioner's Submission

The petitioner has submitted the Interest on Working Capital for FY 2013-14 computed on normative basis. As per the JERC Tariff Regulations, for the purpose of computation of normative working capital and interest on working capital, the components of working capital are as follows:

- Sum of two month requirement for meeting the fuel cost
- One month employee costs
- One month Administration & General expenses
- One month R&M Cost

The rate of interest on working capital has been considered as per SBI Prime lending rate as on 1st April of the respective year. Interest on normative working capital for FY 2013-14 has been claimed at Rs. 2.45 Crores.

Commission's analysis

As per the regulation 29 of JERC tariff regulations

"

29. WORKING CAPITAL AND INTEREST RATE ON WORKING CAPITAL

5) For generation and transmission business, the working capital shall be as per CERC norms.

6) Subject to prudence check, the working capital for distribution business shall be the sum of one month requirement for meeting:

a. Power purchase cost.

b. Employees cost.

c. Administration & general expenses and

d. Repair & Maintenance expenses.

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

a. Power purchase cost

b. Employees cost

c. Administration & general expenses

d. Repair & Maintenance expenses.

e. Sum of two month requirement for meeting Fuel cost.

8) The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures."

The Commission has considered the approved fuel cost expenses of FY 2013-14 and approved O&M expenses to work out the normative working capital required for FY 2013-14.

In accordance with Section 47(4) of the Electricity Act 2003, the distribution licensee is required to pay interest on security deposit collected from the consumers. If this security deposit is invested in the form of interest earning fixed deposits or other similar instruments, the interest earned from such investment could be utilized to pay the interest to the consumers under section 47(4) of the Electricity Act 2003, alternatively, the funds could be retained by the Licensee to meet its working capital needs. It is noted that the petitioner has not invested any of the security deposit held and the said amount is available to the petitioner. Accordingly, the Commission has allowed the interest payable to the consumer as an expense in this order. The Commission has considered the security deposit available with the Petitioner as a source to meet working capital requirements and has deducted this amount from the working capital requirement considered for interest on working capital for FY 2013-14. Further, Commission clarifies that SBI PLR rate has now been substituted as SBI Advance Rate at 14.45%[4] for FY 2013-14. Commission has computed the requirement of working capital based on the provisions of the regulations. Working capital has been reduced by the amount of Consumer Security Deposit/Misc. deposit available with the petitioner considering its usage for meeting part of working capital requirements.

Table 83 : Interest on Working Capital approved by the Commission for FY 2013-14 (in Rs. Crores)

S. No.	Particulars	Petitioner Submission (FY 2013-14)	Approved (FY 2013-14)
1	Fuel Cost for 2 months	15.27	13.91
2	Power Purchase Cost for one month	-	-
3	Employee Cost for one month	1.00	0.83
4	A&G Expenses for one month	0.11	0.08
5	R&M Expenses for one month	0.27	0.28
6	**Total Working Capital for one month**	**16.64**	**15.11**
7	**Net Working Capital for one month after deducting security deposit**	**16.64**	**15.05**
8	SBI PLR Rate	14.75%	14.45%
9	**Interest on Working Capital**	**2.45**	**2.17**

The Commission considers Rs. 2.17 Crores as Interest on Working Capital as reasonable and approves the same for ARR for FY 2013-14.

6.10.3 Interest on Security Deposit

Petitioner's Submission

The petitioner has not claimed any interest on security deposit as part of the Aggregate Revenue Requirement (ARR) for FY 2013-14.

Commission's analysis

The Commission has assessed the need and availability of funds to the licensee. Consumer's security deposit is the quantum of consumer's funds available to the licensee and hence deducted from the funds available to meet working capital requirements and the interest on working capital is allowed on the balance amount. The cost of available security deposit of the consumer is allowed as an interest on security deposit to be paid to the consumer as per section

[4] SBI advance rate notified on 14.02.2011; Thereafter four revisions in the SBI advance rate was notified in FY 2011-12 and are as under: 25.04.2011-13.25%; 12.05.2011-14% ; 11.07.2011-14.25%; 13.08.2011 – 14.75%.; 27.09.2012-14.50% and 04.02.2013-14.45%

47(4) and regulation 25 of the JERC Tariff Regulations 2009 and the same is allowed as expenditure in the ARR.

As per Clause 47(4) of the Electricity Act, 2003 and as specified in regulation 25 of JERC Tariff Regulations 2009, *the distribution licenses shall pay interest on security deposit collected from the consumers, equivalent to the bank rate or more as may be specified by the Commission*. On account of provisions mentioned in the Act and regulation, **Commission directs the petitioner to pay the interest on consumer security deposit for FY 2013-14 (at the Bank Rate i.e. 8.75% per annum) to the consumers on their security deposit irrespective of petitioner's constraints** and should explicitly mention the same as the 'Interest on security deposit for FY 2013-14' on the bills of the consumers. **Any non-compliance in this regard shall be viewed seriously by the Commission.**

An amount of Rs 7.29 lakhs security deposit has been submitted by the petitioner in its additional data submission with no information on addition in the FY 2013-14, therefore the closing security deposit has been considered at Rs 8.24 Lac on 31st March 2014, based on the addition in the security deposit for the FY 2012-13 considering the opening amount to be Rs 6.34 Lac.

Table 84 : Interest on Security Deposit approved by the Commission for FY 2013-14 (in Rs. Crores)

S. No.	Particulars	Petitioner Submission (FY 2013-14)	Approved (FY 2013-14)
1	Opening Security Deposit/Misc. Deposit	Not Claimed	0.07
2	Add: Deposits during the Year		0.01
3	Less: Deposits refunded		-
4	Closing Security Deposit		0.08
5	Bank Rate		8.75%
6	**Interest on Security Deposit**		**0.01**

The Commission allows Rs 0.01 Crores as the interest on security deposit and considered as expenditure in the ARR for FY 2013-14.

6.11 Return on Capital Base/Equity

Petitioner's Submission

The petitioner has submitted that as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009, LED is entitled for a Return on Equity (RoE). However, the rate of return has not been specified in the Regulations issued by JERC.

The petitioner has submitted that Distribution Business has always been perceived to be a business having a greater inherent risk than the Generation or Transmission Business due to various factors amongst which the direct interface with the retail consumers is the biggest risk. The same has been recognized by many Commissions across the country and they have proposed a higher rate of return on the equity invested in distribution business as compared to generation and transmission business. This has been demonstrated by the various Commissions by offering rate of return @16% for distribution business and accordingly LED has claimed RoE of 16% for FY 2013-14.

Return on equity has been computed based on 30% normative equity for capitalization during FY 2013-14 in line with the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The petitioner has claimed return of equity of Rs 1.31 Crores for FY 2013-14.

Commission's analysis

LED is an integrated utility in its present form as defined in Regulation 2(9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 and is not restructured and corporatized till date. As of now, it is an integrated utility and is entitled to return on capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide provision under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement for consideration of either return on capital base or return on equity for historical assets is information in the form of audited annual accounts and assets & depreciation registers. The Petitioner has not been maintaining the adequate information.

The Commission has considered Rs. 38.50 Crores as the gross block at the beginning of FY 2013-14 and accumulated depreciation of Rs. 3.29 Crores. The Commission has therefore considered the reasonable return of Rs 1.06 Crores at the rate of 3% on net fixed asset of Rs. 35.21 Crores at the beginning of FY 2013-14.

Table 85 : Return on capital base approved by the Commission for FY 2013-14 (in Rs. Crores)

Sr. No.	Particulars	Petitioner Submission (FY 2013-14)	Approved (FY 2013-14)
1	Gross block at beginning of the year	RoE amount of Rs 1.31 Crores has been claimed	38.50
2	Less accumulated depreciation		3.29
3	Net block at beginning of the year		35.21
4	Less accumulated consumer contribution		-
5	**Net fixed assets at beginning of the year**		35.21
6	**Reasonable return @3% of NFA**	**1.31**	**1.06**

Commission considers the Return on Net Fixed Assets of Rs. 1.06 Crores as reasonable and approves the same for FY 2013-14.

6.12 Provision for bad & doubtful debts

Petitioner's Submission

The petitioner has submitted that it has considered the provision for Bad and Doubtful Debts at 1% of the receivables for FY 2012-13 and FY 2013-14. The petitioner has submitted the provision for bad debts at Rs 0.11 Crores and Rs 0.12 Crores respectively for FY 2012-13 and FY 2013-14.

Table 86 : Provision for bad and doubtful debts submitted by the Petitioner for FY 2013-14 (in Rs. Crores)

Provision for Bad & Doubtful Debts	FY 2012-13	FY 2013-14
	Revised Estimates	Projected
Receivables	11.26	12.15
Provision for Bad &Doubtful Debts as % of Receivables	1%	1%
Provision for Bad & Doubtful Debts	**0.11**	**0.12**

Commission's analysis

As specified in the regulation no. 28 of JERC Tariff regulations, read with the format -

"28. Bad and Doubtful Debts

The Commission may, after the generating company/licensee gets the receivables audited, allow a provision for bad debts up to 1% of receivables in the revenue requirement of the generating company/licensee. (Information to be furnished in format 18)"

Format -18

S.No.	*Particulars*	*Amount (Rs. in Crores)*
1.	*2.*	*3.*
1.	*Amount of receivable bad and doubtful debts (audited)*	
2.	*Provision made for debts in ARR*	

In the absence of audited accounts showing the trend of the actual write-off of the bad/doubtful debts for the past year(s), the Commission has considered the provision of 0.5% (against up to 1% in the regulation) of the receivables towards bad and doubtful debts subject to availability (at the time of true up) of audited accounts & auditor's certificate of actual write off of bad & doubtful debts.

Commission has considered the provision of 0.5% of the receivables from the retail sales for FY 2013-14 as bad and doubtful debt at Rs 0.05 Crores as reasonable and approves the same as per the regulations for ARR of FY 2013-14 subject to final adjustment in true-up when audited accounts become available and auditor's certificate of write off of bad and doubtful debts is furnished.

The submission of the petitioner vis-à-vis the approved value for FY 2013-14 is as shown below

Table 87 : Provision for bad and doubtful debts approved by the Commission for FY 2013-14 (in Rs. Crores)

S. No.	Particulars	Petitioner Submission FY 2013-14	Approved FY 2013-14
1	Receivables	12.26	10.86
2	Provision for Bad &Doubtful Debts as % of Receivables	1%	0.5%
3	**Provision for Bad & Doubtful Debts**	**0.12**	**0.05**

6.13 Non-Tariff Income

Petitioner's Submission

The petitioner has estimated Rs. 0.20 Crores for FY 2013-14 based on the revised estimates of FY 2012-13 as the non-tariff income in the form of meter rent, late payment charges & misc. charges from various categories of consumers. The petitioner has submitted that the actual non-tariff income for FY 2011-12 was Rs 0.18 Crores and has considered an increase of 5% over the revised estimates of non-tariff income of FY 2012-13 for projecting the non-tariff income of FY 2013-14

Commission's analysis

The Commission has observed the submission made by the petitioner for FY 2011-12 and **has considered Rs. 0.20 Crores as reasonable and approves the same for FY 2013-14.**

6.14 Revenue at existing tariff for FY 2013-14

Petitioner's Submission

The petitioner has computed the revenue for FY 2013-14 based on the tariff rate notified by the Administration of the UT of Lakshadweep vide Notification dated 31st October, 2012.

Revenue from sale of power for FY 2013-14 is determined based on the energy sales estimated and category wise tariff prevalent in the UT of Lakshadweep.

The Revenue from sale of power at existing tariff has been estimated to be Rs. 12.26 Crores for FY 2013-14, as shown in the table below.

Table 88 : Revenue at existing tariff projected by the petitioner for FY 2013-14 (Rs Crores)

S. No.	Category	FY 2013-14
		Petitioner's estimates
1	Domestic	6.56
2	Commercial	4.45
3	HT Consumer	0.58
4	Industrial	0.14
5	Public (Street Light)	0.46
6	Temporary Connections	0.08
	Total	**12.26**

Commission's analysis

Commission has estimated the revenue on the basis of approved sales and existing tariff for FY 2013-14. Commission has taken the slab wise sales provided by the utility for FY 2012-13 for estimating the same for FY 2013-14. Further, in case of HT Industrial category Commission has calculated the revenue based on the approved sales and connected load.

Table 89 : Revenue at existing tariff approved by the Commission for FY 2013-14

S. No.	Particulars	Sales (MU) FY 2013-14	Average Revenue Realization (Rs/kWh) FY 2013-14	Revenue at existing tariff (Rs Crores) FY 2013-14
1	Domestic	28.71	1.84	5.29
2	Commercial	7.93	5.29	4.19
3	HT Industrial	0.34	10.24	0.35
4	Industrial	0.50	6.95	0.35
5	Public (Street Light)	1.66	4.00	0.67
6	Temporary Connections	0.02	7.00	0.01
	Total	**39.16**	**2.77**	**10.86**

6.15 Aggregate Revenue Requirement and Revenue Surplus/Deficit for FY 2013-14

Petitioner's Submission

The petitioner has submitted Rs. 122.42 Crores as the Aggregate Revenue Requirement for FY 2013-14 in the ARR & tariff petition on the basis of the estimates of the various components of the ARR as discussed above.

Commission's analysis

The Commission has considered and approved the ARR for FY 2013-14 based on the items of expenditure discussed in the preceding sections and the same has been summarized in the table below.

Table 90 : Aggregate Revenue Requirement approved by the Commission for FY 2013-14 (Rs. Crores)

S. No.	Particulars	Petitioner Submission FY 2013-14	Approved FY 2013-14
1	Cost of fuel	91.60	83.48
2	Cost of power purchase for full year		-
3	Employee costs	11.95	10.00
4	Repair & Maintenance Expenses	1.35	0.97
5	Administration and general expenses	3.19	3.38
6	Depreciation	5.68	2.66
7	Interest and finance charges	4.96	4.25
8	Interest on working capital	2.45	2.17
9	Interest on Security Deposit	-	0.01
10	Return on NFA /Equity	1.31	1.06
11	Provision for Bad Debt	0.12	0.05
12	Advance Against Depreciation	-	-
13	**Total Revenue Requirement**	**122.62**	**108.03**
14	Less: Non-Tariff Income	0.20	0.20
15	**Net Revenue Requirement (13-14)**	**122.42**	**107.83**

The estimated revenue deficit at existing tariff as approved for FY 2013-14 is given below.

Table 91 : Revenue Gap approved by the Commission for FY 2013-14 (Rs. Crores)

S. No.	Particulars	Petitioner Submission FY 2013-14	Approved FY 2013-14
1	Net Revenue Requirement	**122.42**	**107.83**
2	Less: Revenue from Retail Sales at Existing Tariff	12.26	10.86
3	**Net Gap at existing tariff for FY 2013-14 (1-2)**	**110.16**	**96.97**
4	Gap of the previous year	-	0
5	**Total Gap at existing tariff of FY 2013-14 (3+4)**	**110.16**	**96.97**

As seen from the table above, there is a revenue gap of Rs 96.97 Crores at the end of FY 2013-14 at existing tariff which also includes revenue gap for the FY 2012-13, as estimated by the Commission against the gap of Rs. 110.16 Crores estimated by the petitioner at the existing tariff for FY 2013-14. The major reason for the reduction in gap for FY 2013-14 as assessed by the Commission is reduction in expenses claimed by the petitioner. It is expected that in future ARRs and True-ups, when the Petitioner submits the actual figures of revenue for FY 2013-14, fixed asset registers, separate accounts of the cost of the generation from diesel generating sets; the gap assessed (as of now) in the revenue requirement as above shall be appropriately considered.

7. DIRECTIVES

7.1 Background

While examining the information and data submitted by the Petitioner in the proposed ARR and Tariff Petition for FY 2013-14, it has been observed that the distribution licensee has not been maintaining the required information and has used assumptions for computation of several components of ARR.

In spite of directions provided in the previous tariff order the utility has not been able to provide any substantial information for supporting its calculations. Data pertaining to fuel consumption provided by the utility is not clear which has no supporting analysis provided. Therefore, Commission will like to direct the utility to submit information as listed below before 30th July 2013:

- Fuel receipt received from IOC for past two years along with the analysis of fuel cost
- Dispatch register of fuel, island wise, for past two years

Apart from the above information required, Commission has also provided separate directives based on submissions made by the petitioner:

1. Filing of Review and True-up Petition for FY 2012-13

As per the regulation no. 8 of JERC tariff regulations 2009, the petitioner is directed to submit the Review of FY 2012-13 along with the ARR and Tariff Petition for FY 2013-14 in line with JERC regulations as modified from time to time. The Commission shall consider variations between approvals and revised estimates/pre-actual 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 for FY 2012-13 during Review.

After audited accounts of FY 2012-13 are made available; the Commission shall undertake similar exercise as mentioned 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', for which true-up petition should be submitted along with the audited accounts for consideration of the Commission.

Petitioners Response

In the present petition the LED is filing the review for FY 2012-13 and the ARR and Tariff Petition for FY 2013-14. Further, the LED would file the True up for FY 2012-13 along with the Tariff Petition for FY 2014-15 once the annual accounts for FY 2012-13 are finalized.

Commission's Comments

The Commission further directs the petitioner to submit audited figures for FY 2011-12 for the purpose of fixing base year data along with the true-up petition for the FY 2012-13 in its next submission.

2. **Fuel and Power Purchase Cost Adjustment Formula (FPPCA)**

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 the help of the budgetary support of the Government of India.

Keeping the above in view, the Commission is of the view that any variation in power purchase cost (including variation in cost of their own generation) should, for the time being, be borne by the utility. As being done historically and be gradually brought in line with the spirit of the Tariff policy under the Electricity Act, 2003. Further, the utility is directed to propose a scheme for sharing of the increase in cost of own generation/ power purchase cost with the consumers for the Commission's consideration and approval.

Petitioners Response

The LED would like to submit to the Hon'ble Commission that any variation in the power purchase cost (including variation in cost of own generation) will be borne by the LED for FY 2013-14. It is therefore requested by LED that the Hon'ble Commission may approve the same.

Commission's Comments

3. **Annual Statement of Accounts**

The Commission has observed that the department of Lakshadweep is not maintaining separate accounts on commercially accepted principles for the electricity business. The Petitioner is directed to segregate the accounts pertaining to electricity business as per the Electricity Act 2003 and get them duly audited as required under JERC (Terms and Conditions for Determination of Tariff) Regulations 2009.

Petitioners Response

The LED would like to submit to the Hon'ble Commission that it will engage a Chartered Accountant firm to prepare the Annual Statement of Accounts for FY 2012-13 and will submit the same to the Hon'ble Commission along with the next ARR and Tariff Petition.

Commission's Comments

Commission directs petitioner to submit the audited accounts for FY 2011-12 and FY 2012-13 in the next submission.

4. **Preparation of Asset and Depreciation Register**

The Electricity Department, Lakshadweep is directed to arrange for the preparation of asset and depreciation registers function wise, and asset classification wise. Till such time the above registers are prepared and got audited, the Commission cannot consider the gross fixed assets and accumulated depreciation over the years to arrive at the capital base and allow the return thereon as per JERC (Terms and Conditions of Determination of Tariff) Regulations, 2009.

The Petitioner is directed to submit quarterly progress report and the completion date of the preparation of the asset and depreciation registers, function wise and asset classification wise after getting them audited.

Petitioners Response

The LED would like to submit to the Hon'ble Commission that it will engage a Chartered Accountant firm to prepare the asset and depreciation registers function wise, and asset classification wise and will submit the same to the Hon'ble Commission along with the next ARR and Tariff Petition.

Commission's Comments

Commission directs petitioner to submit the audited asset register for FY 2011-12 and FY 2012-13 in the next submission.

5. **Optimization of Fuel Cost**

The UT of Lakshadweep is an archipelago consisting of 11 inhabited islands and located far from the mainland of India; it is entirely dependent on its own generation for supply of power. The power in the UT of Lakshadweep is generated mainly from its Diesel Generating (DG) sets besides some production from solar plants.

The diesel is generally received in bulk in big tankers, thereafter it is transported to various islands in drums. Obviously, there are losses in transportation, storage and handling of which no assessment is available. It is understood that presently there is no system through which actual fuel consumption per generating station can be ascertained for generation of one unit of energy. In fact, there should be proper accounting of generating station wise fuel receipts & issues. The ED LED is directed to evolve a system of accounting of fuel received at port, dispatched island wise, actual quantity received on the islands and actual quantity consumed island wise for generating electricity; so that actual fuel consumption per unit generation could be worked out. Accordingly, the petitioner is directed to furnish such details along with the next filing.

Petitioners Response

The actual island wise fuel consumption for FY 2011-12 is being submitted as Annexure I along with this petition.

Commission's Comments

In the data submitted by the petitioner, some of the data was incomplete. Commission directs the petitioner to submit the complete actual status before 1st July 2013.

6. Renewable Purchase Obligation

The Petitioner is directed to encourage and incentivize generation from renewable sources to meet its overall and individual RPO targets. The petitioner has to purchase 3% of total consumption of all the consumers in its area as power purchase from renewable sources for FY 2012-13 including 0.40% from Solar and 2.60% from Non-Solar as per the JERC (Procurement of Renewable Energy) Regulations 2010.

Petitioners Response

The LED would like to submit to the Hon'ble Commission that all of the eleven islands have SPV plants and out of that nine will be functional in FY 2013-14. The total solar power generation projected for FY 2013-14 1.57 MU which is 3.03% of the total generation projected for FY 2013-14. Further the LED is also exploring the possibility of generating power from biomass and has already engaged a consultant for preparation of the DPR for the same.

Commission's Comments

Commission directs the petitioner to provide the status of the DPR prepared for biomass generation activity and the time lines for such project implementation. Also, for the time being what other options is the utility considering for fulfilling the non-solar RPO obligation.

7. **Segregation of O&M expenses under different accounting heads**

The Commission directs the Petitioner to maintain segregation of the O&M expenses under different accounting heads and maintain the information as desired as per the regulatory formats and submit the same alongwith the next ARR/tariff filing.

Petitioners Response

The LED would like to submit to the Hon'ble Commission that it has started the process to maintain segregation of the O&M expenses under different accounting heads and will be submitting the same in the desired regulatory formats along with the next ARR and Tariff Petition.

Commission's Comments

Commission directs the petitioner to submit the actual expenses for FY 2011-12 and FY 2012-13 by 1st July 2013.

8. **Bill Payment**

The Petitioner is directed to explore options for multiple payment points/gateways for online collection and status of existing system of bill payment should be submitted within three months.

Petitioners Response

The LED would like to submit to the Hon'ble Commission that it has already taken action to set up multiple payment points/gateways through Common Service Centres across all the islands. Further the software is being modified to start the online collection system in Lakshadweep.

Commission's Comments

Commission directs the petitioner to submit the details of online collection of the bills from the time of implementation in the next petition.

9. **Collection of Arrears**

The Petitioner is directed to analyze the outstanding dues; bad debts etc. & construct a data base of such consumers including particulars like amount, aging schedule and category. The Petitioner should identify those consumers having an outstanding of Rs. 50 thousand and above, for more than six months from the due date.

Petitioners Response

The LED would like to submit that a system to analyze the outstanding dues, bad debts etc. is already in place and further LED would also like to appraise the Hon'ble Commission that none of the consumers is having an outstanding of Rs. 50 thousand and above, for more than six months from the due date.

Commission's Comments

Petitioner is directed to submit the age wise details of arrears in the region before 1st July 2013.

10. Capital expenditure

The Petitioner is directed to submit the detailed statement of capital expenditure incurred and capitalized for every quarter, within 15 days of the subsequent quarter.

Petitioners Response

The LED will start submitting the quarterly statement of capital expenditure incurred and capitalization for every quarter to the Hon'ble Commission shortly.

Commission's Comments

Petitioner is required to submit the status of capital expenditure on quarterly basis before 1st July 2013.

11. Metering of consumer installations / replacement of Non-Functional or defective Meters

Under Section 55 (1) of Electricity Act 2003, no licensee shall supply electricity after expiry of 2 years from the appointed date except through installation of correct meter in accordance with the regulation to be made in this behalf by the authority. Accordingly, metering is required to be done in line with CEA (installation and operation of meters) Regulations 2006 for all consumers. ED LED is directed to submit an action plan regarding installation/replacement of meters by 30th December 2012.

Petitioners Response

The LED would like to submit to the Hon'ble Commission that there is 100% metering of all the consumers of electricity in Lakshadweep.

Commission's Comments

The Petitioner is directed to submit category wise details of metering before 1zt July 2013

12. Strengthening of the Consumer Grievance Redressal System

The Commission directs the petitioner to find a way to dispose all pending applications as per the provisions under section 43 of the Electricity Act, and relevant JERC Regulations, other than the cases pending due to lack of documentary evidence of legal heirs after the death of original owner of the premises.

The Commission also directs the petitioner to follow the Standard of Performance notified by the Commission strictly and the status report on all new/shifting connection applications pending by more than 45 days, with the reason for their pendency be submitted to the Commission by 30th December 2012.

The petitioner is directed to promote and give publicity to the functioning of the Consumer Grievance Redressal Forum (CGRF), so that consumers can approach CGRF for redressal of theie grievances.

The Commission directs the petitioner to publicize the benefit to consumers, highlighting the steps and necessary documents required for redressal of complaints and to initiate action on the following:

- Complaints against fast meters/defective meters
- Application for shifting of electricity connection
- Application for new Connection
- Complaints regarding no-supply.
- Any other complaints

Commission further directs to prepare monthly/ quarterly schedule for visit to different islands by officers i.e. S.D.O., Executive Engineers and Superintendent Engineer LED to bring in greater efficiency in the working of LED and also to hear and settle the public grievances and complaints of the consumers at the spot so that no consumer is forced to visit the main office of the LED.

Petitioners Response

The directive of the Hon’ble Commission in this regard is being complied. The officers of the LED visit different Islands to hear and settle the public grievances and complaints regularly.

Commission's Comments

Petitioner is required to submit the list of complaint received and action taken in the FY 2011-12 and FY 2012-13 before 1st July 2013.

13. Exploration of alternative sources of electrical energy

The Commission has observed that there is huge dependency on diesel for generating electricity, which not only increases the average cost of supply but also puts a huge burden on the financial health of the utility. The Commission has noticed that the Petitioner has taken some initiatives in this regard but firm execution is required so as to speed up the process of the construction and achievement of commercial operation date of renewable generation plants. It is inevitable for the distribution licensee to explore alternative sources of power, and at the same time consumer's contribution in this regard is required in terms of installation of roof top solar, wind or hybrid equipments etc. to reduce the load on the existing power stations of the utility.

The petitioner is directed to submit a quarterly progress report for the initiatives taken in this regard and submit the first report by 30th January 2013.

Petitioners Response

The LED would like to submit to the Hon'ble Commission that it is exploring the possibility of generating power from biomass and has already engaged a consultant for preparation of the DPR and global tender for all possible renewable energy generation. The LED will submit the progress report of the same to the Hon'ble Commission shortly.

Commission's Comments

Serious efforts are required by the Petitioner in this regard and a status report on the other alternative means be submitted to Commission by 31st September 2013.

14. Energy Audit

The Petitioner is directed to get an energy audit conducted to assess actual technical and commercial losses. The energy audit of the generating stations is required for an actual assessment of losses. Based on the studies, ED LED shall propose an action plan for the reduction of losses in subsequent years along with the investment required for reduction of such losses and augmentation of transmission and distribution system. Effective technical and administrative measures shall be taken to reduce the commercial losses. The action plan for energy audit and loss reduction measures shall be furnished to the Commission by 30th December 2012.

Petitioners Response

The LED is taking necessary steps to appoint an agency for the energy audit. Further there is also a proposal for installation of AMR meters across all the islands for the reduction of T&D losses. The action plan for the same will be submitted to the Hon'ble Commission shortly.

Commission's Comments

Petitioner is required to submit the action plan along with the details of agency appointed for the purpose of energy audit before 1st July 2013.

15. Management Information System (MIS)

The Commission has observed that the petitioner is not maintaining the sales and revenue data as per the regulatory formats, specified in the JERC tariff regulations. **The slab wise and category wise data is directed to be maintained month-wise for proper analysis of sales and revenue.**

The Petitioner is directed to take steps to build credible, accurate & verifiable data base and management information system (MIS) to meet the requirements of filing ARR & Tariff Petition as per the regulatory requirements of the Commission.

The ED LED shall conduct a study for computerization of data and shall give a proposal for the same along with an action plan (with target dates) to the Commission by 30th January 2013.

Petitioners Response

The LED would like to submit to the Hon'ble Commission that it is maintaining the category wise and slab wise data on a monthly basis and the category wise and slab wise data for the FY 2011-12 is being submitted along with this petition in the regulatory formats. Further, the LED is taking necessary steps to build credible, accurate & verifiable data base and management information system (MIS) to meet the requirements of filing ARR & Tariff Petition as per the regulatory requirements of the Commission.

Commission's Comments

16. Interest on Security Deposit

As per Clause 47(4) of the Electricity Act, 2003 and as specified in regulation 25 of JERC Tariff Regulations 2009, *the distribution licenses shall pay interest on security deposit collected from the consumers, equivalent to the bank rate or more as may be specified by the Commission*. On account of provisions mentioned in the Act and regulation, Commission directs the petitioner, that the petitioner must pay the interest on consumer security deposit for FY 2012-13 (at the Bank Rate) with effect from 1st April 2012 to the consumers on their security deposit irrespective of petitioner's constraints and should explicitly mention the same as the 'Interest on security deposit for FY 2012-13' on the bills of the consumers. **Any non-compliance in this regard shall be viewed seriously by the Commission.**

Petitioners Response

The LED would like to submit to the Hon'ble Commission that the present billing system of the department is not having the provision of giving the interest on security deposit to its consumers. The department is presently upgrading its billing software and also updating the security deposit records and as soon as these two processes are complete it will start paying interest on security deposit to its consumers and also appraise the Hon'ble Commission on the same.

Commission's Comments

Commission directs the petitioner to submit the details of such payments made by the next submission.

17. Cost of Power Generation

The Commission has observed that the ED LED is not maintaining separate accounts for their diesel generating sets and solar power plants. The Commission directs the petitioner to provide separate details of cost of generation and final arrived tariff from the following stations/sets:

i. Cost of generation and Tariff from each Diesel Generating set

ii. Cost of generation and Tariff from Solar Power Plant

iii. Cost of generation and Tariff from other Renewable Power Plants

iv. Power Purchase cost from other sources, if any

Petitioners Response

The generator-wise data of the generators installed each station, including unit generated, auxiliary power consumption, plant load factor and specific fuel consumption based on actual for FY 2011-12 is being submitted along with this petition as Annexure I.

Commission's Comments

The data provided by the petitioner has some inconsistencies which need to be corrected. Petitioner is required to submit the revised data before 1st July 2013.

18. Improvement in Specific Fuel Consumption

It is observed that the specific fuel consumption in case of LED is much higher at 0.32 litres per unit of electricity based on actual for FY 2011-12 whereas for similarly placed territory of Andaman & Nicobar Islands it is 0.23[5] litres to generate one unit of electricity based on approved cost for FY 2012-13. Also, the actual specific fuel consumption for the IPP at A&N is 0.24 litres/unit based on actual for FY 2011-12.

So, the utility needs to take serious steps to economies its use of the HSD fuel and bring its specific fuel consumption at par with other similarly placed utilities.

Petitioners Response

The LED would like to submit to the Hon'ble Commission that out of the existing installed capacity of 18890 kW, the old DG sets have a capacity of 3750 kW. By the end of the 12th five year plan the old DG sets will be phased out and the specific fuel consumption will come down so that the LED will be able to economize its use of HSD fuel.

Commission's Comments

The Commission directs the Petitioner to submit the action plan with Time lines by 30th Oct 2013.

19. Generator–wise data

The utility is required to submit generator-wise data of the generators installed each station, including unit generated, auxiliary power consumption, plant load factor and specific fuel consumption based on actual. The same is required to evaluate the efficacy of each plant installed at the islands.

Petitioners Response

The generator-wise data of the generators installed each station, including unit generated, auxiliary power consumption, plant load factor and specific fuel consumption based on actual for FY 2011-12 is being submitted along with this petition as Annexure I.

Commission's Comments

The Commission has noted the Petitioner's submission.

20. Cost of Fuel

[5] For 266570000 units of gross generation, 60486314 litres of HSD fuel consumption have been approved for FY 2012-13 resulting in 0.23 litres being consumed to generate one unit of electricity in the Andaman & Nicobar Islands

The Commission directs the petitioner to explore possibilities of sourcing the fuel from a station other than Beypore, if that is logistically and physically possible keeping the overall cost of transportation lower than the present cost.

Petitioners Response

The LED would like to submit to the Hon'ble Commission that it is already exploring the possibilities of sourcing the fuel from a station other than Beypore so that the overall cost of transportation is lower than the present cost.

Commission's Comments

The Commission has noted the petitioner's submission.

21. **Rebate for Advance Payment :** The Petitioner has proposed a rebate of 2% on the energy bill received for Pre-paid meters .

Commission's Comments : The Commission agrees to the proposal of the Petitioner.

22. **Introduction of Bill payment system through Franchise:** The Petitioner has proposed bill payment system through Private Franchisee at Village level allowing franchisee to charge 0.75% of the billed amount from the Consumer in lieu of the services offered.

Commission's Comments : The issue being the local administration of the Utility, the Commission will not get involved in such matters. However, it is suggested that the selection of Franchisee should be through a transparent mechanism.

8. TARIFF PRINCIPLES AND DESIGN

8.1 Preamble

The Commission in determining the revenue requirement and retail supply tariff for the financial year 2013-14 has been guided by the provisions of the Electricity Act, 2003, the Tariff Policy, Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission (CERC) and Regulations on Terms and Conditions of Tariff notified by the JERC under Section 61 of the Act which lay down the broad principles, which shall guide determination of retail tariff.

8.2 Tariff Proposal

Petitioner's submission

The petitioner has not proposed any tariff increase. The revenue gap has been funded by the administration as submitted by the petitioner.

Commission's Analysis

The Commission, considering the petitioners request, has approved the tariff as existing for FY 2012-13. The Commission's approved tariff for FY 2013-14 is given below:

Table 92: Commission's Approved Tariff for FY 2013-14

S. No.	Category/Consumption Slab per month	Approved Tariff (FY 2013-14)	
		Fixed Charges (Rs /per month per connection or Rs/kVA/month)	Energy Charges (Rs/kWh)
1	**BPL / Kutir Jyoti**	Rs. 25.00/ connection/month	
2	**Domestic**		
	0- 50 units	Rs 10/connection/month for single phase and Rs 50/connection/per month for 3 phase connections	1.00
	51 to 100 units		1.25
	101 to 200 units		2.50
	201 units and above		4.00
3	**Commercial**		
	0-100 units	Rs. 25/connection/ month for singe phase and Rs. 100/connection/ month for 3 phase connections	4.25
	101 - 200 units		5.00
	201 units and above		6.00
4	**HT Consumers**	Rs. 100/ kVA/month	6.00
5	**Industrial**	Rs. 30 /kVA/month	4.50
6	**Public (Street Light)**	-	4.00
7	**Temporary Connection**		7.00

9. Rationalization and Reform of Tariff Schedule and Terms & Conditions of Supply

The Commission in pursuit of the rationalization and reform of the tariff schedule and terms & conditions of supply had floated a draft consultation paper titled 'Draft Consultation Paper - Seeks to provide a policy framework to address uniformity in consumer classification based on uses of electricity, voltage-wise contract load/demand limits and terms and condition of LT and HT supply to various consumer categories' in December 2012.

Reasons for the Rationalization

The Joint Electricity Regulatory Commission (JERC) for the State of Goa and UTs notified its "Joint Electricity Regulatory Commission (Electricity Supply Code) Regulations, 2010'' which was applicable to all distribution licensees and its consumers. Presently, all the seven licensees have different supply voltage for different contract demand / load, different consumer categories and different terms & conditions. The supply voltage for different contract demand/load has not been specified in the JERC (Electricity Supply Code) Regulation, 2010. Until a common uniform supply voltage for different contract demand / load, consumer categories, Terms & Conditions for LT supply and HT supply are framed; there would always be dissimilarities in the above amongst all the seven utilities under JERC.

The objective of the draft paper 2012 was to bring about uniformity mainly in the various parameters through a common terms and conditions for the seven licensees under the jurisdiction of JERC.

1. Uniform categorization of consumers based on uses;
2. Uniform supply voltage for different contract demand/load;
3. Uniform terms & conditions for LT supply;
4. Uniform terms & conditions for HT supply

Further, there is dissimilarity in the terms and conditions for both LT and HT voltage level between the licensees on various parameters as listed below:

1. Power Factor;
2. Power Factor Incentive;
3. Power Factor Surcharge;
4. Disconnection;
5. Billing;
6. Excess Demand; and
7. Over drawl

The Commission had floated the above mentioned draft paper for comments/suggestions/objections from the stakeholders for further consideration and implementation in the forthcoming tariff orders. However, the Commission did not receive adequate comments/suggestions from all the licensees and other stakeholders. There were no objections/suggestions from some of the licensees under the jurisdiction of JERC. In view of the lack of awareness and for greater participation from the public at large, the Commission has included a gist of the proposed tariff schedule and terms & conditions of supply in this tariff order which is reproduced below here. **The Commission wants the licensees and other stakeholders to be more participative and give their suggestions/comments/objections so that the proposed common tariff schedule and terms & conditions of supply can be made applicable in the future years with necessary changes.** From the below mentioned schedule, the Commission has already introduced the proviso of advance payment rebate, prompt payment rebate, power factor surcharge/rebate and TOD tariff in this year's tariff schedule for the benefit of the stakeholders. The Commission is inviting comments/suggestions from the stakeholders on other features of the draft tariff schedule which are yet to be implemented.

The complete draft consultation paper is available on the Commission's website www.jercuts.gov.in.

<u>Proposed Uniform Tariff Schedule and Terms & Conditions of Supply</u>

<u>PART - A: LOW TENSION (LT) SUPPLY</u>

System of supply: Low Tension – Alternating Current, 50 cycles per second
Single Phase supply at 230 Volts
Three Phase supply at 400 Volts
The tariffs are applicable for supply of electricity to LT consumers with a contracted load/demand upto 75 kW (100 HP) for Domestic, non-domestic, Public lighting, Industrial, Agricultural and Public water works categories.
Single Phase supply - contracted load upto 5.0 kW
Three Phase supply - contracted load above 5.0 kW

CATEGORY OF SERVICE AND TARIFF RATES

1.0 DOMESTIC SERVICE
Applicability
This tariff shall be applicable for supply of electricity for a contracted load/demand upto 75 KW for domestic purposes such as lights, fans, radios, televisions, heaters, air-conditioners, washing machines, air-coolers, geysers, refrigerators, ovens, mixers and other domestic appliances including motor-pumps for lifting water for domestic purposes in residential houses, bungalows, multi-storied flats, farm houses, ashrams, mutts, housing colonies etc. This shall also be applicable to the common facilities in the multi-storied, purely residential apartments, buildings having contracted load/demand upto 75 kW.
1.1 DOMESTIC SERVICE-I (DS-I)
This tariff shall be applicable to all huts and dwelling houses of families below the poverty line (BPL) and houses, including pucca houses, built under Government schemes, including rehabilitation for BPL families, having contracted load of 100 Watts only. Consumption of consumers under this category shall be limited to 30 kwh per month.

Note: In case it is detected that load of consumers under this category exceeds 100 watt or monthly consumption exceeds 30 kwh for three consecutive months, it shall be considered under unauthorised use of electricity and shall be dealt as per JERC Electricity Supply Code Regulations, 2010 and the BPL Tariff shall immediately become inoperative and shall further be billed under DS-II category.

1.2 DOMESTIC SERVICE-II (DS-II)

This is applicable for domestic premises for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted load/demand above 5 kW upto 75 KW.

Note (i) If a portion of the domestic premises limited to only one room is used for running small household business having DS-II connection, such connection shall be billed under DS-II category provided that the total monthly consumption of the consumer does not exceed 150 KWH.

(ii) If either more than one room or only one room having monthly consumption exceeding 150 KWH for consecutive three months are detected in the domestic premises being used for mixed purposes having DS-II connection, it shall be considered under unauthorised use of electricity and shall be dealt as per JERC Electricity Supply Code Regulations, 2010 and such connection shall further be billed under NDS-I category until a separate connection of appropriate tariff is taken for that portion used for non-domestic purpose.

TARIFF RATES

1.0 DOMESTIC SERVICE

1.1 DOMESTIC SERVICE-I (DS-I)

Sl.	Category of consumers	Fixed charge (Rs/connection/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered	x	
	unmetered		X

1.2 DOMESTIC SERVICE-II (DS-II)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	Single / Three Phases		Upto 100	
			101-300	
			301-500	
			Above 500	

OPTIONAL

1.2.1 DOMESTIC SERVICE-II/D (DS-II/D)

All those consumers under DS-II category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

1.2.1 DOMESTIC SERVICE-II/D (DS-II/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

2.0 NON-DOMESTIC SERVICE

Applicability

This shall be applicable for supply of electrical energy for non-domestic consumers having contracted load/demand upto 75 kW, using electrical energy for light, fan and power loads for non-domestic purposes like shops, offices, government and semi–government offices, show rooms, laundries, photo-studios, bakery shops, parlours, bars, coffee houses, advertisement hoardings, neon sign-boards, hospitals, nursing homes, clinics, dispensaries, diagnostic centres, X-ray plants, private schools, colleges, libraries, coaching institutes and research institutes, restaurants, hotels, clubs, gymnasium, sport institutions, stadiums, guest houses, boarding / lodging houses, marriage houses, public halls, auditorium, exhibitions, theatres, circus, cinemas, fuel/oil stations, service stations, printing presses, museums, banks, race-course, burial /crematorium grounds, bus-stations, railway stations, telephone exchanges, All India Radio / T.V. installations, shops having welding set, small lathe, electric drill etc, IT establishments, common facilities in multi-storied commercial office / buildings, commercial trusts, societies, shopping malls, multiplexes, commercial establishments and other installations not covered under any other tariff schedule.

This shall also be applicable to government educational institutions, their hostels and libraries, government hospitals, government research institutions, government sport institutions and non–profitable government aided educational institutions, their hostels and libraries, government run youth hostels, harijan hostels, rehabilitation centres, anganwadies, balwadies etc, non-profitable recognized charitable institutions, orphanage homes and old-age homes run by religious and charitable organisations recognised by government, etc.

Religious places such as temples, mosques, gurudwaras, churches etc, are also covered under this tariff.

2.1 NON-DOMESTIC SERVICE-I (NDS-I)

This shall be applicable for supply of electrical energy for non-domestic services such as shops, offices, government and semi–government offices, show rooms, laundries, photo-studios, bakery shops, parlours, bars, coffee houses, advertisement hoardings, neon sign-boards, hospitals, nursing homes, clinics, dispensaries, diagnostic centres, X-ray plants, private schools, colleges, libraries, coaching institutes and research institutes, restaurants, hotels, clubs, gymnasium, sport institutions, stadiums, guest houses, boarding / lodging houses, marriage houses, public halls, auditorium, exhibitions, theatres, circus, cinemas, fuel/oil stations, service stations, printing presses, museums, banks, race-course, burial /crematorium grounds, bus-stations, railway stations, telephone exchanges, All India Radio / T.V. installations, shops having welding set, small lathe, electric drill etc, IT establishments, common facilities in multi-storied commercial office / buildings, commercial trusts, societies, shopping malls, multiplexes, commercial establishments and other installations not covered under any other tariff schedule for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted /demand above 5 KW upto 75 KW.

This shall also be applicable to government educational institutions, their laboratories, hostels and libraries, government hospitals, government research institutions, government sport institutions and government aided educational institutions, their laboratories, hostels and libraries, government run youth hostels, harijan hostels, rehabilitation centres, anganwadies, balwadies etc.

2.2 NON-DOMESTIC SERVICE-II (NDS-II)

This shall be applicable for supply of electrical energy for non-domestic services such as orphanage homes and old-age homes run by religious and charitable organisations recognised by the government for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted load/demand above 5 KW upto 75 KW

This shall be applicable for supply of electrical energy for non-domestic (Religious) service such as places of worship like temples, mosques, gurudwaras, churches.

2.3 NON-DOMESTIC SERVICE-III (NDS-III)

This shall be applicable for supply of electrical energy for advertisement hoardings and neon sign boards for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted load/demand above 5 KW upto 75 KW

TARIFF RATES

2.0 NON-DOMESTIC SERVICE

2.1 NON-DOMESTIC SERVICE-I (NDS-I)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	Single/Three Phases		Upto 100	
			Above 100	

OPTIONAL

2.1.1 NON-DOMESTIC SERVICE-I/D (NDS-I/D)

All those consumers under NDS-I category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

2.1.1 NON-DOMESTIC SERVICE-I/D (NDS-I/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

2.2 NON-DOMESTIC SERVICE-II (NDS-II)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	Single/ Three Phases		For all units	

OPTIONAL

2.2.1 NON-DOMESTIC SERVICE-II/D (NDS-II/D)

All those consumers under NDS-II category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

2.2.1 NON-DOMESTIC SERVICE-II/D (NDS-II/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

2.3 NON-DOMESTIC SERVICE-III (NDS-III)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	Single/ Three Phases		For all units	

OPTIONAL

2.3.1 NON-DOMESTIC SERVICE-III/D (NDS-III/D)

All those consumers under NDS-III category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

2.3.1 NON-DOMESTIC SERVICE-III/D (NDS-III/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

3.0 IRRIGATION AND AGRICULTURAL SERVICE (IAS)

Applicability

This shall be applicable for supply of electrical energy for contracted load/demand upto 100 HP for bonafide use for irrigation pumping and agricultural purposes including processing of Agricultural Produce, confined to chaff - cutter, thrasher, cane crusher and rice Huller including lighting loads when operated by the agriculturist in the field or farm. This is also applicable to nurseries growing flowers/ plants/ saplings/ fruits, hatcheries, poultries (with more than 1000 birds) and fisheries (fish ponds), piggery, aquaculture, sericulture, cattle breeding farms, mushroom growing farms, and those dairy units where only extraction of milk and its processing such as chilling, pasteurisation, etc is done.

3.1 IRRIGATION AND AGRICULTURAL SERVICE-I (IAS-I)

This shall be applicable for supply of electrical energy for contracted load/demand upto 25 HP for bonafide use for irrigation pumping and agricultural purposes including processing of Agricultural Produce

3.2 IRRIGATION AND AGRICULTURAL SERVICE-II (IAS-II)

This shall be applicable for supply of electrical energy for contracted load/demand above 25 HP upto 100 HP for bonafide use for irrigation pumping and agricultural purposes including processing of Agricultural Produce

3.3 IRRIGATION AND AGRICULTURAL SERVICE-III (IAS-III)

This shall be applicable for supply of electrical energy for contracted load/demand upto 100 HP for allied activities such as nurseries growing flowers/ plants/ saplings/ fruits, hatcheries, poultries (with more than 1000 birds) and fisheries (fish ponds), piggery, aquaculture, sericulture, cattle breeding farms, mushroom growing farms, and those dairy units where only extraction of milk and its processing such as chilling, pasteurisation, etc is done.

Tariff Rates

3.0 IRRIGATION AND AGRICULTURAL SERVICE (IAS)

3.1 IRRIGATION AND AGRICULTURAL SERVICE-I (IAS-I)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered		
	Unmetered		X

3.2 IRRIGATION AND AGRICULTURAL SERVICE-II (IAS-II)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)

3.3 IRRIGATION AND AGRICULTURAL SERVICE-III (IAS-III)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered		

4.0 LOW TENSION INDUSTRIAL SERVICE (LTIS)

Applicability

This shall be applicable for supply of electricity to low tension industrial consumers with a contracted load/demand upto 100 HP for industrial processing or agro-industries purposes, cold storage, arc welding sets, workshops, flour mills, wet grinding, oil mills, rice mills, dal mills, atta chakki, Huller, expellers, saw mills, milk dairies (where milk is processed other than chilling, pasteurisation etc to produce other milk products), ice cream manufacturing units, power-looms, garment manufacturing units, tyre retreading units, bakery manufacturing units, etc including lighting loads.

4.1 LOW TENSION INDUSTRIAL SERVICE-I (LTIS-I)

This shall be applicable for supply of electricity to low tension industrial consumers with a contracted load/demand upto 25 HP

4.2 LOW TENSION INDUSTRIAL SERVICE-II (LTIS-II)

This shall be applicable for supply of electricity to low tension industrial consumers with a contracted load/demand above 25 HP upto 100 HP

Tariff Rates

4.0 LOW TENSION INDUSTRIAL SERVICE (LTIS)

4.1 LOW TENSION INDUSTRIAL SERVICE-I (LTIS-I)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge
			Rate (Ps/unit)

OPTIONAL

4.1.1 LOW TENSION INDUSTRIAL SERVICE-I/D (LTIS-I/D)

All those consumers under LTIS-I category with 3 phase supply and with contract demand upto 25 HP opting for demand based tariff shall be required to pay at the rates indicated below:

4.1.1 LOW TENSION INDUSTRIAL SERVICE-I/D (LTIS-I/D)

Sl.	Category of consumers	Demand charge (Rs/HP/ month or part thereof)	Energy charge	
			Consumption/ months(Units)	Rate (Ps/unit)
	All Three Phase upto 25 HP			

4.2 LOW TENSION INDUSTRIAL SERVICE-II (LTIS-II)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge
			Rate (Ps/unit)

OPTIONAL

4.2.1 LOW TENSION INDUSTRIAL SERVICE-II/D (LTIS-II/D)

All those consumers under LTIS-II category with 3 phase supply and with contract demand above 25 HP upto upto 100 HP opting for demand based tariff shall be required to pay at the rates indicated below:

4.2.1 LOW TENSION INDUSTRIAL SERVICE-II/D (LTIS-II/D)

Sl.	Category of consumers	Demand charge (Rs/HP/ month or part thereof)	Energy charge	
			Consumption/ months(Units)	Rate (Ps/unit)
	All Three Phase			

5.0 PUBLIC WATER WORKS & PUBLIC LIGHTING

Applicability

This shall be applicable to public water works, sewerage treatment plant and sewerage pumping stations including lighting loads functioning under state government and state government undertakings and local bodies for contracted load/demand upto 100 HP.

This shall also be applicable for supply of electricity for contracted load/demand upto 75 KW to street light system including signal system belonging to state / central government / local bodies. Also applicable to traffic lights, mast lights / blinkers etc.

5.1 PUBLIC WATER WORKS (PWW)

This shall be applicable to public water works, sewerage treatment plant and sewerage pumping stations including lighting loads functioning under state government and state government undertakings and local bodies for contracted load/demand upto 100 HP.

5.2 PUBLIC LIGHTING (PL)

This shall be applicable for supply of electricity for contracted load/demand upto 75 KW to street light system including signal system belonging to state / central government / local bodies. Also applicable to traffic lights, mast lights / blinkers etc.

Tariff Rates

5.0 PUBLIC WATER WORKS (PWW)

5.1 PUBLIC WATER WORKS-I (PWW-I)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge
			Rate (Ps/unit)

OPTIONAL

5.1.1 PUBLIC WATER WORKS/D (PWW/D)

All those consumers under PWW category with 3 phase supply and with contract demand upto 100 HP opting for demand based tariff shall be required to pay at the rates indicated below:

5.1.1 PUBLIC WATER WORKS/D (PWW/D)

Sl.	Category of consumers	Demand charge (Rs/HP/ month or part thereof)	Energy charge	
			Consumption/ months(Units)	Rate (Ps/unit)
	All Three Phase			

5.2 PUBLIC LIGHTING (PL)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered		
	Unmetered		X

6.0 BULK SUPPLY SERVICES (BS)

Applicability

This tariff shall be applicable to supply of electrical energy for contracted load/demand above 30 KW upto 75 KW at three phase low tension at single point where onward distribution lines / service lines are owned and maintained by the consumers for domestic purpose or non-domestic purpose as specified in the respective tariff category.

6.1 BULK SUPPLY SERVICES-I (BS-I)

This tariff shall be applicable to supply of electrical energy for domestic services for contracted load/demand above 30 KW upto 75 KW at three phase low tension at single point where onward distribution lines / service lines are owned and maintained by the consumers as specified in the domestic service category above.

6.2 BULK SUPPLY SERVICES-II (BS-II)

This tariff shall be applicable to supply of electrical energy for non-domestic services for contracted load/demand above 30 KW upto 75 KW at three phase low tension at single point where onward distribution lines / service lines are owned and maintained by the consumers as specified in the non-domestic services category above.

Tariff Rates

6.1 BULK SUPPLY SERVICES-I (BS-I)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge (Paisa/kwh)

OPTIONAL

6.1.1 BULK SUPPLY SERVICES-I/D (BS-I/D)

All those consumers under BS-I category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

6.1.1 BULK SUPPLY SERVICES-I/D (BS-I/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption (Units)	Rate (Ps/unit)
	All Three Phase			

6.2 BULK SUPPLY SERVICES-II (BS-II)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge (Paisa/kwh)

OPTIONAL

6.2.1 BULK SUPPLY SERVICES-II/D (BS-II/D)

All those consumers under BS-II category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

6.2.1 BULK SUPPLY SERVICES-II (BS-II/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ MONTHS(Units)	Rate (Ps/unit)
	All Three Phase			

TERMS AND CONDITIONS OF LOW TENSION (LT) TARIFF

1. Unless otherwise agreed to, these tariffs are applicable for power supply at one point only.
2. Unless otherwise specifically stated to the contrary, the figures of energy charges relates to paise per unit (kwh) for energy consumed during the month.
3. These tariffs are exclusive of statutory levies like electricity duty/cess or any other taxes, duties/cess etc, imposed by the State Government / Central Government or any other competent authority and shall be charged extra.
4. In case payment is made through cheque and the cheque is dishonoured, an amount of Rs.200/- shall be levied as cheque return charges. The licensee may initiate action u/s 138 of the Negotiable Instrument Act, 1981 in addition to disconnection of the service.
5. Fixed/Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection. Fixed/Demand charges, wherever applicable, shall be double as and when bi-monthly billing is done. Similarly, slabs of energy consumption shall also be doubled in case of bi-monthly billing.
6. The electricity bill shall be rounded off in whole rupees. Amount less than 50 paisa shall be ignored and amount of 50 paisa and above shall be considered as one rupee.
7. 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.
8. 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.
9. Delayed payment surcharge: In case a consumer does not pay energy bills in full by the due date specified in the bill, a delayed payment surcharge of one and half (1.5) percent per month or part thereof on the outstanding arrears shall be levied from the due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003.

10. Shunt Capacitor Installation

a) Every LT consumer including irrigation pump set consumers whose connected load includes induction motor (s) of capacity 3 HP and above and other low power factor consuming appliances shall arrange to install low tension shunt capacitors of appropriate capacity at his cost across terminals of his motor (s). The consumer shall ensure that the capacitors installed by him are properly matched with the actual rating of the motor so as to ensure power factor of 90% (0.9 lagging).

b) All LT consumers having welding transformers will be required to install suitable shunt capacitor(s) of adequate capacity so as to ensure power factor of not less than 90% (0.9 lagging).

c) The capacitors shall be of standard manufacture and meet the Bureau of Indian Standards specification.

d) Consumers not complying to above shall be liable to pay a power factor surcharge at the following rates:

(i) For the LT consumers whose meter is capable of recording average monthly power factor and If the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 0.5% on billed demand and energy charges for each fall of 0.01 in power factor upto 0.7(lagging). If such consumers maintains power factor more than 95% (0.95 lagging), a power factor incentive @ 0.25% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging)

(ii) For the LT consumers whose meter is not capable of recording average monthly power factor and such LT Consumers not complying to conditions a to c above shall be liable to pay a power factor surcharge of 10% (ten percent) of the billed fixed/demand and energy charges till the capacitors in healthy condition are installed.

e) If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer’s service connection without prejudice for the levy of the surcharge.

f) No new supply to LT installations having low power factor consuming equipment such as induction motor of 3 HP and above or welding transformers etc., will be released unless shunt capacitors are installed to the satisfaction of the Board.

11. Maximum Demand: The maximum demand of supply of electricity during a month shall be twice the largest number of Kilo-Volt Ampere Hours (KVAH) delivered at the point of supply to the consumers during any consecutive 30 minutes in the month.

12. Billing Demand: Any LT consumer who has opted for demand based tariff, the billing of such consumer shall be on the maximum demand recorded during the month or contracted demand, whichever is higher. Such billing demand shall be rounded off to next higher digit for the purpose of billing.

13. Excess Demand: If in any month, the recorded maximum demand of the consumer exceeds 105% of its contracted demand, the normal tariff shall be applicable upto the 105% of the contract demand and that portion of demand which is in excess of 105% of the contracted demand shall be billed at double the normal rate. If the actual recorded demand of a consumer exceeds 105% of the contracted demand consecutively for three months, the licensee may issue a notice and inform the consumer to get additional contract demand sanctioned or to limit their drawl as per their contract. Otherwise the licensee shall take action as per provisions of the Act/Rules/Regulations.

Illustration: If contract demand is 60 kw whereas maximum demand recorded during the month is 70 kw, then demand for 63 kw (105% of 60 kw) shall be billed at normal rate and demand for 7 kw (70 kva-63 kw) shall be billed at twice the normal rate.

14. Defective / Damaged / Burnt Meter: In case of meter being defective / damaged / burnt the Licensee or the consumer as the case may be shall replace the same within the period specified in "Standards of Performance" Regulations issued by the Commission. Till defective meter is replaced the consumption shall be assessed and billed on an average consumption of last six meter reading cycles or average monthly consumption of corresponding six meter reading cycles of the preceding year whichever is higher from the date of meter being out of order. Such consumption shall be treated as actual consumption for all practical purposes until the meter is replaced/ rectified.

In case a functional check-meter is available then the readings of the check meter shall be used for billing purposes when main meter becomes defective/damaged/burnt.

In case the meter becomes defective within three meter reading cycles after its installation and prior consumption is not available, then billing shall be done provisionally on the basis of following load factor subject to adjustment on the average consumption of three meter reading cycles of the replaced meter:

Sl	Category of consumers	Load Factor	Average Unit
1.	Domestic	0.15	100 units/kW
2.	Non-domestic	0.20	150 units/kW
3.	Public Water Works	0.20	100 units/HP for water works 125 unit/kW for street light
4.	Irrigation & Agicultural	0.15	80 units/HP
5.	LT Industrial	0.25	135 units/HP
6.	HT Industrial (at P.F.=0.0.90 lag)	0.40	260 units/kVA

15. Contracted/Connected load/Demand exceeding LT load limit: In case of existing LT consumers whose contracted/connected load or demand exceeds the upper limit of LT supply, such consumers may either shift to HT supply or optionally continue to remain as LT consumers subject to payment of 10% surcharge on fixed and energy charges. The licensee shall not release any new connection or enhance load of existing consumers whose contracted load/demand exceeds LT limits.

16. Usage of electricity for other purpose than authorized: If either more than one room or only one room having monthly consumption exceeding 150 KWH for consecutive three months are detected in the domestic premises being used for mixed purposes having DS-II connection or any other premises which is used for a purpose other than for which it was authorized and the tariff applicable for which is higher, it shall be considered under unauthorised use of electricity and shall be dealt as per JERC Electricity Supply Code Regulations, 2010 and such connection shall further be billed on appropriate higher tariff category until a separate connection of appropriate tariff is taken for that portion.

17. FPPCA: The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula notified by the Commission. The value of K-factor shall be applicable to the different consumer categories as per the values approved in this tariff order. Such charges shall be recovered / refunded in accordance with terms & conditions specified in the FPPCA formula.

18. Temporary Supply (LT)

(i) Temporary Supply is for connection temporary in nature for a maximum period of two year. The applicability shall be as given in the respective tariff category. Temporary supply cannot be claimed by a prospective consumer as a matter of right but will normally be arranged by the licensee when a requisition is made giving due notice subject to technical feasibility and in accordance with electricity supply code issued by the Commission.

(ii) The tariff shall be chargeable as applicable to the corresponding appropriate tariff category at the following rates subject to minimum Rs ....:

Sl	Period of Supply	Tariff Rate
1.	Upto 12 months	150% of normal rate of appropriate tariff category
2.	More than 12 months and upto 18 months	175% of normal rate of appropriate tariff category
3.	More than 18 months and upto 24 months	200% of normal rate of appropriate tariff category

Fixed/Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection.

(iii) Terms of Supply of Temporary Supply shall be as below:

a) Temporary supply may be given for a period not exceeding 3 months in the first instance, the duration of which, may be extended on quarter to quarter basis subject to maximum total duration of two year.

b) In addition to the tariff charges, the consumer shall have to deposit the following charges before commencement of the temporary supply:

(i) Estimated cost of erection of temporary service line and dismantling.

(ii) Cost of irretrievable materials which cannot be taken back to service.

(iii) Meter rent for the full period of temporary connection as per appropriate tariff schedule and other miscellaneous charges.

(iv) Rental on the cost of materials of the licensee as per estimate at the rate of Rs. 15/- per month on every Rs. 100/- or part thereof.

(v) Ten per cent on the total cost of the estimate for the temporary service connection to cover as security for loss of materials and contingencies. In case such loss is not noticed, the amount will be refunded.

c) The applicants for temporary supply shall be required to make a deposit in advance of the cost as detailed above including fixed/demand charges and the energy consumption charges estimated for full period on the basis of contracted load/demand. This will however, be adjusted against the final bill that will be rendered on disconnection of supply.

d) If the consumer intends to extend the temporary supply beyond the period originally applied for, he will have to deposit in advance all applicable charges as detailed above including the estimated electricity consumption charges, for the period to be extended and final bill as well, for the previous period, if any.

19. Seasonal Supply (LT)

(i) Seasonal supply shall be given to any consumer on written request to the licensee subject to the following conditions.

Sl	Period of Supply	Tariff Rate
1.	Upto 3 consecutive months in a year	Appropriate tariff plus 40 percent
2.	More than 3 consecutive months and upto 6 consecutive months in a year	Appropriate tariff plus 30 percent
3.	More than 6 consecutive months and upto 9 consecutive months in a year	Appropriate tariff plus 20 percent
4.	More than 9 consecutive months but less than one year	Appropriate tariff plus 10 percent.

(ii) The meter rent and other charges as provided in the appropriate tariff are applicable to seasonal loads and would be charged extra for the entire period of supply.

(iii) The supply would be disconnected after the end of the period unless the consumer wants the supply to be continued. Any reconnection charges have to be borne by the consumer.

(iv) Consumer proposing to avail seasonal supply shall sign an agreement with the licensee to avail power supply for a minimum period of 2 years in the case of LT category of supply.

(v)The consumers must avail supply in terms of whole calendar month continuously.

(vi) The consumer is required to apply for seasonal supply and pay initial cost and security deposit as an applicant for normal electricity supply.

(vii) The consumer shall ensure payment of monthly energy bills within 7 days of its receipt. The supply will be disconnected if payment is not made on due date.

20. Schedule of Tariff and Other charges approved in this Tariff Order shall remain in force until it is amended by the Commission.

PART - B: HIGH TENSION (HT) SUPPLY

System of supply: High Tension – Alternating Current, 50 cycles per second, 3 phase at 11 KV / 22 KV / 33 KV

The tariffs shall be applicable for supply of electricity for use in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA depending upon the supply voltage for different contract demand as specified below:

Sl	Supply Voltage	Contract Demand	
		Minimum	maximum
1	11 kV or 22 kV	80 kVA	1500kVA
2	33 kV	1501 kVA	5000 kVA

CATEGORY OF SERVICE AND TARIFF RATES

8.0 HIGH TENSION SERVICE-HTS

Applicability

The tariffs shall be applicable for supply of electricity for use in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

Note:

(i) A surcharge @ 10% shall be levied on fixed/demand charge and energy charge if supply is availed at LT voltage by the existing consumers against specified 11 kV.

(ii) A surcharge @ 5% shall be levied on fixed/demand charge and energy charge if supply is availed at 11 kV or 22 kV by the existing consumers against specified 33 kV.

(iii) An incentive @ 3% shall be given on demand charge and energy charge if supply voltage is at 33 kV against specified 11 kV.

(iv) An incentive @ 3% shall be given on demand charge and energy charge if supply voltage is at 66 kV EHT voltage against specified 33 kV HT voltage.

8.1 HIGH TENSION/DS (HT/DS)

The tariffs shall be applicable for supply of electricity for domestic use defined under 1.0 above in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.2 HIGH TENSION/NDS (HT/NDS)

8.2.1HIGH TENSION/NDS-I (HT/NDS-I)

The tariffs shall be applicable for supply of electricity for non-domestic use defined under 2.0 above including shopping malls, multiplexes and other commercial installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.2.2 HIGH TENSION/NDS-II (HT/NDS-II)

The tariffs shall be applicable for supply of electricity for non-domestic (religious and charitable) use defined under 2.0 above with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.3 HIGH TENSION/IAS (HT/IAS)

The tariffs shall be applicable for supply of electricity for irrigation and agricultural use defined under 3.0 above in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.4 HIGH TENSION/INDUSTRIAL (HTIS-I)

The tariffs shall be applicable for supply of electricity for industrial use defined under 4.0 above other than power intensive covered under HTS-IV tariff in installations with a minimum contract demand of 80

KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.5 HIGH TENSION/POWER INCENTIVE (HTIS-II)
The tariffs shall be applicable for supply of electricity for power intensive, metal alloy, steel melting, ferro-alloy, ferro-metallurgical use in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.6 HIGH TENSION/PWW (HT/PWW)
The tariffs shall be applicable for supply of electricity for public water works use defined under 5.0 above in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

Tariff Rates

8.0 HIGH TENSION SERVICE-HTS

8.1 HIGH TENSION/DS (HT/DS)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge
			Rate (Ps/unit)

8.2.1 HIGH TENSION/NDS (HT/NDS-I)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge
			Rate (Ps/unit)

8.2.2 HIGH TENSION/NDS (HT/NDS-II)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge
			Rate (Ps/unit)

8.3 HIGH TENSION/IAS (HT/IAS)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge
			Rate (Ps/unit)

8.4 HIGH TENSION/INDUSRIAL (HTIS-I)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.5 HIGH TENSION/POWER INCENTIVE (HTIS-II)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.6 HIGH TENSION/PWW (HT/PWW)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

PART - C: EXTRA HIGH TENSION (EHT) SUPPLY

System of supply: Extra High Tension – Alternating Current, 50 cycles per second, 3 phase at 66 KV / 110 KV / 132 KV / 220 KV

The tariffs shall be applicable for supply of electricity for use in installations with contract demand more than 5000 KVA depending upon the supply voltage for different contract demand as specified below:

Sl	Supply Voltage	Contract Demand	
		minimum	Maximum
1	66 kV	5001 kVA	25000 kVA
2	110 kV or 132 kV or 220 kV	Above 25000 kVA	

CATEGORY OF SERVICE AND TARIFF RATES

9.0 EXTRA HIGH TENSION

Applicability

The tariffs shall be applicable for supply of electricity for use in installations with a minimum contract demand of 5001 KVA on extra high tension voltage at 66 KV / 110 KV / 132 KV / 220 KV as per the specified voltage wise contract demand.

Note:

(i) A surcharge @ 5% shall be levied on fixed/demand charge and energy charge if supply is availed at 33 kV HT voltage by existing consumers against specified 66 kV EHT voltage.

(ii) A surcharge @ 5% shall be levied on fixed/demand charge and energy charge if supply is availed at 66 kV EHT voltage by existing consumers against specified 110 KV / 132 KV / 220 KV EHT voltage.

(iii) An incentive @ 3% shall be given on demand charge and energy charge if supply voltage is at 110 kV or 132 kV or 220 kV against specified 66 kV.

Tariff Rates

9.0 EXTRA HIGH TENSION SERVICES (EHTS)

Sl.	**Category of consumers**	**Fixed charge (Rs/KVA/ month or part thereof)**	**Energy charge**
			Rate (Ps/unit)

<u>TERMS AND CONDITIONS OF HT and EHT TARIFF</u>

1. Unless otherwise agreed to, these tariffs are applicable for power supply at one point only.
2. Unless otherwise specifically stated to the contrary, the figures of energy charges relates to paisa per unit for energy consumed during the month.
3. These tariffs are exclusive of statutory levies like electricity duty/cess or any other taxes, duties/cess etc., imposed by the State Government / Central Government or any other competent authority and shall be charged extra.
4. In case, payment is made through cheque and the cheque is dishonoured, an amount of Rs.200/- shall be levied as cheque return charges. The licensee may initiate action u/s 138 of the Negotiable Instrument Act, 1981 in addition to disconnection of the service.
5. The supply voltage for different contract demand as specified below:

Sl	Supply Voltage	Contract Demand	
		minimum	maximum
1	11 kV or 22 kV	80 kVA	1500kVA
2	33 kV	1501 kVA	5000 kVA
3	66 kV	5001 kVA	25000 kVA
4	110 kV or 132 kV or 220 kV	Above 25000 kVA	

6. Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection. Demand charges, wherever applicable, shall be double as and when bi-monthly billing is done. Similarly, slabs of energy consumption shall also be doubled in case of bi-monthly billing.
7. The electricity bill shall be rounded off in whole rupees. Amount less than 50 paisa shall be ignored and amount of 50 paisa and above shall be considered as one rupee.

8. 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.

9. 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.

10. Delayed payment surcharge: In case a consumer does not pay energy bills in full by the due date specified in the bill, a delayed payment surcharge of one and half (1.5) percent per month or part thereof on the outstanding arrears shall be levied from the due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003.

11. Power Factor Surcharge / Incentive

(a)The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 90% (0.9 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 upto 0.7(lagging)

(b) In case the monthly average power factor of the consumer is more than 95% (0.95 lagging), a power factor incentive @ 0.5% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging)

(c) If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.

(d) 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

12. Maximum Demand: The maximum demand of supply of electricity during a month shall be twice the largest number of Kilo-Volt Ampere Hours (KVAH) delivered at the point of supply to the consumers during any consecutive 30 minutes in the month.

13. Billing Demand: The billing shall be on the maximum demand recorded during the month or 75% of contracted demand, whichever is higher. Such billing demand shall be rounded off to next higher digit for the purpose of billing.

14. Excess Demand: If in any month, the recorded maximum demand of the consumer exceeds 105% of its contracted demand, the normal tariff shall be applicable upto the 105% of the contract demand and that portion of demand which is in excess of 105% of the contracted demand shall be billed at double the normal rate. If the actual recorded demand of a consumer exceeds 105% of the contracted demand consecutively for three months, the licensee may issue a notice and inform the consumer to get additional contract demand sanctioned or to limit their drawl as per their contract. Otherwise the licensee shall take action as per provisions of the Act/Rules/Regulations.

Illustration: If contract demand is 100 kva whereas maximum demand recorded during the month is 115 kva, then demand for 105 kva (105% of 100 kva) shall be billed at normal rate and demand for 15 kva (120 kva-105 kva) shall be billed at twice the normal rate.

15. Defective / Damaged / Burnt Meter: In case of meter being defective / damaged / burnt, the licensee or the consumer as the case may be shall replace the same within the period specified in "Standards of Performance" Regulations issued by the Commission. Till defective meter is replaced the consumption shall be assessed and billed on an average consumption of last six meter reading cycles or average monthly consumption of corresponding six meter reading cycles of the preceding year whichever is higher from the date of meter being out of order. Such consumption shall be treated as actual consumption for all practical purposes until the meter is replaced/ rectified.

In case a functional check-meter is available then the readings of the check meter shall be used for billing purposes when main meter becomes defective/damaged/burnt.

In case the meter becomes defective immediately after its installation and prior consumption is available, then billing shall be done provisionally on the basis of following load factor subject to adjustment on the average consumption of three meter reading cycles of the replaced meter.

16. FPPCA: The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula notified by the Commission. The value of K-factor shall be applicable to the different consumer categories as per the values approved in this tariff order. Such charges shall be recovered / refunded in accordance with terms & conditions specified in the FPPCA formula.

17. Temporary Supply (HT & EHT)

(i) Temporary Supply is for connection temporary in nature for a maximum period of two year. The applicability shall be as given in the respective tariff category. Temporary supply cannot be claimed by a prospective consumer as a matter of right but will normally be arranged by the licensee when a requisition is made giving due notice subject to technical feasibility and in accordance with electricity supply code issued by the Commission.

(ii) The tariff shall be chargeable as applicable to the corresponding appropriate tariff category at the following rates subject to minimum Rs ....:

Sl	Period of Supply	Tariff Rate
1.	Upto 12 months	150% of normal rate of appropriate tariff category
2.	More than 12 months and upto 18 months	175% of normal rate of appropriate tariff category
3.	More than 18 months and upto 24 months	200% of normal rate of appropriate tariff category

Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection.

(iii) Terms of Supply of Temporary Supply shall be as below:

a) Temporary supply may be given for a period not exceeding 3 months in the first instance, the duration of which may be extended on quarter to quarter basis subject to maximum total duration of two year.

b) In addition to the tariff charges, the consumer shall have to deposit the following charges before commencement of the temporary supply:

(i) Estimated cost of erection of temporary service line and dismantling.

(ii) Cost of irretrievable materials which cannot be taken back to service.

(iii) Meter rent for the full period of temporary connection as per appropriate tariff schedule and other miscellaneous charges.

(iv) Rental on the cost of materials of the licensee as per estimate at the rate of Rs. 15/- per month on every Rs. 100/- or part thereof.

(v) Ten per cent on the total cost of the estimate for the temporary service connection to cover as security for loss of materials and contingencies. In case such loss is not noticed, the amount will be refunded.

c) The applicants for temporary supply shall be required to make a deposit in advance of the cost as detailed above including demand charges and the energy consumption charges estimated for full period on the basis of contracted demand. This will however, be adjusted against the final bill that will be rendered on disconnection of supply.

d) If the consumer intends to extend the temporary supply beyond the period originally applied for, he will have to deposit in advance all applicable charges as detailed above including the estimated electricity consumption charges, for the period to be extended and final bill as well, for the previous period, if any.

18. Seasonal Supply (HT & EHT)

(i) Seasonal supply shall be given to any consumer on written request to the Board subject to the following conditions.

Sl	Period of Supply	Tariff Rate
1.	Upto 3 consecutive months in a year	Appropriate tariff plus 40 percent
2.	More than 3 consecutive months and upto 6 consecutive months in a year	Appropriate tariff plus 30 percent
3.	More than 6 consecutive months and upto 9 consecutive months in a year	Appropriate tariff plus 20 percent
4.	More than 9 consecutive months but less than one year	Appropriate tariff plus 10 percent.

(ii) The meter rent and other charges as provided in the appropriate tariff are applicable to seasonal loads and would be charged extra for the entire period of supply.

(iii) The supply would be disconnected after the end of the period unless the consumer wants the supply to be continued. Any reconnection charges have to be borne by the consumer.

(iv) Consumer proposing to avail seasonal supply shall sign an agreement with the licensee to avail power supply for a minimum period of 3 years in the case of HT category of supply.

(v) The consumers must avail supply in terms of whole calendar month continuously.

(vi) The consumer is required to apply for seasonal supply and pay initial cost and security deposit as an applicant for normal electricity supply.

(vii) The consumer shall ensure payment of monthly energy bills within 7 days of its receipt. The supply will be disconnected if payment is not made on due date.

19. Time of Day tariff (ToD)

(i) Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.

(ii)The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

Time of use	Demand Charges	Energy Charges
Normal period (6:00 a.m. to 6:00 p.m)	Normal Rate	Normal rate of energy charges

Evening peak load period (6:00 p.m to 10.00 p.m)	Normal Rate	120% of normal rate of energy charges
Off-peak load period (10:00 p.m to 6:00 a.m)	Normal Rate	90% of normal rate of energy charges

(iii) Applicability and Terms and Conditions of TOD tariff:
(a) TOD tariff shall be optional unless otherwise specifically stated to the contrary in the tariff order.
(b) The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from other sources through wheeling of power.
(c) The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff.
(d) In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.
20. Schedule of Tariff and Other charges approved in this Tariff Order shall be as approved in the tariff order.

PART - D: MISCELLANEOUS AND GENERAL CHARGES (FOR ALL CATEGORIES OF CONSUMERS)

1 METER RENT:

i) BPL
ii) LT Single Phase except BPL
iii) LT Three Phase Upto 100 Amps
iv) LT meter with CT
v) HT meter with CTPT combined unit
vi) EHT meter with CTPT combined unit

2 APPLICATION FEE FOR NEW CONNECTION / REDUCTION OF CONTRACTED LOAD OR DEMAND / ENHANCEMENT OF CONTRACTED LOAD OR DEMAND/REQUEST FOR PERMANENT DISCONNECTION:

(i) BPL
(ii) LT Single phase except BPL
(iii) LT Three phase
(iv) HTS
(v) EHTS

3 TESTING / INSPECTION OF CONSUMER'S INSTALLATION:

(i) Initial Test / Inspection Free of cost
(ii) Subsequent test and inspection Rs. 100.00 for single phase necessitated by fault in installation or by not complying with terms and conditions of supply connection
a) for three phase LT connection
b) for HT connection.

4 METER TESTING FEE:

(i) LT Single Phase meter
(ii) LT Three Phase meter
(iii) LT Three Phase meter with CT
(iv) LT Tri-vector meter
(v) HT Tri-vector meter
(vi) EHT Tri-vector meter
(vii) LT CT set
(viii) HT metering equipment
(ix) EHT metering equipment

Note: If the meter is tested at third party testing laboratory at the request of the consumer then the fees charged by the testing laboratory will be payable by the consumer.

5 REMOVING / RE-FIXING / CHANGING OF METER / METER BOARD AT CONSUMER'S REQUEST:

(i) BPL
(ii) LT Single Phase meter
(iii) LT Three Phase meter
(iv) LT Three Phase meter with CT
(v) LT Tri-vector meter with CT
(vi) HT Tri-vector meter with metering equipment
(vii) EHT Tri-vector meter with metering equipment

Note: Cost of material, as required, will be borne by the consumer

6 RECONNECTION CHARGE:

(i) BPL
(ii) LT Single Phase supply
(iii) LT Three Phase supply
(iv) HT supply
(v) EHT supply

7 SUPERVISION, LABOUR AND ESTABLISHMENT CHARGE FOR SERVICE CONNECTION:

(i) BPL
(ii) LT Single Phase
(iii) LT Three Phase
(iv) HT As per approved estimate
(v) EHT As per approved estimate

10. CONCLUSION OF COMMISSION'S ORDER

Having considered the Petition no. 101/2013 of Electricity Department of Lakshadweep for approval of Aggregate Revenue Requirement (ARR) and determination of retail tariffs for supply of electricity for FY 2013-14, the Commission approves the Aggregate Revenue Requirement (ARR) and the revised tariff for ED-Lakshadweep for FY 2013-14 as below.

1. The break-up of the Aggregate Revenue Requirement (ARR) approved for ED Lakshadweep for the year 2013-14 is given below.

Table 93: ARR for the FY 2013-14 (Rs Crores)

S. No.	Particulars	Approved FY 2013-14
1	Cost of fuel	83.48
2	Cost of power purchase for full year	-
3	Employee costs	10.00
4	Repair & Maintenance Expenses	0.97
5	Administration and general expenses	3.38
6	Depreciation	2.66
7	Interest and finance charges	4.25
8	Interest on working capital	2.17
9	Interest on Security Deposit	0.01
10	Return on NFA /Equity	1.06
11	Provision for Bad Debt	0.05
12	Advance Against Depreciation	-
13	**Total Revenue Requirement**	**108.03**
14	Less: Non-Tariff Income	0.20
15	**Net Revenue Requirement (13-14)**	**107.83**
16	Less: Revenue from Retail Sales at Existing Tariff	10.86
17	Less: Revenue from Surplus Power Sale/UI	**-**
18	**Net Gap/(Surplus) for FY 2013-14 (15-16-17)**	**96.97**
19	Gap for the previous year/ (Surplus) FY 2012-13	**-**
20	**Total Gap for FY 2013-14 at the existing tariff of FY 2013-14 (18+19)**	**96.97**
21	Additional Revenue from proposed tariffs	0
22	**Revenue Gap after proposed tariffs (20-21)**	**96.97**

2. The approved retail tariff (as given below) shall be in accordance with the tariff schedule specified in this order to meet the ARR of FY 2013-14.

Table 94: Approved Tariff

S. No.	Category/Consumption Slab	Approved (FY 2013-14) Fixed Charges (Rs /per month per connection or Rs/kVA/month)	Approved (FY 2013-14) Energy Charges (Rs/kWh)
1	**BPL/Kutir Jyoti**	Rs 25/connection/month	
2	**Domestic**		
	0- 50 units	Rs 10/connection/month for single phase and Rs 50/connection/per month for 3 phase connections	1.00
	51 to 100 units		1.25
	101 to 200 units		2.50
	201 units and above		4.00
3	**Commercial**		
	0-100 units	Rs. 25/connection/ month for single phase and Rs. 100/connection/ month for 3 phase connections	4.25
	101 - 200 units		5.00
	201 units and above		6.00
4	**HT Consumers**	Rs. 100/ kVA/month	6.00
5	**Industrial**	Rs. 30 /kVA/month	4.50
6	**Public (Street Light)**	-	4.00
7	**Temporary Connection**	-	7.00

3. The approved revised tariff shall come into force with effect from 01st April 2013 and shall remain valid till 31st March 2014. The licensee shall publish the revised tariff structure and the salient features of tariff within one week in three daily newspapers in the respective local languages of the region, besides English, having wide circulation in their respective areas of supply.
4. FPPCA formula has been separately notified under the Regulation. It is seen that in the case of Lakshadweep, majority of the generation is diesel based, making per unit cost of generation very high compared to the other utilities. Thus, 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 Lakshadweep & is so large that in near future there seems to be no feasibility of recovering average cost of supply from the consumer.

Keeping the above fact in view, the Commission is of the view that any variation in the cost of power generation (including variation in power purchase cost, if any) should for the time being be borne by the utility. Further, the utility is directed to propose a scheme for sharing of the increase in the cost of power generation (including power purchase cost, if any) with the consumers for the Commission's consideration and approval.

5. Copy of this order may be sent to the Petitioner, CEA and Administration of UT of Lakshadweep. It shall be placed on the website of the Commission.

(S. K. Chaturvedi)	**(Dr. V. K. Garg)**
Member	**Chairman**

Place: Gurgaon
Date: 22nd May 2013

11. TARIFF SCHEDULE

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 Regulation notified by JERC.

   Provided that (a) if a portion of the domestic premises limited to only one room is used for running small household business having connection under domestic category, such connection shall be billed under domestic category provided that the total monthly consumption of the consumer (including consumption for above mentioned small household business) does not exceed 150 kWh

   (b) 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 permit installation of contracted load of 3 HP and above in LT unless they are provided with the capacitors of adequate rating to comply with power factor conditions as specified in the JERC Supply Code Regulations 2010. The consumer has to provide appropriate capacitors for these installations presently running on without capacitors.

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 Regulation. 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 Regulation 2010. If such over-drawl is more than 20% of the contract demand then the connections shall be disconnected after due notice to the consumers.

   Explanation: Assuming the contract demand as 100 KVA, maximum demand at 120 KVA and total energy consumption as 12000 Kwh, then the consumption corresponding to the contract demand will be 10000 Kwh (12000*100/120) and consumption corresponding to the excess demand will be 2000 Kwh. This excess demand of 20 KVA and excess consumption of 2000 Kwh will be billed at twice the respective normal rate. Such connections drawing more than 120 kVA, shall be disconnected after due notice.

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

11) **Delayed payment surcharge** shall be applicable to all categories of consumers. Delayed payment surcharge of 2% per month or part thereof shall be levied on all arrears of bills. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paise shall be ignored and amount of 50 paise or more shall be rounded off to next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only upto the month of permanent disconnection.

12) **Advance Payment Rebate:** If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.

13) **Prompt Payment Rebate:** If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.

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

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

The detailed tariff Schedule is outlined as below.

DETAILED TARIFF SCHEDULE

A. Tariff BPL/Kutir Jyoti:

Applicable to consumers of Below Poverty Line (BPL) category with monthly consumption of 30 units and below.

Fixed Charge – Rs 25/- per service connection per month or part thereof

Note: Production of relevant BPL certificate issued by the authority concerned in the Island is a must for considering into this category and their consumption does not exceed 30 kWh per month at any instant.

ED Lakshadweep shall install meters on all such consumers, latest by Dec. 31’ 2013.

B. Domestic Category

Application to private houses, bungalows, hostels and hospitals run on noncommercial lines, charitable educational and religious institutions etc. for lights, fans, radios, domestic heating and other household appliances.

I. Fixed Charges

Rs. 10 / connection/ month or part thereof for single phase connection
Rs. 50/connection/ month or part thereof for three phase connection

II. Energy Charges

Usage (Units/Month)	Energy Charge (Ps/Unit)
0-50 units	100
51-100 units	125
101-200 units	250
201 units and above	400

C. 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.

I. Fixed Charges

Rs. 25/ connection/ month or part thereof for single phase connection
Rs. 100/connection/month or part thereof for three phase connection

II. Energy Charges

Usage (Units/Month)	Energy charge (Ps/Unit)
0-100 units	425
101-200 units	500
201 units and above	600

D. Industrial Category

Applicable to all Low Tension Industrial Connections including water works/pumps.

I. Fixed Charges

Rs 30/kVA/month or part thereof

II. Energy Charges

	Energy charge (Ps/Unit)
For all units	450

E. HT Consumers

Applicable for the consumers connected with 11 KV.

i. Fixed Charges (Demand Charges)

For Billing Demand	Charges (Rs/KVA/month) or part thereof
Upto Contract Demand	Rs 100/kVA/month or part thereof

ii. Energy Charges

Usage (Units/Month)	Tariff (Ps/Unit)
For all units	600

iii. Penalty Charges: Shall be in accordance with S.No. 9 of the General Terms and Conditions.

iv. Power Factor Charges

(a)The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 90% (0.9 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 upto 0.7(lagging)

(b) In case the monthly average power factor of the consumer is more than 95% (0.95 lagging), a power factor incentive @ 0.5% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging)

(c) If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.

(d) 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

v. 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

F. Public (Street Lighting)

Applicable for lighting on public roads, footpaths, streets and fares in parks & markets.

i. Energy Charges

Usage	Tariff (Ps/Unit)
For all units	400

G. Temporary Supply:

i. Energy Charges

Usage	Tariff (Ps/Unit)
For all units	700

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.

Schedule of Other Charges

a. Meter Rent Charges

S.No.	Meter Type	Charges (in Rs.) / month or part there of
1	Single Phase	Rs 10 per month or part thereof
2	Three Phase	Rs 25 per month or part thereof
3	LT Meter with MD indicator	Rs 200 per month or part thereof
4	Tri- vector Meter	Rs 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 L.T.M.D.I meters.

Considering the constraints prevailing in Lakshadweep Islands, the energy meters will be provided by the department only.

b. Reconnection Charges after temporary disconnection

S. No.	Connection Type	Charges (in Rs.)
1	Single Phase LT	Rs 50
2	Three Phase LT	Rs 100
3	HT	Rs 500

c. Service Connection Charges

S. No.	Connection Type	Charges (in Rs.)

1	Single Phase LT	Rs 250
2	Three Phase LT	Rs 500
3	HT	Rs 1000

d. Extra Length Charge

S.No.	Connection Type	Charges / Meter (in Rs.)
1	Single Phase	Rs 50/meter
2	Three Phase	Rs 100/meter

Extra length chargeable will be beyond permissible 30 meters free length from existing network for new connection for all categories.

e. Testing Fee for various Metering Equipment

S. No.	Types of Metering Equipment	Fee Per Unit (in Rs.)
1	Single Phase	100
2	Three Phase	300
3	Three Phase Tri-vector Meter (0.5 Class) Industrial LT Consumer	500
4	Three Phase Tri-vector Meter (0.5 Class) 11 KV HT Consumer	500
5	Combined CTPT Unit for 11 KV Consumer	500
6	Three Phase CT Block	300
7	CT Coil	100

f. Fees (Non-refundable) for submission of Test Report of wiring completion

S. No.	Types of Connection	Fee Per Test Report (in Rs.)
1	Single Phase Lighting / Domestic	10
2	Three Phase Lighting /Domestic	25
3	Single Phase Lighting / Commercial	50
4	Three Phase Lighting / Commercial	100
5	Three Phase LT Industries	250
6	Single Phase / Streetlight / Public Lighting & others	50

g. Other charges:

a) Meter shifting charges (within the premises on consumer request) - Rs. 1000/-

b) Shifting of poles on consumer request - Rs. 1500/-

c) Diversion of HT/LT line on consumer request - Rs. 100/- per meter

d) Penalty for tampering/damaging of supplier equipments – As per the relevant provisions of the JERC Supply Code Regulations 2010.