



TARIFF ORDER

Business Plan for the MYT period for FY 2015-16 to FY 2017-18

Petition No. 152 of 2014

Review of ARR of FY 2014-15

And

**Determination of Aggregate Revenue Requirement for
MYT Period**

FY 2015-16 to FY 2017-18

&

Retail Tariff for FY 2015-16

Petition no. 155/2014

For

**Electricity Department, UT of Andaman & Nicobar
Islands**

JOINT ELECTRICITY REGULATORY COMMISSION

FOR GOA AND UNION TERRITORIES

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2	Public notices published by the Petitioner for inviting suggestions/comments on the Petition (Petition no. 155/2014 and 152/2014)
3	Public notice published by the Commission for intimation of public hearing
4	List of objectors

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/ Compounded Annual Growth Rate
Capex	:	Capital Expenditure
CEA	:	Central Electricity Authority
CERC	:	Central Electricity Regulatory Commission
COD	:	Commercial Operation Date
Commission	:	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
Ckt. Km	:	Circuit Kilometer
DISCOM/A&N	:	Electricity Department, UT of Andaman & Nicobar Islands
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
HPP	:	Hired Power Plant
HSD	:	High Speed Diesel Engines
HT	:	High Tension
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
NTPC	:	National Thermal Power Corporation
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
SCL	:	Sanctioned Connected Load
S/C	:	Single Circuit
SBI PLR	:	SBI Prime Lending Rate
SPCL	:	Suryachakara Power Corporation Limited
T&D	:	Transmission & Distribution
UoM	:	Unit of Measurement
VAR	:	Volt Ampere Reactive
VC	:	Variable Charges
Y-O-Y	:	Year on Year

Before the

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

Quorum¹

S. K. Chaturvedi (Chairman)

Petition No. 152/2014

Petition No. 155/2014

In the matter of

Aggregate Revenue Requirement (ARR) for MYT Period FY 2015-16 to FY 2017-18 & Retail Tariff for the Financial Year 2015-16, and Business Plan for FY 2015-16 to FY 2017-18 of the Electricity Department, Union Territory of Andaman & Nicobar Islands

Electricity Department, Union Territory of Andaman & Nicobar Islands ..Petitioner

¹ As per section 93 of the Electricity Act, 2003; no act or proceedings of the Appropriate Commission shall be questioned or shall be invalidated merely on the ground of existence of any vacancy or defect in the constitution of the Appropriate Commission. Therefore, Shri S K Chaturvedi the chairperson of the JERC constituted the valid quorum for the public hearing in respect of the determination of the ARR & tariff for FY 2015-16, due to vacancy in the position of member at that time.

ORDER

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 Andaman & Nicobar Islands

The Electricity Department, UT of Andaman & Nicobar Islands herein called ED-A&N, is responsible for power supply in the Union Territory.

As submitted by the petitioner,

“The Department of Electricity of Andaman & Nicobar Administration (“ED-A&N”) is responsible for power supply in the union territory. Power requirement of ED-A&N is met by own generation station as well as power purchase.

Andaman & Nicobar Islands is cluster of islands scattered in the Bay of Bengal. These islands are truncated from rest of India by more than 1000 kms. The total area of the territory is 8249 sq. kms having population of 379944 as per 2011 Census provisional records & average growth rate is 6.68%. The tempo of economic development has tremendously accelerated along with all-round expansion in the areas/sectors viz. (i) Shipping Services, (ii) Civil Supplies, (iii) Education, (iv)

Fisheries, (v) Tourism & Information Technology, (vi) Health, (vii) Industries, (viii) Rural Development, (ix) Social Welfare, (x) Transport, (xi) Increase in District Headquarters (xii) Central Government Department, (xiii) Public Undertaking & other offices, (xiv) Services & Utilities, (xv) Defense Establishment (xvi) Commercial Organisations/Business Centers etc. Thus, these islands have reached at the take-off stage of total economic transformation. All these economic and infrastructure developments require power as a vital input & to play a key role for achieving overall transformations.

Prior to independence a small steam driven reciprocating DG Generator of 100 KW Capacity was installed by the British at Ross Island in 1926. Direct current DG Set of 100 KW Capacity was installed at Port Blair during 1929. After independence two steam turbine generating sets of 550 KW each were established during 1951 in the power house at Chatham Island. The boilers were operated on wood fuel and saw dust, which were the waste product of Chatham Saw Mill and later switched over to Mangrove wood as fuel. This was the start of alternating current power supply at Port Blair.

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

The Electricity Department is operating and maintaining power generation, transmission & distribution system network in these islands for providing electric power supply to general public, and implements various schemes under Plan & Non Plan for augmentation of DG Generating Capacity and establishment of new power houses and T&D Systems. This department is also functioning as a Nodal Agency for implementing renewable energy program of the Ministry of New & Renewable Energy in these islands. Presently, the department is headed by a Superintending Engineer, associated with seven EEs & around thirty six AEs for

carrying out the task of power generation, transmission & distribution to the general public including schemes under non-conventional energy sources

1.3 Filing of Petition

Electricity Department, UT of Andaman and Nicobar Islands filed its business plan for the Multi Year Tariff (MYT) period for the first control period FY 2015-16 to FY 2017-18 on 17th November, 2014 and the petition for determination of Aggregate Revenue Requirement (ARR) for the control period and Determination of Tariff for FY 2015-16 on 15th December, 2014 according to the principles specified by the Joint Electricity Regulatory Commission for the state of Goa and Union Territories (Multi Year Distribution Tariff) Regulations 2014 and under sections 61, 62 and 64 of Electricity Act, 2003.

1.4 Admission of Petition

After initial scrutiny and analysis of the petition, the Commission as per its letter dated 16th December 2014 admitted the petition for Business Plan and approval of Aggregate Revenue Requirement (ARR) for the MYT Period. The Petitioner was directed to publish the summary of the petition for proposed ARR for MYT Period in leading newspapers of the union territory and upload the petition on the website of the Petitioner. The copy of the admission order is enclosed as **Annexure 1** to this order. It was also informed to the Petitioner that the Business plan order will be issued with the tariff order. The same is dealt in Para 1.8 of this order.

Electricity Department, UT of Andaman & Nicobar Islands had published a public notice on 21st January 2015 in “Bartaman”, “The Echo of India” and “The Andaman Express” newspapers and again on 04th February 2015 in the three newspapers of UT of Andaman & Nicobar Islands indicating there in the proposed ARR and Tariff for the MYT Period inviting suggestions/objections from the public. The copy of the newspaper clippings wherein public notice was published by the petitioner for the information to the stakeholders are enclosed as **Annexure 2** to this order. The Public Notice was also put on the website of the department on 23rd January 2015.

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, obtained information/clarifications wherever required and carried out technical validation with regard to the information provided.

The 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 indicated key issues related to the petition, which included power purchase cost, estimated sales and revenue submitted to the Commission, etc.

On 12.01.2015, the representatives of the Department along with the representatives of the Commission conducted the technical validation session at the Commission’s office. The Commission vide letter dated 12.01.2015 sought clarifications/additional data on the issues/discrepancies highlighted during the technical validation session. This included clarification on the compliance of directives, non-submission of audited accounts, non-submission of true-up for FY 2013-14, mismatch of certain components including revenue figures, power generation, power purchase from SPCL, HPP etc, capitalization, monthly consumption of HSD & Lubricants depreciation claimed for FY 2014-15 and validation of fuel receipts and consumption for FY 2014-15.

The Petitioner submitted its replies, in response to the queries raised by the Commission’s office, which were necessary for computation of the ARR and the resultant tariff of the Petitioner thereof through letter and through email dated

12th January, 2015.

Most of the queries raised by the Commission have been clarified by the Petitioner with the last email dated 20th January, 2015. The Commission has to rely on the information made available by the petitioner through emails and letters without waiting for affidavits which comes later on because data has been revised by the petitioner in subsequent submissions.

Table 1.1: Formal Interactions with the Petitioner

Sl. No.	Date	Action by	Subject
1	27.11.2014	Commission	Difference in the Business Plan
2	31.12.2014	Commission	Difference in the MYT Petition
3	12.01.2015	Petitioner	Additional information furnished.
4	20.01.2015	Petitioner	Further additional information furnished

1.6 Public Hearing Process

The Commission directed 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.

A public notice was published by the Petitioner for inviting objections/ suggestions from its stakeholders on the tariff petition in the leading newspapers, and was also uploaded on the Electricity Department, A&N website (<http://electricity.and.nic.in>) on 23.01.2015 for inviting objections and suggestions on their petition.

The details of public notice are attached as **Annexure 2** to this order.

1.7 Notice for public hearing

Commission 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 as per the schedule mentioned below:

Table 1.2: Schedule of Public hearing at Port Blair

Sl. No.	Date	Venue of Hearing	Time & Category of Consumers	Subject
1	06 th February 2015 Friday	Multi purpose Hall of ALHW, Port Blair	From 11:00AM onwards For all categories of consumers	Business plan and ARR for MYT Control Period FY 2015-16 to FY 2017-18

Table 1.3: Details of public notice published by Commission

Sl. No.	Date	Language	Name of the Website / Newspaper
1	21.01.2015	Bangla	Bartaman (Kolkata)
2	21.01.2015	English	The Echo of India
3	21.01.2015	English	The Andaman Express

Table 1.4: Details of Repeat public notice published by Commission

Sl. No.	Date	Language	Name of the Website / Newspaper
1	04.02.2015	Bangla	Bartaman(Kolkata)
2	04.02.2015	English	The Echo of India
3	04.02.2015	English	The Andaman Express

The copies of public notice published by the Commission for intimation of public hearing are attached as **Annexure 3** to this order.

The Commission received objections/ suggestions on the petition during the public hearing. The Commission handed over the set of these to the Petitioner for communicating their reply to the objections raised by the objectors.

During the public hearing, each person who raised objections / gave suggestions or made comments was provided an opportunity to present his/ her 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 an opportunity to express their views. The list of all objectors who gave suggestions or comments is attached at **Annexure 4** to this order.

The list includes the objectors:

1. Those who gave their written objections/ suggestions/ comments &

expressed desire to present orally also during the public hearing.

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

All these objections/suggestions/ comments were responded to by the Licensee during the hearing. Later the Licensee submitted its written reply for the written objections/suggestions of the stakeholders.

The issues and concerns expressed by stakeholders have been examined by the Commission. The major issues indicated during the public hearing, the comments/replies of the utility and the views of the Commission thereon have been summarized in **Chapter 4** of this order.

1.8 Analysis of the Commission

The Petitioner – Andaman & Nicobar Islands filed the petition for Approval of Business Plan for Control Period FY 2015-16 to FY 2017-18 on 01.10.2014 under Regulation 12.1 of the MYT Regulation 2014. The Petitioner under Regulation 12.1 of the MYT Regulations 2014 was required to submit the Business Plan by 30.09.2014. The Commission under Regulation 13.1 of the MYT Regulation 2014 was required to approve the Business Plan within 30 days from receipt of the complete business plan. Thereafter, as per Regulation 12.2 of the JERC MYT Regulations the Petitioner was required to submit MYT Petition for approval of ARR and Tariff for the Control Period of FY 2015-16 to 2017-18.

The Petitioner failed to submit the Business Plan on or before 30.09.2014, therefore, the Commission directed the Petitioner to submit the MYT Petition for approval of ARR and Tariff for the Control Period of FY 2015-16 to 2017-18.

The Petitioner submitted the Business Plan on 17.11.2014 and the MYT Petition on 15.12.2014. The Commission analysed the petitions. The petitions were found as per the Electricity Act, 2003 and Regulations framed there under. The petition for

approval of Business Plan was admitted on 16.12.2014. The MYT petition was admitted on 16.12.2014.

The Commission on 16.12.2014 decided to club both the petitions for approval of Business Plan and approval of MYT ARR and Tariff.

The Commission sent public hearing notices to all the concerned stakeholders and public at large by publication in three newspapers on 21.01.2015 and 04.02.2015.

The Commission held a joint Public Hearing of both the petitions for approval of Business Plan and approval of MYT ARR and Tariff on 06.02.2015 at Port Blair, Andaman & Nicobar Islands.

The Commission analysed the petitions, representations of the stake holders and response received from the petitioner. The Commission observed that as per Regulation 22 (c) of the JERC MYT Regulations the Petitioner is required to submit detailed supporting documents with the petition for approval of Business Plan. The supporting documents should include purpose of capital investment, capital structure, capitalization schedule, financing plan and cost benefit analysis. The Commission found that the Business Plan was not accompanied with these supporting documents.

The Commission also observed that some of the stakeholders in the Public Hearing represented that the petition for approval of the Business Plan should be filed by 30th September of the year prior to the commencement of the control period and after approval of the Business Plan the licensee should file the MYT petition. Therefore, the approval of the business plan is a prerequisite for filing the MYT Petition. But the petitioner did not file the petition for approval of Business Plan in-time and filed the petition for the MYT before approval of the Business Plan.

Regulation 12.11 of the JERC MYT Regulations provides that in case of delay / non-submission of the application for approval of Business Plan and application of

Determination of Tariff, as the case may be, additional information, the Commission may initiate Suo-moto proceedings mandating the filing of the petitions and if the petitioner fails to file the application the Commission may, on its own, decide tariff on the basis of previous year tariff details after incorporating suitable adjustments.

Regulation 9 of the JERC MYT Regulations provides that some of the controllable parameters determining tariff are linked with capital investment plan of the licensee. Therefore, approval of ARR on MYT frame work based on the capital investment plan submitted by the licensee without the supporting documents may affect the retail consumers adversely.

Regulation 38 of the JERC MYT Regulations is as under:

“If any difficulty arises in giving effect to the provisions of these Regulations, the Commission may, by general or specific order, make such provisions not inconsistent with the provisions of the Act, as may appear to be necessary for removing the difficulty.”

In the light of the above facts and circumstances the Commission is of the opinion that it is not possible to approve the Business Plan for the control period FY 2015-16 to FY 2017-18 and consequently it is also not possible to approve MYT ARR and Tariff for the control period FY 2015-16 to FY 2017-18. Hence the Commission has decided not to implement the JERC (Multi Year Distribution Tariff) Regulations, 2014 as provided under Regulation 38 for the control period FY 2015-16 to FY 2017-18 and proceeds to approve ARR and determine tariff for FY 2015-16 only under JERC (Terms and Condition for determination of Tariff) Regulations, 2009.

2. BRIEF SUMMARY OF ARR & TARIFF PETITION FOR MYT PERIOD FY 2015-16 to FY 2017-18

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 Multi Year Tariff (MYT) Regulations, 2014. These regulations shall be applicable for determination of Tariff from April 1, 2015 to March 31, 2018. These Regulations are 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 Puducherry.

As indicated in Para no. 1.3 and 1.4 of Chapter no. 1, Electricity Department, UT of Andaman & Nicobar Islands filed its petition for determination of Aggregate Revenue Requirement and Tariff for the MYT period to the Commission on 16th December 2015 under Sections 61, 62 & 64 of the Electricity Act, 2003 and relevant provisions mentioned in JERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2009 and MYT regulations 2014. The petitioner has not requested for true-up of FY 2013-14.

After initial scrutiny & analysis of the information submitted with ARR and Tariff Petition filed by ED-A&N 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. 155/2014' on 16th December, 2015.

2.2 About Electricity Department of Andaman & Nicobar Islands

The Department of Electricity of Andaman & Nicobar Administration (ED-A&N) is responsible for power supply in the union territory. Power requirement of ED-A&N is met by own generating stations and power purchase from Suryachakara Power Corporation Limited. The total area of the territory is 8249 sq. kms having

population of 379944 as per 2011 Census provisional records & average growth rate is 6.68%. These islands have reached the takeoff stage of total economic transformation. All these economic and infrastructure developments require power as a vital input and to play a key role for achieving overall transformation. Out of 824,900 hectares of geographical area, 795,000 hectares is reported for land use of which 90.9% is forest area (including 59.15% of area covered under protected forest) and 1.51% Cultivable Waste Land.

Due to the geographical & topographical peculiarities of these islands including separation by sea over great distances, there is no single power grid for the entire electrified island and instead a power house at each location caters independently to the power requirements of area/islands. There are 53 diesel power houses at different locations in these islands having DG sets of capacity ranging from 6 KW to 5000 KW (including 20 MW from IPP operated by M/s SPCL) and one hydro power station having 5.25 MW Capacity at Kalpong North Andaman. The aggregate installed capacity is 104.348 MW as on date of filing of petition and firm capacity of 73.771 MW.

2.3 Petition Summary for Aggregate Revenue Requirement for the MYT Period FY 2015-16 to FY 2017-18

The petition covers the basis, assumptions and projections of individual elements constituting the determination of ARR for the MYT Period and proposal for retail tariff for FY 2015-16. The Commission had issued the first Tariff Order for Electricity Department of UT of Andaman & Nicobar Islands (ED-A&N) on 04th June, 2012 for FY 2012-13. The Commission in its first Tariff Order dated 4th June, 2012 had approved the ARR for FY 2012-13 based on the actual cost of FY 2010-11 and estimated expenses of FY 2011-12, as submitted by the petitioner. Further, Commission had approved revision in retail tariff to meet the revenue deficit for FY 2012-13.

The Commission in its Order dated 11th April, 2014 had approved the ARR for FY 2014-15 and estimated expenses for FY 2013-14. The revenue gap of Rs. 459.41 Cr

approved for FY 2014-15 was required to be borne by the administration of A&N through non-plan funding in the Annual Plan by the Government of India to the Electricity Department of Andaman & Nicobar Islands as communicated by Assistant Secretary(Power) vide letter dated 31st March, 2014.

The Petitioner has submitted the ARR & tariff petition for the MYT Period from FY 2015-16 to FY 2017-18 based on the actual performance during FY 2010-11, FY 2011-12, FY 2012-13, FY 2013-14 (half yearly actuals-H1) as basis with supporting rationale. Based on the estimates and projections for the MYT Period, the aggregate revenue requirement for ED-A&N has been proposed at Rs. 661.96 Cr, Rs. 728.70 Cr and Rs. 800.91 Cr for the FY 2015-16, FY 2016-17 and FY 2017-18 respectively after considering the submissions of the petitioner as mentioned in the table below. The brief summary of petitioner's proposal as submitted in the petition for the MYT Period is presented below:

Table 2.1: Brief Summary of ARR for FY 2014-15(RE) and the MYT Period submitted by the petitioner

(Rs. Cr)					
Sl. No.	Item of expense	FY 2014-15 (RE)	FY 2015-16 (Projected)	FY 2016-17 (Projected)	FY 2017-18 (Projected)
1	2	3	4	5	6
1	Cost of fuel	180.55	210.09	243.12	279.99
2	Cost of power purchase	281.55	294.79	309.66	324.26
3	Employee costs	64.50	68.36	72.45	76.78
4	R&M expenses	38.98	41.31	43.79	46.40
5	Administration and general expenses	1.30	1.38	1.46	1.55
6	Depreciation	7.51	11.64	15.47	19.83
7	Interest charges (including interest on working capital)	21.40	28.86	35.56	42.94
8	Return on NFA /Equity	2.99	5.51	7.21	9.15
9	Provision for Bad Debit	0.00	0.00	0.00	0.00
10	Total revenue requirement	598.77	661.96	728.70	800.91
11	Less: non tariff income	2.45	2.57	2.70	2.83
12	Net revenue requirement (10-11)	596.32	659.38	726.00	798.07
13	Revenue from tariff	106.45	110.35	114.39	118.61
14	Gap (12-13)	489.87	549.03	611.61	679.46
15	Gap for previous year	0.00	0.00	0.00	0.00
16	Total gap (14+15)	489.87	549.03	611.61	679.46

Sl. No.	Item of expense	FY 2014-15 (RE)	FY 2015-16 (Projected)	FY 2016-17 (Projected)	FY 2017-18 (Projected)
17	Revenue surplus carried over	0.00	0.00	0.00	0.00
18	Additional revenue from proposed tariff	0.00	11.19	11.60	12.03
19	Regulatory asset	0.00	0.00	0.00	0.00
20	Energy sales (MU)	224.60	233.89	243.61	253.76

2.4 Summary of the Tariff Proposal for the MYT Period

It is further submitted by the petitioner that

“The estimated gap in the FY 2015-16 has been computed by deducting the ARR from Revenue at Existing Tariff. ED-A&N has projected gap for the FY 2015-16 at Rs. 549.03 Cr as detailed.

Tariff is a sensitive subject having substantial impact on social, economic and financial wellbeing of the public at large as well as the viability and growth of power sector. ED-A&N proposes to recover a part of the gap through hike in tariff as recovery of the total gap would result in huge burden on the consumers. The proposed tariff of the gap is detailed in the subsequent section.

The basic requirement of any Tariff Proposal is that it has to be transparent and justifiable against various policy guidelines and the framework evolved by the JERC and various SERCs. In the light of the experience gained by the other utilities in implementation of the tariff orders and regulatory requirements specified under various states and policy guidelines an attempt has been made to improve upon the present tariff design. The cost of supply computes to Rs. 28.19 per unit. Average revenue per unit is Rs. 4.72. Thus there is gap of Rs. 23.47 per unit.

It is submitted that over 95% of power is generated from diesel based generating stations. There is no other source of energy. Major component of cost of supply is cost of HSD and Lubricants. Cost of HSD has increased substantially since the last revision of tariff in FY 2012-13 and with rising cost of HSD and Lubricants cost of supply is heavily impacted. In this Tariff Proposal partial recovery of increase in

cost is proposed.

It submitted that in ED-A&N, consumer mix has main contribution from domestic consumers towards total energy consumption. The proposal for increase in tariff aims at putting less burden on domestic consumers specially those falling under lowest slab. At the proposed tariff only 18.43% of the Annual Revenue requirement would be recovered.

Considering the above, the tariff proposal for FY 2015-16 for individual categories is given below along with the comparison of existing and proposed energy charges.”

Table 2.2: Brief Summary of Tariff Proposal for the MYT period submitted by the petitioner

Sl. No	Category	Existing Charge (Rs. /kWh)	
		Existing	Proposed
1	Domestic		
	0 to 100 units	2.00	2.20
	101 units -200 units	3.70	4.10
	201 units & above	5.10	5.60
2	Commercial (General Purpose)		
	0 to 200 units	5.40	5.95
	201 units to 500 units	6.50	7.15
	501 units & above	7.25	8.00
3	Industry		
	0 to 500 units	4.45	4.90
	501 units & above	5.00	5.50
4	Bulk	9.20	10.15
5	Public Lighting	4.50	4.95
6	Irrigation Pumps & Agriculture	1.25	1.40

2.5 Prayer to the Hon'ble Commission

The petitioner respectfully prays that Hon'ble Commission may:

- *Approve the MYT for Control Period of three financial years from April 1, 2015 to March 31, 2018 for ED-A&N formulated in accordance with the Business plan, guidelines outlined as per the regulation of Joint Electricity Regulatory Commission relating to Distribution Licensee and the principles contained in Tariff Regulations;*

- *Condone any inadvertent delay /omissions /errors /rounding off differences /shortcomings and ED-A&N may please be permitted to add / change / modify / alter the petition;*
- *Permit ED-A&N to file additional data / information as may be necessary;*
- *Pass such further and other orders, as the Commission may deem fit and proper, keeping in view the facts and circumstances of the case.”*

3. APPROACH OF THE ORDER FOR DETERMINATION OF ARR & TARIFF FOR THE CONTROL PERIOD FY 2015-16 TO FY 2017-18

3.1 Introduction

As indicated in an earlier chapter of this order, Electricity Department of UT of Andaman & Nicobar Islands had filed its petition for determination of Aggregate Revenue Requirement and Tariff for the MYT Period FY 2015-16 to FY 2017-18 to the Commission on 16th December 2015 in accordance with section 61, 62 & 64 of the Electricity Act, 2003 and relevant provisions mentioned in JERC MYT Regulations, 2014.

3.2 Approach for True-up for FY 2013-14

The Commission in its last tariff order dated 11th April, 2014 had directed the petitioner to submit the true-up for FY 2013-14 along with the ARR of FY 2015-16. Since ED-A&N is currently operating as a department within the Govt. of India, the system of account keeping is on cash receipt and expense basis i.e. pro-forma accounts. The petitioner has submitted that the Annual Accounts for the FY 2013-14 has not been audited and the petition for True-up shall be submitted after completion of audit.

ED-A&N being 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 as the ED-A&N is not restructured and corporatized till date.

The JERC (Terms and Conditions for determination of Tariff) Regulations, 2009 regarding review and true up is reproduced below.

“8. Review and Truing Up

(1) The Commission shall undertake a review along with the next Tariff Order of the expenses and revenues approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised

estimates/pre-actuals of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments/ changes in case such variations are for adequate and justifiable reasons. Such an exercise shall be called 'Review'.

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

Emphasis added

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

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

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

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

The Analysis is provided in **Chapter 5 (True-Up for FY 2013-14)** of this Order.

3.3 Approach for Review for FY 2014-15

The Commission has considered the submission of the petitioner dated February 18, 2012 (received on February 23, 2012, attaching Min. of Home Affairs letter dated August 05, 1959 highlighting the strategic importance of the territory, wherein it is absolutely essential that the basic utility services such as transport, electricity etc. are provided in these areas notwithstanding the fact that the services may not be economically viable. The facts are illustrated as per office memo of Ministry of Home Affairs, Govt. of India dated August 05th, 1959 addressed to the

Planning Commission, New Delhi. The copy of the same is made available by the petitioner with its additional submission dated February 18'2012. The copy is attached as **Annexure 5** to this Order.

While the petitioner has not specifically requested for Review of FY 2014-15, the Commission, on the basis of the data submitted by petitioner, has reviewed ARR for FY 2014-15 on Suo-moto basis (based on the half yearly actuals), which was determined earlier by the Commission in its ARR order dated 11th April, 2014. The Review of ARR for FY 2014-15 is to be carried out as per the provisions of Regulation 8 of JERC Tariff Regulations, 2009, which is as under:

“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”

In view of the above, the Commission has reviewed the variations between approvals and actuals of sale of electricity, income and expenditure for FY 2014-15; and also the revised estimates based on half yearly actuals, estimated the energy sale, income and expenditure for FY 2014-15 as submitted by the petitioner and permitted necessary adjustments in cases where variations are for reasonable and justifiable reasons.

The detailed analysis & treatment of each component based on the revised estimates is provided in **Chapter 6 (Review of ARR for FY 2014-15)** of this Order.

3.4 Approach for Determination of ARR & Retail Tariff for FY 2015-16

In the determination of ARR & Tariff for MYT Period, various provisions of the JERC Tariff Regulations, 2014 pertaining Business Plan of the integrated utility are relevant and the Commission has been guided by the principles contained in section 61 of the Electricity Act, 2003 many other things to examine the sales forecast, Power Purchase Quantum and other income of expenditure.

According to Regulation 12.1 of JERC (MYT) Regulations, 2014, an application for approval of Business Plan shall be made by 30th September of the year prior to the

commencement of the control period, in accordance to the JERC (conduct of Business) Regulations, 2009.

According to Regulation 13 an Order approving or rejecting the Business Plan shall, as far as practicable be issued within thirty (30) days from receipt of a complete Business Plan.

None of the Licensees have submitted the Business Plan on 30th September, 2014 as required in Regulation 12.1. Most of the Licensees have submitted the Business Plan along with the MYT Petition. Since energy projection, Power Purchase plan, capital investment etc in the MYT Petition shall be in line with the approved Business Plan, the Commission is of the view that approval of ARR for MYT period without prior approval of Business Plan is not in order. The Commission has therefore, considered that the ARR & Tariff be determined for FY 2015-16 under JERC Regulations, 2009 and extend the implementation of the MYT Period to FY 2016-17 to FY 2018-19.

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) 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;

- g) The promotion of co-generation and generation of electricity from renewable sources of energy;
- h) The National Electricity Policy and tariff policy;
- i) In addition to above the Commission is bound by the Renewable Energy purchase obligations, as specified in JERC (Procurement of Renewable Energy) Regulations, 2010.
- j) Relevant directions given by the Hon'ble APTEL in the judgment in O.P. no. 1 of 2011.

The Commission had also considered the memo of Ministry of Home Affairs, Govt. of India dated August 05'1959 addressed to the Planning Commission, while disposing the ARR and Tariff Petition (65/2012) for FY 2012-13 which enumerates the strategic importance of the territory, and it is absolutely essential that the basic utility services such as transport, electricity etc. are provided in these areas. The facts of aforesaid memo have also been considered while disposing the ARR and Tariff Petition 155/2014 for FY 2015-16 submitted by the petitioner.

The Commission has considered the actual audited figures of income & expenditure submitted by the Petitioner for FY 2011-12, actuals for FY 2012-13, actuals of FY 2013-14 and half yearly actuals for FY 2014-15 to form the basis for projection of income and expenditure for MYT Period. Further, the Commission has relied on the actual data of FY 2012-13, FY 2013-14 and FY 2014-15 (half year) provided by the petitioner during technical validation session on 12th January, 2015 and in subsequent submissions & clarifications thereafter. The detailed Analysis & treatment of each component is provided in **Chapter 7 (Aggregate Revenue Requirement for FY 2015-16)** of this Order.

4. SUMMARY OF OBJECTIONS RAISED/SUGGESTIONS MADE, PETITIONER'S AND COMMISSION'S VIEWS

4.1 Public response to the Petition

The Petitioner has published the summary of ARR and Tariff proposal in the newspapers, copies of the petition were made available to the general public and the petition was posted on the website of the Petitioner duly inviting comments/objections from public as per provisions of the JERC (Conduct of Business) regulations 2009. No written objections were received. Some stake holders participated in the Public Hearing held on the petition at Andaman and Nicobar Islands on 06th February 2015 and some objections were received orally, which are listed below.

4.2 Objections/Suggestions, Response from Electricity Department, UT Andaman and Nicobar and Commission's views

4.3 Stakeholders Objections/Comments

Objector - I Sri. Ranjith, New Anumod Bakery

Objection: Ours is a bakery working for 30 years. We produce edible products and therefore it should come under industrial category.

Petitioner's Submission

The issue of conversion from commercial to industrial category is being considered by the department based on the certificate issued by industries department.

Commission's View

The objector may obtain certificate from Industrial Department stating that Bakery comes under "Industry", so as to consider it under industrial category.

Objector- II Sri Ramajayan, RMC. Akshay Orja

Objection:

- In Andaman and Nicobar hotels are still using electric heaters instead of solar heaters.

- In FY 2012-13 the Commission has given orders that an incentive of Rs. 50/- per month should be given for using solar water heaters but it is not yet implemented.
- Street lights are used even in day time.

Petitioner's Submission:

His demand for incorporating the rebate towards installation of Solar-water heater is being considered in the new software which is expected to be completed shortly.

Commission's View:

The petitioner should immediately start implementing the incentive for using solar heaters. ED, A&N should also take steps to see that street lights are switched off during day time.

Objector- III Shri P. KANAN, President Govt Employee Federation

Objection

- For domestic consumers rate of per unit should be decreased. He also suggested that diesel usage has to be cut down and alternate source has to be found.
- Meters should be replaced.

Petitioner's Submission:

No response.

Commission's View:

The Commission has issued road map for implementing solar usage which reduces the usage of diesel for power generation and directed the utility to install LED lights in streets to reduce consumption. The petitioner is also directed to replace all the defective meters.

Objector - IV Sri. C.P BABU

Objection:

The bills given by the utility do not contain per unit rate of electricity and helpline telephone number for complaints is also not given.

Petitioner's Submission:

No response.

Commission's Submission:

The Electricity Department, A&N is directed to provide the unit rate of electricity and the help line telephone number in the bills issued.

Objector - V Sri S.K Majumdar

Objection: The proposal of ED A&N to increase per unit rate of Domestic consumers may not be entertained. He suggested that slab units may be considered at minimum rate.

Petitioner's Submission:

Their demand for not increasing the Tariff has to be considered by the Commission based on the facts laid down in the Petition filed by ED-A&N in the finalization of ARR and MYT for the control period FY 2015-16 to FY 2017-18.

Commission's View:

The Commission has finalized the Tariffs after analysing the annual revenue requirement and the expected revenue from sale of energy to the utility. The Commission has also examined the objections raised and the response of A&N while finalising the tariff.

Objector - VI Shri Jogeshwar Lal

Objection: The proposal of ED A&N to increase per unit rate of Domestic consumers may not be entertained. He suggested that slab units may be considered at minimum rate.

Petitioner's Submission:

Their demand for not increasing the Tariff has to be considered by the Commission based on the facts laid down in the Petition filed by ED-A&N in the finalization of ARR and MYT for the control period FY 2015-16 to FY 2017-18.

Commission's View:

The Commission has finalized the Tariffs after analysing the annual revenue requirement and the expected revenue from sale of energy to the utility. The Commission has also examined the objections raised and the response of A&N while finalising the tariff.

5. TRUE-UP FOR FY 2013-14

5.1 Petitioner's Submission

The petitioner has not requested for provisional/final True-up for FY 2013-14. The petitioner has submitted that the Annual Accounts for the FY 2013-14 has not been audited and the petition for True-up shall be submitted after completion of audit.

5.2 Commission's Analysis

The Commission in its last Tariff Order dated 11th April, 2014 had directed the petitioner to submit the True-up for FY 2013-14 along with the ARR of FY 2015-16. Since, ED-A&N is currently operating as a department within the Govt. of India, the system of account keeping is on cash receipt and expense basis i.e. proforma accounts. The petitioner has submitted that the Annual Accounts for the FY 2013-14 have not been audited and the petition for True-up shall be submitted after completion of audit.

ED-A&N being 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 as the ED-A&N is not restructured and corporatized till date. Further, as per JERC (Terms and Conditions for determination of Tariff) Regulations, 2009:

Review and Truing Up

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

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

Emphasis added

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

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

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

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

Since, the audited accounts based on commercial accounting principles are still awaited, Commission is of the view that it would be inappropriate to consider provisional True up of FY 2013-14.

6. REVIEW OF ARR FOR FY 2014-15

6.1 Background

The Commission had approved the Aggregate Revenue Requirement for FY 2014-15, vide its ARR and Tariff Order dated April 11th, 2014, as per the provisions of the JERC Tariff Regulations, 2009. The Petitioner had submitted the revised estimates of sale of electricity, income and expenditure of FY 2014-15 for the review of ARR of FY 2014-15, which include the actual of the first half of FY 2014-15 and estimates of the balance year, as per Regulation 8 of JERC Tariff Regulations, 2009, in ARR and the Tariff Petition for the MYT period FY 2015-16 to FY 2017-18 on 21.01.2015. The Petitioner has provided that revised estimate for FY 2014-15 without any back up data in support of the revised estimate.

The Commission had considered the following for ARR of FY 2014-15 as per the JERC Tariff Regulations, prior to submission of the Petition for Performance Review:

- i. Actual Performance in FY 2011-12 (as per the audited accounts);
- ii. Actual Performance in FY 2012-13 (as per the audited accounts);
- iii. Reviewed estimates of FY 2013-14, including the category-wise sales, revenue and expenditure.

For this Review of FY 2014-15, the Commission has considered the following:

- a. Actual Performance in FY 2013-14;
- b. Actual Power Purchase Quantum and Cost for FY 2014-15 from April 2014 to September 2014;
- c. Details of sales and Revenue, Consumers and Connected Load for FY 2014-15 from April 2014 to September 2014;
- d. Revised estimates of FY 2014-15 of O&M expenses, Capital Expenditure based on the expenses approved for FY 2013-14 in the order dated 11th April, 2014;
- e. Non-Tariff Income;
- f. Depreciation, Interest and Finance Charges, Interest on Working Capital,

Interest on Security Deposit, and Return on Net Fixed Assets has been computed as per the JERC Tariff Regulations, 2009, and the expenses approved for FY 2013-14 in the Order dated 11th April 2014.

6.2 Review of ARR for FY 2014-15

The review of aggregate revenue requirement requires an assessment of the quantum of energy sales, energy loss, as well as various cost elements like power purchase cost, O&M expenses, interest cost and depreciation. This has been done based on the actual data for 6 months for power purchase cost, and sales, and revised estimates of FY 2014-15 based on six months actuals for O&M expenses, interest and depreciation submitted by the Petitioner. As regards various components of ARR, the Commission's analysis thereon and decision in respect of items given below are indicated 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 and Security Deposits;
- viii. Return on Capital Base/ Net Fixed Assets;
- ix. Provision for Bad and Doubtful Debts;
- x. Other expenses;
- xi. Non-Tariff Income;

6.3 Consumers, Connected load and Energy Sales

Petitioner's Submission

Energy Sales

The petitioner has stated that:

"The consumer base of ED-A&N consists of Domestic, Commercial and Industrial, consumers. The sales mix is primarily dominated by domestic consumers, followed by commercial consumers. The total consumption of domestic consumers is approximately 49 percent and Commercial consumers contribute to around 27 percent of the total sales. Thus, the sales forecast would completely depend on the sales expected in the Domestic and Commercial Categories.

The sales forecast is based on the trends observed in the sales pattern of various categories over the past years, new developments on account of Government Policies, socio-economic changes, industrial growth, etc., that would affect the consumption across various categories of consumers. The CAGR (%) for a period of five years (FY 2013-14 over FY 2009-10) for different categories has been adopted for estimating the energy sales for the FY 2014-15. Energy sales towards temporary connections have been added to the commercial category since it has been observed that temporary connections are predominantly utilised for commercial purposes. Consumption in the temporary connection category in FY 2013-14 was 0.72 MUs. The same has been projected for the year FY 2014-15 since the CAGR for the category reflected an abnormal growth trend. In addition, the growth trend in the number of consumers and connected load has been taken as a guiding factor for arriving at the requirement of demand and energy."

The Petitioner has considered the past trend for projecting the Energy Sales

(MUs) and the number of consumers, as mentioned in the following Table:

Table 6.1: Details of Energy Sales during the Past Years and Estimations for FY 2014-15 (MU)

Category	FY 2009-10 (Actuals)	FY 2010-11 (Actuals)	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15 (Estimate)
Domestic	83.96	90.20	93.98	101.36	107.38	112.80
Commercial	49.12	52.17	54.02	55.22	56.93	58.69
Industrial	8.72	8.64	10.89	11.17	11.97	12.76
Bulk	25.99	26.02	29.57	28.98	29.32	30.03
Public Lighting	8.36	9.15	9.26	8.72	9.24	9.42
Irrigation, Pumps & Agriculture	0.74	0.83	0.90	0.91	0.87	0.90
Total	176.90	187.01	198.62	206.35	215.71	224.60

The Petitioner has considered the average growth rate (%) for projecting the Energy Sales (MUs) for FY 2014-15, as mentioned in the following Table:

Table 6.2: Growth rate considered for FY 2014-15 (%)

Sl. No.	Category	Assumed Growth rate for FY 2014-15
1	Domestic	5.04%
2	Commercial	3.13%
3	Industrial	6.55%
4	Bulk	2.44%
5	Public Lighting	2.02%
6	Irrigation Pumps & Agriculture	3.35%

As part of submission of additional data, the Petitioner has furnished the month-wise category wise actual energy sales for FY 2013-14 and FY 2014-15 (up to September 2014).

Number of Consumers

The petitioner has stated that:

" The forecast of the number of consumers is based on the trends observed in the connections pattern of various categories over the past years, new developments on account of Government policies, Socio-economic changes, industrial growth, etc., that would affect consumption across various categories of consumers. The CAGR (%) for a period of five years (FY 2013-14 over FY 2009-10) for different categories has been adopted for estimating the number of consumers for the FY 2014-15. However, normalisation has been undertaken for certain categories

where an abnormal rise or reduction has been observed. Temporary connections have been added to the commercial category since it has been observed that temporary connections are predominantly utilized for commercial purposes.”

Table 6.3: Details of the Number of Consumers during Past years

Sl. No.	Category	FY 2009-10 (Actuals)	FY 2010-11 (Actuals)	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15 (Estimate)
1	Domestic	76479	81741	91843	93757	97738	102652
2	Commercial	15626	16131	16767	17291	17885	18257
3	Industrial	461	457	493	501	514	525
4	Bulk	44	48	55	56	57	60
5	Public Lighting	434	505	552	649	626	674
6	Irrigation Pumps & Agriculture	177	186	237	218	226	237
	Total	93221	99068	110002	112472	117046	122406

Commission’s Analysis

As per Sub-Regulation (2) (ii) of Regulation 13 of JERC Tariff Regulations 2009:

“(ii) The estimated figures for the current financial year should be based on the 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 the known and measurable changes expected to occur between these. These adjustments must be specifically documented and justified.”

The Commission estimated the sales for the second half of the current financial year based on the actual figures for the first half and by adopting the H2 CAGR of sales from FY 2011-12 to FY 2013-14.

The category-wise number of consumers, as projected by the Petitioner, are approved.

The approved Sales, Connected Load and the number of consumers for the FY 2014-15 have been shown in the Table below:

Table 6.4: Category-wise Sales Approved by the Commission for FY 2014-15 (RE) (MU)

Sl. No.	Category/Consumption Slab	FY 2014-15 (RE)					
		Petitioner's submission	Approved in T.O. of 11.04.2014	Petitioner's submission for review	H1 (Submitted by the Petitioner)	H2 (Approved by the Commission)	Total Sales Approved by the Commission
A	Domestic	114.03	117.18	112.8	55.87	57.26	113.13
B	Commercial	61.29	58.96	58.69	29.07	29.61	58.68
C	Industrial	12.98	13.97	12.76	6.32	6.41	12.73
D	Bulk	30.54	31.01	30.03	14.88	14.18	29.06
E	Public Lighting	8.76	9.42	9.42	4.67	4.67	9.34
F	Irrigation Pumps & Agriculture	1.02	0.94	0.9	0.45	0.42	0.87
	Total	228.62	231.49	224.60	111.26	112.55	223.81

Table 6.5: Category-wise Number of Consumers Approved by the Commission for FY 2014-15

S. No.	Category/Consumption Slab	FY 2014-15			
		(Petitioner's submission)	Approved in T.O. of 11.04.2014	Petitioner's Submission for Review	Approved by the Commission
A	Domestic	106617	96799	102652	102652
B	Commercial	18049	17910	18257	18257
C	Industrial	523	511	525	525
D	Bulk	61	79	60	60
E	Public Lighting	808	716	674	674
F	Irrigation Pumps & Agriculture	221	218	237	237
	Grand Total	126278	116233	122406	122405

Table 6.6: Category- wise Connected Load Approved by the Commission for FY 2014-15 (kW)

Sl. No.	Category/Consumption Slab	FY 2014-15 (Approved by the Commission)
A	Domestic	103088.11
B	Commercial	63737.55
C	Industrial	11030.06
D	Bulk	10913.95
E	Public Lighting	4284.35
F	Irrigation Pumps & Agriculture	901.46
	Grand Total (in kW)	193955.48
	Grand Total (in MW)	193.96

6.4 Transmission & Distribution Loss

Petitioner's Submission

The petitioner has submitted that:

“ED-A&N has achieved a significant reduction in distribution losses during recent years. ED-A&N submits that the system improvement works executed every year, under the plan schemes, have also contributed to the reduction of distribution losses. However, it may also be noted that reduction of distribution losses may not be possible beyond a certain level due to topographical conditions and technical limitations. The distribution losses in the ED-A&N distribution network have been in the range of approximately 18% to 20% in the past. For the purpose of FY 2014-15 ARR, the losses have been retained at 17% for the FY 2014-15.”

Commission's Analysis

The Commission, in its ARR and Tariff Order for FY 2014-15, had approved the targeted T&D loss level of 17%. The Petitioner has furnished the actual T&D loss for FY 2013-14 on the basis of the actual figures of sales and energy availability for FY 2013-14, while the Commission has estimated, from the available data, the actual loss level for FY 2013-14 at 19.39%.

As per Regulation 15 of JERC Tariff Regulations, 2009:

“15. AT& C Losses

- 1. The licensee shall give information of total AT&C losses in the previous year and the 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 programme 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, the 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.”*

It is noted by the Commission that the Petitioner has not provided the energy audit report, nor any basis for increase of T&D loss level to 19.18% from 18.03% (approved for FY 2013-14 in the Tariff Order dated 11th April, 2014).

The Petitioner has submitted that various schemes, like extension of T&D lines, erection of new distribution transformers, replacement of old defective meters, distribution transformer metering, replacement of old conductors, and providing HT meters in feeders, being undertaken by the ED A&N will lead to progressive reduction in losses.

The sharing of gain on account of over-achievement/under-achievement of targets specified by the Commission will be dealt in the true-up of FY 2014-15 on the basis of final figures of available power, energy sales for FY 2014-15, as per the audited accounts.

Accordingly, for the purpose of this Order, the Commission, while taking into account the coastal environment and topography of these islands, **retains the**

T&D loss level of 17% (approved in the Order dated 11th April 2014) as reasonable and approves the same for the purpose of Review of ARR of FY 2014-15.

6.5 Energy Balance

Petitioner's Submission

The Petitioner submits that the energy requirement for sale within the islands is 270.60 Million Units for FY 2014-15, after considering the T&D losses of 17%.

As submitted by the Petitioner:

"The energy requirement of ED-A&N is mainly met from own generation and power purchase from IPP (M/s Surya Chakra Corporation Limited), HPPs & NTPC (SPV). There is no availability of power from Central Generating Stations or from other sources/ open market/ power exchanges, etc. Own generation accounts for around 46.56% and 36.68% of the total power requirement for FY 2012-13 & 2013-14 respectively and power purchase accounts for around 53.44% & 63.32% of the total power requirement for 2012-13 & 2013-14 respectively and it is estimated that approximately 37.37% & 62.63% of the total energy requirement for FY 2014-15 shall be met by own generation and power purchase respectively. "

Commission's Analysis

Based on the approved energy sales of 231.49 million units and T&D losses of 17% for FY 2014-15, in its Tariff Order dated 11th April 2014, the energy requirement for sale within the islands was approved at 278.90 million units for FY 2014-15.

Based on the actual performance of DG sets of IPP during the first half of FY 2014-15 and the submissions made by the Petitioner to increase the energy availability from their own DG sets during that period, the Commission has taken a pragmatic view and considered the generation during the second half of FY 2014-15 from the own DG sets of the department, so that the total energy requirement is met from power purchase and own generation.

The detailed Analysis of power purchase from M/s SPCL and own generation has been indicated in Para 6.6. As stated by the Petitioner, the energy requirement is mainly met from own generation and power purchase from M/s SPCL, HPPs and NTPC's SPV. It can also be observed that the energy requirements of the 29 islands vary during the year and are mainly met from the generating sets installed in these islands.

The Commission has already pointed out in the previous Tariff Orders that, given the heat rate and efficiency of the power houses maintained by the Petitioner, the generation efficiency and the Plant Load Factor of each DG set seem to be very low. The Petitioner needs to look into this aspect carefully to reduce high generation cost of its own DG Sets.

In view of this, the Commission had also desired information in the following directive given by the Commission in the Tariff Order dated 04th June 2012 for FY 2012-13.

“There are 135 no. of diesel generating sets, excluding 4 DG sets of M/s SPCL located in the 29 islands of Andaman & Nicobar catering to their electricity needs; the capacity of diesel generating sets of ED-A&N varies from 12 KW to 2500 KW. 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 by each generating station can be ascertained for generation of one unit of energy. In fact, there should also be proper accounting of generating unit wise fuel receipts & issues. The ED-A&N is directed to evolve a system of accounting of fuel received at the port, dispatched island-wise, actual quantity received on the islands and the actual quantity consumed island-wise for generating electricity; so that actual fuel consumption per unit generation, along with the variation, could be worked out. Accordingly the petitioner is directed to furnish such details along with the next filing. “

From the data of generation, the de-rated capacity, consumption of HSD & Lubricating oil for FY 2013-14, FY 2014-15 (H1) furnished by the Petitioner (as part of additional information), it could be observed that some of the own DG sets may be in the standby mode of operation and some may be inefficient. Now, the Commission feels that such DG sets need to be identified. It is, however, to be noted that the Petitioner had submitted incomplete information required as part of ARR and Tariff Petition for FY 2014-15. As such, the fuel consumption and heat rate in the previous Tariff Order was provisionally considered, subject to true-up, based on the actual data to be submitted by the Petitioner.

The Table below captures the figures as submitted by the petitioner and that approved for review of ARR of FY 2014-15:

Table 6.7: Energy Balance

Sl. No.	Particulars	FY 2014-15 (MU)			
		Petitioner's submission	Approved in T.O. of 11.04.2014	Petitioner's submission for review	Approved by the Commission
A)	ENERGY REQUIREMENT (in MU)				
1	Energy sales within the UT (in MU)	228.62	231.49	224.6	223.81
2	Total sales within the UT	228.62	231.49	224.6	223.81
3	Transmission and Distribution losses				
i)	%	17.00%	17.00%	17.00%	17.00%
ii)	MU	46.83	47.41	46.00	45.84
	Energy required at the Generator End for Sale to Retail Consumers	275.45	278.90	270.60	269.65
B)	ENERGY REQUIRED AT GENERATOR END	275.45	278.90	270.60	269.65
1	Gross Availability (in MUs)	273.34	278.95	270.60	269.65
A	NTPC Solar	0.01	5.03	6.48	6.5
B	Hydel	12.03	11.54	4.48	11.03
C	IPP	104.4	92.49	89.78	92.35
D	HPP (Hired Power Plant)	45.65	79.59	72.04	68.35
E	Own Generation	111.25	90.31	101.14	90.92
3	Gross Purchase including PX (in MUs)	273.34	278.95	273.92	269.15

6.6 Power Purchase Quantum and Cost Petitioner's Submission

Source of Power

The Petitioner submits that ED-A&N has 53 own generating stations and meets around 40%-45% of its total energy requirement from its own generation. The balance requirement of power is met from purchase from IPP (SPCL), HPPs and NTPC (SPV). The details of power generating stations, submitted as part of additional submission, are given below:

Table 6.8: Details of Power Generating Stations for FY 2014-15

Sl. No.	Source	Location	Installed Capacity (in MW)			Power House wise Installed Capacity (in MW)	De-rated Capacity (in MW)
			DG Size (KW)	Nos	MW		
Power Purchase							
1	IPP – SPCL	South Andaman	5000	4	20	20	15
2	HPP-I	South Andaman	1000	5	5	5	0.6
3	HPP-II	South Andaman	1250	8	10	10	10
4	HPP-III	North Andaman	1000	1	1	1	1
5	G/Ch. SPV	South Andaman	5000	1	5	5	5
Own Generation							
6	Chatham	South Andaman	2500	6	15	15	12.5
7	Phoenix Bay	South Andaman	1000	2	2	8	6.6
			1200	5	6		
8	Raj Niwas	South Andaman	256	2	0.512	1.024	0.6
9	Medical	South Andaman	256	1	0.256		
10	Secretariat	South Andaman	256	1	0.256		
11	RutLand	Rutland	12	1	0.012	0.024	0.024
12	45 Acre	Rutland	12	1	0.012		
13	Neil Island	Neil Island	128	3	0.384	0.634	0.371
			100	2	0.2		
			50	1	0.05		
14	Havelock	Havelock	256	5	1.28	1.73	1.44
			50	1	0.05		
			400	1	0.4		
15	Hutbay	Little Andaman	250	1	0.25	5.65	2.595
			800	3	2.4		
			1000	3	3		
16	Dugong Creek	Little Andaman	16	2	0.032	0.047	0.025
			15	1	0.015		
17	Strait Island	Strait Island	15	1	0.015	0.015	0.028
18	Baratang	Middle Andaman	256	1	0.256	0.512	0.512
			256	1	0.256		
19	Rangat Bay	Middle Andaman	800	4	3.2	10.036	6.71
			1000	5	5		
			248	7	1.736		

Sl. No.	Source	Location	Installed Capacity (in MW)			Power House wise Installed Capacity (in MW)	De-rated Capacity (in MW)			
			DG Size (KW)	Nos	MW					
			100	1	0.1					
20	Bangaon	Middle Andaman	16	1	0.016	0.016				
21	Hanspuri	Middle Andaman	12	1	0.012	0.027				
			15	1	0.015					
22	Long Island	Middle Andaman	128	4	0.512	0.892	0.551			
			65	2	0.13					
			50	5	0.25					
23	Gandhi Nagar	North Andaman	60	1	0.06	0.06	0.23			
24	Ganesh Nagar		65	1	0.065	0.065				
25	Shanti Nagar		65	1	0.065	0.065				
26	Smith Island		40	1	0.04	0.04				
27	Sita Nagar		256	3	0.768	2.37	2.37			
			800	2	1.6					
28	KHEP**		1750	3	5.25	5.25	4.8			
29	Kinyuka NPH	Car Nicobar	1000	4	4	5.636	2.7			
			100	1	0.1					
30	Headquarters		256	5	1.28					
			128	2	0.256					
31	Kamorta	Kamorta	256	4	1.024	1.236	0.96			
32	Bunderkhari		12	1	0.012					
33	Derring		8	1	0.008					
			12	1	0.012					
34	Alukheak		6	1	0.006					
35	Changua		12	1	0.012					
			6	1	0.006					
36	Manak		24	1	0.024					
			12	1	0.012					
37	Pillpillow		8	1	0.008					
			24	1	0.024					
38	Kakana		32	1	0.032					
			24	1	0.024					
39	Champion		Nancowry	65	3			0.195	0.323	0.08
				50	2			0.1		
40	Hitoi		12	1	0.012					
			8	2	0.016					
41	Katchal NTPC	Katchal	250	3	0.75	1.23	1.03			
42	Katchal NPH		256	1	0.256					
			100	1	0.1					
			50	2	0.1					
43	Upper Katchal		12	2	0.024					
44	Teressa	Teressa	50	3	0.15	0.756	0.53			
			256	2	0.512					
45	Chukmachi		32	1	0.032					
			12	1	0.012					

Sl. No.	Source	Location	Installed Capacity (in MW)			Power House wise Installed Capacity (in MW)	De-rated Capacity (in MW)		
			DG Size (KW)	Nos	MW				
46	Minyuk		50	1	0.05				
47	Chowra	Chowra	50	2	0.1	0.164	0.164		
			32	2	0.064				
48	Campbell Bay	Great Nicobar	800	3	2.4	2.848	2.3		
			256	1	0.256				
			50	1	0.05				
			24	1	0.024				
			49	Afra Bay	32			1	0.032
			50	Pilolow	12			1	0.012
			51	Pilobha	12			1	0.012
52	Pilowpanja	12	1	0.012					
53	Macachuwa	50	1	0.05					
Total			32289	176	104.65	104.65	78.72		
Power Purchase			13250	19	41	41	31.6		
Own Generation			19039	157	63.648	63.65	47.12		

Assumptions for Power Generation/Projections of Power Purchase

The merit order dispatch principles are typically adopted when determining the power purchases from various generating stations. However, in the present case, even though there are limited sources of purchase of power, 100% of the generation is available to ED-A&N. Accordingly, ED-A&N has considered utilisation /purchase of the power available from all the possible sources during FY 2014-15 to meet the demand to the extent possible.

Power Purchase cost is a function of the energy requirement and the price of available power from the different sources for meeting the energy requirements. The energy requirements of ED-A&N for FY 2014-15 is proposed to be met from own generation and power purchase from sources, as detailed above.

ED-A&N has projected the quantum of power generation from its own generating stations, based on the units generated for the FY2012-13 and 2013-14. The details of the computation of power generation and purchases are provided in Format-4 of the formats submitted, along with the filing.

Table 6.9: Summary of Power Purchase Expenses of ED-A&N for FY 2014-15

Sr. No	Source	Capacity (MW)	Firm allocation to Licensee		Availability / PLF (%)	Energy recd. by Licensee (MU)	FC (Rs.crore)	VC (Rs.crore)	Others (Rs.crore)	Total (Rs.crore)
			%	MW						
1	2	4	5		7	12	14	15	16	17
1	Power Purchase									
i.	SPCL	20	100	20	51.24	89.78	16.3	131.19	0	147.50
ii.	HPP- I	5	100	5	6.05	2.65	0.36	4.06	0	4.43
iii.	HPP-II	10	100	10	79.21	69.39	9.59	106.45	0	116.03
iv.	G/Charama (SPV)NTPC	5	100	5	14.79	6.48	0	5.03	0	5.03
v.	Others				44.22	4.48	1.69	6.87	0	8.56
				40		172.77	27.95	253.60	0	281.55

Estimation of Power Purchase and Cost

The generation forecast is based on the plant availability and energy demand for the period. Accordingly, generation for FY 2014-15 has been estimated.

Table 6.10: Estimated own Power Generation for FY 2014-15 by the Petitioner

Particulars	(MU)					
	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15
Units Generated	94.28	99.24	109.41	123.29	102.19	106.92
Auxiliary consumption	3.57	4.14	4.05	4.42	4.04	5.78
Sent out	90.71	95.1	105.36	118.87	98.15	101.14

Cost of Fuel and Lubricants

The Petitioner has submitted that out of the total own generation of 102.19 MUs in FY 2013-14, 89.77 MUs were generated from its Diesel power houses and only 12.42 MUs were generated from the Hydro Power Station. Hence, the cost of fuel (HSD and lubricants) is a major component of the cost of generation. Details of cost of fuel are provided below:

Table 6.11: Estimated Cost of Fuel for FY 2014-15 by the Petitioner

Type of Fuel	(Rs. Cr)	
	FY 2013-14	FY 2014-15
HSD	162.0	178.0
Lubricants	2.29	2.51
Total	164.3	180.5

Commission's Analysis

As brought out in the Section on energy balance, the quantum of power purchase and from own generation, approved by the Commission in its Tariff Order dated 11th April, 2014, was 183.515 million units and 105.629 million units at an approved power purchase cost of Rs. 182.18 crore and cost of fuel of Rs. 265.15 crore respectively.

The Commission, as part of prudence check, verified the station-wise power purchase bills submitted by the Petitioner for FY 2014-15 for first six months for power procured from DG sets set up by M/s SPCL. The Commission has considered the actual HSD and lubricating oil consumption of FY 2014-15(H1), actual generation, auxiliary consumption, density of fuel, calorific value of fuel, which is used for estimating the heat rate and consumption of lubricating oil per litre.

The Commission, in the light of diversity in the data for power generation and consumption of fuel and lubricants submitted by the Petitioner in previous Petitions, had directed the Petitioner to evolve an efficient system to account for every litre of fuel issued and consumed for generating electricity.

The summary of power generated and delivered by M/s SPCL for first six months of FY 2014-15 as verified from the bills is mentioned below:

Table 6.12: Summary of Invoices of IPP (Verified for FY 2013-14 (H1))

Sl. No.	Particulars	April	May	June	July	August	September
1	At the Generation Point	9678400	5756000	7858200	8174400	8422500	8076700
2	At the Delivery Point	9327000	5505400	7589680	7899400	8144880	7795280
3	Auxiliary Consumption	351400	250600	268520	275000	277620	281420
4	Auxiliary Consumption (%)	3.63	4.35	3.42	3.36	3.30	3.48
	PLF & Availability						
1	Installed Capacity	14400000	14880000	14400000	14880000	14880000	14400000
2	Operating PLF for the month	67.21%	38.68%	54.57%	54.94%	56.60%	56.09%
3	Average Capacity (in MW)	19.50	19.87	19.56	17.64	18.66	19.84
4	% availability	97.52%	99.33%	97.78%	88.20%	93.28%	99.22%

Table 6.13: Summary of calculation of HSD consumption by IPP for FY 2013-14 (H1)

Sl. No.	Particulars	April	May	June	July	August	September
1	Billing Units (KWh)	9678400	5756000	7858200	8174400	8422500	8076700
2	Total K. Cal @2010 K.Cal/KWh	19453584000	11569560000	15794982000	16430544000	16929225000	16234167000
3	Wt. Avg. Calorific Value of 1 Kg. HSD	10265.25	10263	10270.37	10256.68	10263.7	10268.26
4	HSD Consumption (in Kg) (2/3)	1895091	1127308	1537918	1601936	1649427	1581005
5	Density of HSD (ambient)	0.8221256	0.8220244	0.8205722	0.8262559	0.8231952	0.821502
6	HSD Consumption (in Litres) (4/5)	2305111.419	1371379.979	1874201.349	1938789.071	2003688.927	1924529.3
7	Wt. Avg. Cost of HSD/KL (Rs.)	38345.17	50118.28	51910.36	55437.36	57551.87	61392.75
8	Cost of HSD consumed (in Rs.)	88389889.23	68731205.79	97290466.72	107481347.7	115316044.7	118152146.2

Table 6.14: Summary of Calculation of lub. Oil Consumption by IPP for FY 2013-14 (H1)

Sl. No.	Lube Oil Payment Calculation	April	May	June	July	August	September
1	Billing Units (KWh)	9678400	5756000	7858200	8174400	8422500	8076700
2	Total Consumption in Kg @1.1Gm	10646.24	6331.6	8644.02	8991.84	9264.75	8884.37
3	Density of Lube Oil	0.8894231	0.8894231	0.8894231	0.8894231	0.8894231	0.8894231
4	Lube Oil Consumption (in Litres)	11969.83	7118.77	9718.68	10109.74	10416.58	9988.91
5	Cost of Lube Oil/Litre (Rs.)	169.51	173.62	173.24	173.12	173.04	173.02
6	Cost of Lube Oil consumed (in Rs)	2029005.25	1235961.1	1683664.4	1750198.9	1802485.61	1728281.73

The summary of the verified quantum of power purchase units for the first six months of FY 2014-15 from IPP, HPPs, NTPC Solar and own generation is presented below:

Table 6.15: Summary of Power Purchase Units for the First Six Months of FY 2014-15 (H1)

Sl. No.	Station	Location	Capacity in MW		Generati on on its Full load in Kwh) H1	Actual Genera tion (in Mus)- H1	Availab ility / PLF (in %) - H1	Auxiliary Consump tion (%)	Net Energy Available sent out (MU) - H1
			Instal led	Derat ed					
	Thermal Power Generation								
1	IPP – SPCL	South Andaman	20	15	65700000	47.95	72.98%	3.70%	46.18
2	G/Charama SPV	South Andaman	5	5	21900000	3.25	14.84%	0.00%	3.25
	Power Purchase (Hired power plants)								
3	HPP-I	South Andaman	5	5	21900000	1.06	4.84%	3.70%	1.02

Sl. No.	Station	Location	Capacity in MW		Generati on on its Full load in Kwh) H1	Actual Genera tion (in Mus)- H1	Availab ility / PLF (in %) - H1	Auxiliary Consump tion (%)	Net Energy Available sent out (MU) - H1
			Instal led	Derat ed					
4	HPP-II	South Andaman	10	10	43800000	34.43	78.61%	3.70%	33.16
5	HPP-III Mayabunder	North Andaman	1	1	4380000	2.69	61.42%	3.70%	2.59
	Total Power Purchase					89.38			86.19
	Own Generation								
6	Chatham	South Andaman	15	12.50	42048000	12.39	29.48%	4.74%	11.81
7	Phoenix Bay	South Andaman	8	6.60	28908000	7.46	25.82%	2.58%	7.27
8	Raj Niwas	South Andaman	0.512	0.40	2242560	0.05	2.45%	0.00%	0.05
9	Medical & Secretariat	South Andaman	0.512	0.20	2242560	0.00	0.16%	0.00%	0.00
10	Neil Island	South Andaman	0.634	0.70	1624980	0.80	49.32%	2.14%	0.78
11	Havelock	South Andaman	1.73	1.44	4822380	3.18	65.93%	0.22%	3.17
12	RutLand	South Andaman	0.024	0.01	105120	0.02	19.24%	2.96%	0.02
13	Baratang	Middle Andaman	0.512	0.50	2242560	0.26	11.49%	0.75%	0.26
14	Rangat Bay and Banagaon	Middle Andaman	10.052	6.60	29271540	11.76	40.16%	5.01%	11.17
15	Long Island	Middle Andaman	0.892	0.55	1182600	0.33	27.60%	8.58%	0.30
16	Strait Island	South Andaman	0.015	0.02	65700	0.04	65.84%	0.03%	0.04
17	Hanspuri	Middle Andaman	0.027	0.02	118260	0.02	13.60%	12.45%	0.01
18	Jagannath Dera	North Andaman	0	0.00	0	0.00	0	6.95%	0.00
19	Paschim Sagar	North Andaman	0	1.00	0	2.33	0	3.54%	2.25
20	Smith Island	North Andaman	0.23	0.04	1007400	0.00	0.00%	4.27%	0.00
21	Sita Nagar	North Andaman	2.368	2.37	6657600	0.90	13.53%	1.26%	0.89
22	KHEP**	North Andaman	5.25	4.80	21024000	7.12	33.85%	1.47%	7.01
23	Hutbay	South Andaman	5.65	3.10	11366100	5.77	50.78%	4.28%	5.52
24	Dugong Creek	South Andaman	0.047	0.04	109500	0.02	17.94%	1.77%	0.02
25	NPH Car Nicobar	Nicobar	5.636	4.62	11826000	5.34	45.12%	5.09%	5.06

Sl. No.	Station	Location	Capacity in MW		Generati on on its Full load in Kwh) H1	Actual Genera tion (in Mus)- H1	Availab ility / PLF (in %) - H1	Auxiliary Consum ption (%)	Net Energy Available sent out (MU) - H1
			Instal led	Derat ed					
26	Karmorta+ Community Power Houses)	Nicobar	1.124	0.96	2882040	1.42	49.34%	0.43%	1.42
27	Pillpillow	Nicobar	0.056	0.06	245280	0.00	0.00%	1.65%	0.00
28	Kakana	Nicobar	0.056	0.06	245280	0.00	0.00%	2.38%	0.00
29	Champion	Nicobar	0.323	0.20	350400	0.18	52.73%	2.13%	0.18
30	Katchal	Nicobar	1.23	1.03	3022200	0.73	24.09%	1.94%	0.71
31	Teressa	Nicobar	0.756	0.53	2049840	0.46	22.63%	1.68%	0.46
32	Choera	Nicobar	0.164	0.16	516840	0.14	26.43%	4.20%	0.13
33	Campbell Bay	Nicobar	2.848	2.30	8475300	3.08	36.38%	2.61%	3.00
	Total Own Generation					63.81			61.55
	Grand Total					153.19			147.74

*** Hydro Power Plant at Kalpong, North Andaman*

Gross Heat Rate

The Commission, while estimating the energy availability, has noticed that the Gross Heat Rate of the stations owned by ED-A&N has been at a very high level in FY 2014-15 (H1). The Commission is of the view that such a high station heat rate clearly indicates the wastage/non-utilisation of HSD issued to these stations for generation of electricity. The Commission would like to emphasise that it is not appropriate to consider such wastage/non-utilisation of HSD towards computation of Average Cost of Supply.

While the IPP – Suryachakra Power Corporation Limited is being operated / billed at Station Heat Rate of 2010 kcal/kWh, the Station Heat Rate of stations owned by ED-A&N should be at par with that. As no information of the rated Station Heat Rate of individual stations has been provided by ED-A&N, the Commission has decided to limit the Station Heat Rate of all the stations owned by ED-A&N at 2200 kCal/kWh.

While approving the Gross Heat Rate @ 2200 kCal/kWh, the Commission has placed reliance on Notification No. 7/2(4)/2000-CERC dated 29th February, 2000, wherein the CERC, while determining the Operational Norms for Thermal Generation Tariff, had invited the views of stakeholders regarding the

supplementary document received from the Central Electricity Authority. In this document, the CEA has mentioned that:

“The Gross Heat Rate of the Diesel Generating Unit at standard reference conditions, as per the latest version of ISO – 3046, shall be (a) the following values, or (b) the Guaranteed Heat Rate corresponding to MCR, whichever is less:

Sl. No.	Type of D.G Engine				Gross Heat Rate in Kcal/Kwh
1	Medium Speed	4	-	Stroke	2000
2	Low Speed	2	-	Stroke	1900

It is evident from the above that, as per ISO certification, the gross heat rate should not exceed 2000 kCal/kWh. However, factoring the topography of the A&N islands, the remote location of some of these stations, along with the age of the stations, clubbed with the fact that IPP operating in similar conditions has a Gross Heat Rate of 2010 kcal/kWh, the Commission is of view that 2200 kCal/kWh is reasonable and, accordingly, approves the upper limit of Gross Heat Rate for Own Generating Stations at this level.

However, the Commission has considered the actual Gross Heat Rate for the hired Power Plants at the actual FY 2014-15 (H1) levels and will review the same at the stage of True-Up of FY 2014-15

The Commission also directs the Petitioner to submit a roadmap for achieving the gross heat rate at the currently approved level, for stations that have a higher gross heat rate, by 30th September, 2015, along with the rated gross heat rate and de-rating factors, if any.

The station-wise actual and approved Station Heat Rate for FY 2014-15 is tabulated below:

Table 6.16: Summary of Actual and Approved Gross Heat Rate for FY 2014-15

Sl. No.	Station	Location	Gross Heat Rate		Wt Avg Calorific Value		Density of Lube Oil
			FY 14 H1 (Actual)	FY 14 H1 (Approved)	FY 14 H1 (Actual)	Density of HSD	
Thermal Power Generation							
1	IPP – SPCL	South Andaman	2010	2010	10260	0.822126	0.889423
2	G/Charama SPV	South	0	0	10260	0.822126	0.889423

Sl. No.	Station	Location	Gross Heat Rate		Wt Avg Calorific Value		Density of Lube Oil
			FY 14 H1 (Actual)	FY 14 H1 (Approved)	FY 14 H1 (Actual)	Density of HSD	
		Andaman					
	Power Purchase (Hired Power Plants)						
3	HPP-I	South Andaman	2870	2870	10260	0.822126	0.889423
4	HPP-II	South Andaman	1781	1781	10260	0.822126	0.889423
5	HPP-III Mayabunder	North Andaman	1781	1781	10260	0.822126	0.889423
	Own Generation						
6	Chatham	South Andaman	2652	2200	10260	0.822126	0.889423
7	Phoenix Bay	South Andaman	2506	2200	10260	0.822126	0.889423
8	Raj Niwas	South Andaman	4166	2200	10260	0.822126	0.889423
9	Medical & Secretariat	South Andaman	4737	2200	10260	0.822126	0.889423
10	Neil Island	South Andaman	3564	2200	10260	0.822126	0.889423
11	Havelock	South Andaman	2973	2200	10260	0.822126	0.889423
12	RutLand	South Andaman	3514	2200	10260	0.822126	0.889423
13	Baratang	Middle Andaman	2726	2200	10260	0.822126	0.889423
14	Rangat Bay and Banagaon	Middle Andaman	2676	2200	10260	0.822126	0.889423
15	Long Island	Middle Andaman	3323	2200	10260	0.822126	0.889423
16	Strait Island	South Andaman	2214	1465	10260	0.822126	0.889423
17	Hanspuri	Middle Andaman	2916	2200	10260	0.822126	0.889423
18	Jagannath Dera	North Andaman	0	0	0	0	0
19	Paschim Sagar	North Andaman	0	0	0	0	0
20	Smith Island	North Andaman	0	0	0	0	0
21	Sita Nagar	North Andaman	3333	2200	10260	0.822126	0.889423
22	KHEP**	North Andaman	0	0	0	0	0
23	Hutbay	South Andaman	2599	2200	10260	0.822126	0.889423
24	Dugong Creek	South Andaman	6210	2200	10260	0.822126	0.889423
25	NPH Car Nicobar	Nicobar	2629	2200	10260	0.822126	0.889423
26	Karmorta + Community	Nicobar	2811	2200	10260	0.822126	0.889423

Sl. No.	Station	Location	Gross Heat Rate		Wt Avg Calorific Value		Density of Lube Oil
			FY 14 H1 (Actual)	FY 14 H1 (Approved)	FY 14 H1 (Actual)	Density of HSD	
	(Power Houses)						
27	Pillpillow	Nicobar	0	0	0	0	0
28	Kakana	Nicobar	0	0	0	0	0
29	Champion	Nicobar	3324	2200	10260	0.822126	0.889423
30	Katchal	Nicobar	2840	2200	10260	0.822126	0.889423
31	Teressa	Nicobar	3173	2200	10260	0.822126	0.889423
32	Choera	Nicobar	3255	2200	10260	0.822126	0.889423
33	Campbell Bay	Nicobar	2769	2200	10260	0.822126	0.889423

**** Hydro Power Plant at Kalpong, North Andaman**

The Commission has, accordingly, recomputed the HSD Consumption with approved Gross Heat Rate and Lube Oil cost, which is summarised below:

Table 6.17: Summary of Fuel Cost and Power Purchase Cost of FY 2014-15 (H1)

Sl. No.	Station	Location	HSD Consumption (in Ltrs)		Lube oil Consumpti(in Ltrs) (H1)	HSD Rate (Rs./ KL)	HSD Cost (Rs. Crs)	LSD (Rs/L)	Lube Oil Cost (Rs Cr)	Revised Billed Amount fixed charges (Rs. Crore)	Rebate (Rs. Cr)	Total Billed Amount (Rs. Cr) H1	Rs. Kwh H1
			H1 Actual	H1 Approved									
Thermal Power Generation													
1	IPP – SPCL	South Andaman	11426129	11426129	46913	59680	68.19	189.97	0.89	8.64	0.22	77.50	16.16
2	G/Charama SPV	South Andaman	0	0	0	59680	0.00	189.97	0.00	0		2.56	7.87
Power Purchase (Hired Power Plants)													
3	HPP-I	South Andaman	360664	360664	1037	59680	2.15	189.97	0.02	0.15		2.32	21.91
4	HPP-II	South Andaman	7269682	7269682	33685	59680	43.39	189.97	0.64	4.67		48.70	14.14
5	HPP-III Mayabunder	North Andaman	567977	567977	2632	59680	3.39	189.97	0.05	0.85		4.29	15.95
Total Power Purchase												135.37	
Own Generation													
6	Chatham	South Andaman	3896449	3232596	12126	59680	19.29	189.97	0.23			19.52	15.75
7	Phoenix Bay	South Andaman	2217723	1946766	7303	59680	11.62	189.97	0.14			11.76	15.75
8	Raj Niwas	South Andaman	27088	14303	54	59680	0.09	189.97	0.00			0.09	15.75
9	Medical and Secretariat	South Andaman	2040	948	4	59680	0.01	189.97	0.00			0.01	0.00
10	Neil Island	South Andaman	338615	209050	784	59680	1.25	189.97	0.01			1.26	15.75
11	Havelock	South Andaman	1120570	829257	3111	59680	4.95	189.97	0.06			5.01	15.75
12	Rutland	South Andaman	8425	5275	20	59680	0.03	189.97	0.00			0.03	15.75
13	Baratang	Middle Andaman	83270	67202	252	59680	0.40	189.97	0.00			0.41	15.75
14	Rangat Bay and Banagaon	Middle Andaman	3729826	3066332	11502	59680	18.30	189.97	0.22			18.52	15.75
15	Long Island	Middle Andaman	128593	85131	319	59680	0.51	189.97	0.01			0.51	15.75
16	Strait Island	South Andaman	11353	7513	42	59680	0.04	189.97	0.00			0.05	10.55
17	Hanspuri	Middle Andaman	5561	4195	16	59680	0.03	189.97	0.00			0.03	15.75
18	Jagannath Dera	North Andaman	0	0	0	0.00	0.00	0.00	0.00			0.00	0.00
19	Paschim Sagar	North Andaman	485155	0	0	0.00	0.00	0.00	0.00			0.00	0.00
20	Smith Island	North Andaman	0	0	0	0.00	0.00	0.00	0.00			0.00	0.00
21	Sita Nagar	North Andaman	355967	234956	881	59680	1.40	189.97	0.02			1.42	15.75
22	KHEP**	North Andaman	0	0	0	0.00	0.00	0.00	0.00			0.00	0.00

Sl. No.	Station	Location	HSD Consumption (in Ltrs)		Lube oil Consumption (in Ltrs) (H1)	HSD Rate (Rs./KL)	HSD Cost (Rs. Crs)	LSD (Rs/L)	Lube Oil Cost (Rs Cr)	Revised Billed Amount fixed charges (Rs. Crore)	Rebate (Rs. Cr)	Total Billed Amount (Rs. Cr) H1	Rs. Kwh H1
			H1 Actual	H1 Approved									
23	Hutbay	South Andaman	1778602	1505420	5647	59680	8.98	189.97	0.11			9.09	15.75
24	Dugong Creek	South Andaman	14460	5123	19	59680	0.03	189.97	0.00			0.03	15.75
25	NPH Car Nicobar	Nicobar	1662795	1391658	5220	59680	8.31	189.97	0.10			8.40	15.75
26	Karmorta plus Community Power Houses)	Nicobar	473847	370856	1391	59680	2.21	189.97	0.03			2.24	15.75
27	Pillpillow	Nicobar	0	0	0	0.00	0.00	0.00	0.00			0.00	0.00
28	Kakana	Nicobar	0	0	0	0.00	0.00	0.00	0.00			0.00	0.00
29	Champion	Nicobar	72799	48187	181	59680	0.29	189.97	0.00			0.29	15.75
30	Katchal	Nicobar	245174	189918	712	59680	1.13	189.97	0.01			1.15	15.75
31	Terness	Nicobar	174520	120999	454	59680	0.72	189.97	0.01			0.73	15.75
32	Choera	Nicobar	52715	35632	134	59680	0.21	189.97	0.00			0.22	15.75
33	Campbell Bay	Nicobar	1012240	804160	3017	59680	4.80	189.97	0.06			4.86	15.75
Total Own Generation												85.61	
Grand Total												220.98	

**** Hydro Power Plant at Kalpong, North Andaman**

Quantum and Cost of Power Generation and Purchase of Power

Diesel Generating Station – IPP- M/s SPCL and HPPs

While estimating the energy availability and cost for second half for FY 2014-15, a prudence check has been carried out on the basis of six invoices issued by M/s SPCL (from April to September 2014) to ED-A&N in order to verify HSD consumption and payment made thereof by the Electricity Department, The abstract of IPP invoices for FY 2014-15, including unit generation, auxiliary consumption HSD and Lubricating oil consumption, are mentioned in the Tables above. The following has been considered for estimating the energy availability and cost for the second half of FY 2014-15 from M/s SPCL:

- Actual gross generation from the Diesel Generating Unit of M/s SPCL. The verified power purchase bills submitted by the Petitioner for full year of FY 2014-15 (H1) has been considered, in order to estimate the energy availability for the second half of FY 2014-15.
- Average auxiliary consumption of 3.70%, as verified from the power purchase bills submitted by the Petitioner for first half of FY 2014-15, has been considered for the second half of FY 2014-15.
- HSD and Lubricating oil consumption has been calculated, considering the following, as per the power purchase bills of FY 2014-15 (H1):

- For consumption & cost of HSD:
 - Gross heat rate of 2010 Kcal/Kwh;
 - Average Calorific value and Density of HSD of FY 2014-15 (H1); (Rs 59680/KL)
 - The Actual Cost of HSD, as on September 2014.
- For consumption and cost of Lubricating Oil:
 - Normative @ 1.1 gm per unit;
 - Average Density of Lub. Oil of FY 2014-15 (H1);
 - Actual Cost of Lub. Oil, as on September 2014.(@ Rs. 189.97/KL)
- Actual fixed cost as per the power purchase bills of FY 2014-15 (H1) for projecting the cost of FY 14-15 (H2).
- Rebate, as calculated for previous year, for maintaining the high PLF, considering that the same may not be applicable for the second half of FY 2014-15.
- For the HPPs, the fixed costs, as approved in the respective PPAs.

NTPC's Solar Plant

While estimating the energy availability and cost for FY 2014-15 (H2), the following has been considered for estimating the energy availability and cost for FY 2014-15 (H2) from NTPC's Solar Plant:

- The Plant availability at the levels of FY 2014-15 (H1).
- Average auxiliary consumption of FY 2014-15 (H1) for FY 2014-15.
- Per unit rate of Rs 7.87, as proposed by the Petitioner, has been provisionally considered. This will be reviewed at the time of true-up.

Department's Own Generation

The Commission has considered the average auxiliary consumption for the past two years, the approved gross heat rates, as specified above, average calorific value of fuel, density of fuel and lubricating oil of the first half of FY 2014-15 (H1), average PLFs for the past years, cost of HSD and lubricating oil in the month of September

2014 and consumption of lubricating oil per litre, de-rated capacity of first half of FY 2014-15 (H1) for estimating the energy availability and cost for the second half of FY 2014-15 (H2). The Commission has considered the change in the Plant Load Factor to cater for the demand estimated for the second half of FY 2014-15.

Accordingly, the Commission approves the following power purchase/generation from the below mentioned stations, based on the merit order dispatch principles for the remaining six months of FY 2014-15.

Table 6.18: Summary of Power Purchase Units (Estimated) for the Second Half of FY 2014-15 (H2)

Sl. No.	Station	Location	Capacity in MW		Generation on its Full load (in Kwh) -H2	Actual Generation (in Mus)- H2	Availability / PLF in % H2	Auxiliary Consumption (%)	Net Energy Available sent out (in MU) - H2
			Installed	De-rated					
	Thermal Power Generation								
1	IPP - SPCL	South Andaman	20	15	65700000	47.95	72.98%	3.70%	46.18
2	G/Charama SPV	South Andaman	5	5	21900000	3.25	14.84%	0.00%	3.25
	Power Purchase (Hired power plants)								
3	HPP-I	South Andaman	5	5	21900000	1.06	4.84%	3.70%	1.02
4	HPP-II	South Andaman	10	10	43800000	34.43	78.61%	3.70%	33.16
5	HPP-III Mayabunder	North Andaman	1	1	4380000	2.69	61.42%	3.70%	2.59
	Total Power Purchase					89.38			86.19
	Own Generation								
6	Chatham	South Andaman	15	9.6	42048000	7.29	17.33%	4.74%	6.94
7	Phoenix Bay	South Andaman	8	6.6	28908000	3.97	13.72%	2.58%	3.86
8	Raj Niwas	South Andaman	0.512	0.512	2242560	0.03	1.42%	0.00%	0.03
9	Medical and Secretariat	South Andaman	0.512	0.512	2242560	0.00	0.00%	0.00%	0.00
10	Neil Island	South Andaman	0.634	0.371	1624980	0.40	24.68%	2.14%	0.39
11	Havelock	South Andaman	1.73	1.101	4822380	1.56	32.36%	0.22%	1.56
12	RutLand	South Andaman	0.024	0.024	105120	0.01	12.11%	2.96%	0.01
13	Baratang	Middle Andaman	0.512	0.512	2242560	0.12	5.40%	0.75%	0.12
14	Rangat Bay and Banagaon	Middle Andaman	10.052	6.683	29271540	6.52	22.27%	5.01%	6.19
15	Long Island	Middle Andaman	0.892	0.27	1182600	0.17	14.43%	8.58%	0.16

Sl. No.	Station	Location	Capacity in MW		Generation on its Full load (in Kwh) -H2	Actual Generation (in Mus)-H2	Availability / PLF in % H2	Auxiliary Consumption (%)	Net Energy Available sent out (in MU) - H2
			Installed	De-rated					
16	Strait Island	South Andaman	0.015	0.015	65700	0.03	48.47%	0.03%	0.03
17	Hanspuri	Middle Andaman	0.027	0.027	118260	0.01	5.30%	12.45%	0.01
18	Jagannath Dera	North Andaman	0	0	0	0.00	0.00%	6.95%	0.00
19	Paschim Sagar	North Andaman	0	0	0	0.00	0.00%	3.54%	0.00
20	Smith Island	North Andaman	0.23	0.23	1007400	0.00	0.00%	4.27%	0.00
21	Sita Nagar	North Andaman	2.368	1.52	6657600	0.80	11.96%	1.26%	0.79
22	KHEP**	North Andaman	5.25	4.8	21024000	7.12	33.87%	1.47%	7.02
23	Hutbay	South Andaman	5.65	2.595	11366100	3.04	26.74%	4.28%	2.91
24	Dugong Creek	South Andaman	0.047	0.025	109500	0.01	11.63%	1.77%	0.01
25	NPH Car Nicobar	Nicobar	5.636	2.7	11826000	2.78	23.53%	5.09%	2.64
26	Karmorta +Community Power Houses)	Nicobar	1.124	0.658	2882040	0.73	25.41%	0.43%	0.73
27	Pillpillow	Nicobar	0.056	0.056	245280	0.00	0.00%	1.65%	0.00
28	Kakana	Nicobar	0.056	0.056	245280	0.00	0.00%	2.38%	0.00
29	Champion	Nicobar	0.323	0.08	350400	0.10	27.25%	2.13%	0.09
30	Katchal	Nicobar	1.23	0.69	3022200	0.39	12.85%	1.94%	0.38
31	Teresa	Nicobar	0.756	0.468	2049840	0.25	12.11%	1.68%	0.24
32	Choera	Nicobar	0.164	0.118	516840	0.07	13.53%	4.20%	0.07
33	Campbell Bay	Nicobar	2.848	1.935	8475300	1.58	18.70%	2.61%	1.54
	Total Own Generation					36.98			35.73
	Grand Total					126.36			121.92

** Hydro Power Plant at Kalpong, North Andaman

Table 6.19: Summary of Power Purchase and Fuel Cost for the Second Six Months of FY 2014-15 (H2)

Sl. No.	Station	Location	HSD Consumption (in Ltrs)		Lube oil Consumption (in Ltrs) - H1	HSD Rate inRs./ KL	HSD Cost (Rs. Cr)	LSD Rs/L	Lube Oil Cost (Rs Cr)	Revised Billed Amount fixed charges (Rs. Crore)	Rebate (Rs. Cr)	Total Billed Amount (Rs. Cr) H1	Rs. Kwh - H1
			H1 Actual	H1 Approved									
	Thermal Power Generation												
1	IPP – SPCL	South Andaman	11426129	11426129	46913	59680.00	68.19	189.97	0.89	8.64	0.22	77.50	16.16
2	G/Charama SPV	South Andaman	0	0	0	59680.00	0.00	189.97	0.00	0		2.56	7.87
	Power Purchase (Hired power plants)												
3	HPP-I	South Andaman	360664	360664	1037	59680.00	2.15	189.97	0.02	5.38		7.55	71.25

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Sl. No	Station	Location	HSD Consumption (in Ltrs)		Lube oil Consumption (in Ltrs) - H1	HSD Rate in Rs./ KL	HSD Cost (Rs. Cr)	LSD Rs/L	Lube Oil Cost (Rs Cr)	Revised Billed Amount fixed charges (Rs. Crore)	Rebate (Rs. Cr)	Total Billed Amount (Rs. Cr) H1	Rs. Kwh - H1
			H1 Actual	H1 Approved									
4	HPP-II	South Andaman	7269682	7269682	33685	59680.00	43.39	189.97	0.64	4.68		48.71	14.15
5	HPP-III Mayabunder	North Andaman	567977	567977	2632	59680.00	3.39	189.97	0.05	0.33		3.77	14.01
	Total Power Purchase											140.09	
	Own Generation												
6	Chatham	South Andaman	3896449	1901045	12126	59680.00	11.35	189.97	0.23			11.58	9.34
7	Phoenix Bay	South Andaman	2217723	1034201	7303	59680.00	6.17	189.97	0.14			6.31	8.45
8	Raj Niwas	South Andaman	27088	8306	54	59680.00	0.05	189.97	0.00			0.05	9.22
9	Medical and Secretariat	South Andaman	2040	0	4	59680.00	0.00	189.97	0.00			0.00	0.19
10	Neil Island	South Andaman	338615	104604	784	59680.00	0.62	189.97	0.01			0.64	7.97
11	Havelock	South Andaman	1120570	406977	3111	59680.00	2.43	189.97	0.06			2.49	7.83
12	RutLand	South Andaman	8425	3319	20	59680.00	0.02	189.97	0.00			0.02	9.98
13	Baratang	Middle Andaman	83270	31560	252	59680.00	0.19	189.97	0.00			0.19	7.50
14	Rangat Bay and Banagaon	Middle Andaman	3729826	1700051	11502	59680.00	10.15	189.97	0.22			10.36	8.82
15	Long Island	Middle Andaman	128593	44521	319	59680.00	0.27	189.97	0.01			0.27	8.33
16	Strait Island	South Andaman	11353	5531	42	59680.00	0.03	189.97	0.00			0.03	7.82
17	Hanspuri	Middle Andaman	5561	1635	16	59680.00	0.01	189.97	0.00			0.01	6.25
18	Jagannath Dera	North Andaman	0	0	0	0.00	0.00	0.00	0.00			0.00	0.00
19	Paschim Sagar	North Andaman	485155	0	0	0.00	0.00	0.00	0.00			0.00	0.00
20	Smith Island	North Andaman	0	0	0	0.00	0.00	0.00	0.00			0.00	0.00
21	Sita Nagar	North Andaman	355967	207609	881	59680.00	1.24	189.97	0.02			1.26	13.94
22	KHEP**	North Andaman	0	0	0	0.00	0.00	0.00	0.00			0.00	0.00
23	Hutbay	South Andaman	1778602	792570	5647	59680.00	4.73	189.97	0.11			4.84	8.38
24	Dugong Creek	South Andaman	14460	3321	19	59680.00	0.02	189.97	0.00			0.02	10.28

Sl. No	Station	Location	HSD Consumption (in Ltrs)		Lube oil Consumption (in Ltrs) - H1	HSD Rate in Rs./ KL	HSD Cost (Rs. Cr)	LSD Rs/L	Lube Oil Cost (Rs Cr)	Revised Billed Amount fixed charges (Rs. Crore)	Rebate (Rs. Cr)	Total Billed Amount (Rs. Cr) H1	Rs. Kwh - H1
			H1 Actual	H1 Approved									
25	NPH Car Nicobar	Nicobar	1662795	725694	5220	59680.00	4.33	189.97	0.10			4.43	8.30
26	Karmorta +Community Power Houses)	Nicobar	473847	191027	1391	59680.00	1.14	189.97	0.03			1.17	8.20
27	Pillpillow	Nicobar	0	0	0	0.00	0.00	0.00	0.00			0.00	0.00
28	Kakana	Nicobar	0	0	0	0.00	0.00	0.00	0.00			0.00	0.00
29	Champion	Nicobar	72799	24906	181	59680.00	0.15	189.97	0.00			0.15	8.23
30	Katchal	Nicobar	245174	101291	712	59680.00	0.60	189.97	0.01			0.62	8.49
31	Teressa	Nicobar	174520	64766	454	59680.00	0.39	189.97	0.01			0.40	8.52
32	Choera	Nicobar	52715	18240	134	59680.00	0.11	189.97	0.00			0.11	8.15
33	Campbell Bay	Nicobar	1012240	413342	3017	59680.00	2.47	189.97	0.06			2.52	8.19
	Total Own Generation											47.47	
	Grand Total											187.56	

** Hydro Power Plant at Kalpong, North Andaman

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 had to purchase 3.3% of total consumption of all the consumers in its area as part of its power purchase from renewable sources for FY 2014-15, including 0.60% from Solar and 2.70% from Non-Solar sources.

The projected availability of renewable power from NTPC's Solar and KHEP and consequential RPO Compliance for FY 2014-15 is tabulated below:

Table 6.20: Summary of RPO Compliance for FY 2014-15

S. No	Description	FY 2014-15
1	Sales Within the UT	223.81
2	RPO Obligation (in %)	
	<i>Solar</i>	0.60%
	<i>Non-Solar</i>	2.70%
3	RPO Obligation (in MU)	
	<i>Solar</i>	1.34
	<i>Non-Solar</i>	6.04
4	RPO Compliance (Actual Purchase)	
	<i>Solar</i>	6.50

S. No	Description	FY 2014-15
	<i>Non- Solar</i>	14.03
5	RPO Compliance (REC Certificate Purchase)	
	<i>Solar</i>	0
	<i>Non-Solar</i>	0
6	Total RPO Compliance	
	<i>Solar</i>	6.50
	<i>Non-Solar</i>	14.03
7	Shortfall in RPO Compliance	
	<i>Solar</i>	0
	<i>Non-Solar</i>	0

It is evident from the above that the availability of solar and non-solar power from NTPC solar and KHEP is sufficient not only to meet the RPO Compliance for FY 2014-15, but for clearing the backlog of RPO Compliance from FY 2010-11.

Summary of total approved Power Purchase Cost for Review of ARR of FY 2014-15

While estimating the total power purchase cost, the station-wise energy availability and power purchase cost and fuel cost, as indicated in the earlier Paras have been considered. **The Commission considers the total Power purchase cost of Rs. 275.45 crore and the fuel cost of own generating stations of Rs. 133.08 crore for procuring 172.39 million units of energy and generation of 97.28 million units of electricity as reasonable considering the constraints under which the power is generated and purchased in the island and approves the same for Review of ARR for FY 2014-15.** The summary of the total power purchase quantum and cost, including own generation, is mentioned below:

Table 6.21: Revised Estimates Power Purchase Cost including Fuel cost of own generation for FY 2014-15

Sl. No.	Station	Location	Estimated Generation (in Mus)	Auxiliary Consumption (%)	Net Energy Available (in Mus)	HSD Cost (Rs. Crore)	Lube Oil Cost (Rs Cr)	Revised Billed Amount fixed charges (Rs. Crore)	Rebate (Rs. Cr)	Total Billed Amount (Rs. Cr)	Rs. Kwh - H1
	Thermal Power Generation										
1	IPP – SPCL	South Andaman	95.90	3.70%	92.35	136.38	1.78	17.28	0.44	155.00	16.16
2	G/Charama SPV	South Andaman	6.50	0.00%	6.50	0.00	0.00	0.00		5.12	7.87
	Power Purchase (Hired)										

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Sl. No.	Station	Location	Estimated Generation (in Mus)	Auxiliary Consumption (%)	Net Energy Available (in Mus)	HSD Cost (Rs. Crore)	Lube Oil Cost (Rs Cr)	Revised Billed Amount fixed	Rebate (Rs. Cr)	Total Billed Amount (Rs. Cr)	Rs. Kwh - H1
	power plants)										
3	HPP-I	South Andaman	2.12	3.70%	2.04	4.30	0.04	5.53		9.87	46.58
4	HPP-II	South Andaman	68.86	3.70%	66.31	86.77	1.28	9.35		97.40	14.14
5	HPP-III Mayabunder	North Andaman	5.38	3.70%	5.18	6.78	0.10	1.18		8.06	14.98
	Total Power Purchase		178.76		172.39	234.24	3.20	33.34	0.44	275.45	
	Own Generation										
6	Chatham	South Andaman	19.68	4.74%	18.75	30.64	0.46			31.10	15.80
7	Phoenix Bay	South Andaman	11.43	2.58%	11.13	17.79	0.28			18.07	15.81
8	Raj Niwas	South Andaman	0.09	0.00%	0.09	0.13	0.00			0.14	15.80
9	Medical and Secretariat	South Andaman	0.00	0.00%	0.00	0.01	0.00			0.01	0.00
10	Neil Island	South Andaman	1.20	2.14%	1.18	1.87	0.03			1.90	15.81
11	Havelock	South Andaman	4.74	0.22%	4.73	7.38	0.12			7.50	15.81
12	RutLand	South Andaman	0.03	2.96%	0.03	0.05	0.00			0.05	15.79
13	Baratang	Middle Andaman	0.38	0.75%	0.38	0.59	0.01			0.60	15.82
14	Rangat Bay and Banagaon	Middle Andaman	18.27	5.01%	17.36	28.45	0.44			28.88	15.80
15	Long Island	Middle Andaman	0.50	8.58%	0.45	0.77	0.01			0.79	15.81
16	Strait Island	South Andaman	0.08	0.03%	0.08	0.08	0.00			0.08	10.58
17	Hanspuri	Middle Andaman	0.02	12.45%	0.02	0.03	0.00			0.04	15.83
18	Jagannath Dera	North Andaman	0.00	6.95%	0.00	0.00	0.00			0.00	0.00
19	Paschim Sagar	North Andaman	2.33	3.54%	2.25	0.00	0.00			0.00	0.00
20	Smith Island	North Andaman	0.00	4.27%	0.00	0.00	0.00			0.00	0.00
21	Sita Nagar	North Andaman	1.70	1.26%	1.68	2.64	0.03			2.67	15.76
22	KHEP**	North Andaman	14.24	1.47%	14.03	0.00	0.00			0.00	0.00
23	Hutbay	South Andaman	8.81	4.28%	8.43	13.71	0.21			13.93	15.81
24	Dugong Creek	South Andaman	0.03	1.77%	0.03	0.05	0.00			0.05	15.79

Sl. No.	Station	Location	Estimated Generation (in Mus)	Auxiliary Consumption (%)	Net Energy Available (in Mus)	HSD Cost (Rs. Crore)	Lube Oil Cost (Rs Cr)	Revised Billed Amount fixed	Rebate (Rs. Cr)	Total Billed Amount (Rs. Cr)	Rs. Kwh - H1
25	NPH Car Nicobar	Nicobar	8.12	5.09%	7.70	12.64	0.20			12.83	15.81
26	Karmorta +Community Power Houses)	Nicobar	2.15	0.43%	2.15	3.35	0.05			3.41	15.81
27	Pillpillow	Nicobar	0.00	1.65%	0.00	0.00	0.00			0.00	0.00
28	Kakana	Nicobar	0.00	2.38%	0.00	0.00	0.00			0.00	0.00
29	Champion	Nicobar	0.28	2.13%	0.27	0.44	0.01			0.44	15.81
30	Katchal	Nicobar	1.12	1.94%	1.09	1.74	0.03			1.77	15.81
31	Teressa	Nicobar	0.71	1.68%	0.70	1.11	0.02			1.13	15.81
32	Choera	Nicobar	0.21	4.20%	0.20	0.32	0.01			0.33	15.81
33	Campbell Bay	Nicobar	4.67	2.61%	4.55	7.27	0.11			7.38	15.81
	Total Own Generation		100.79		97.28	131.06	2.02	0.00	0.00	133.08	
	Grand Total		279.55		269.66	365.29	5.22	33.34	0.44	408.53	

**** Hydro Power Plant at Kalpong, North Andaman**

It is seen that, in the case of A&N, the generation is mostly diesel-based, making per unit cost of generation very high compared to other utilities. **If the units generated by the hydro-electric plant are excluded from the total generation, the average fuel cost of DG sets of own generation works out at Rs. 15.46 per unit for FY 2014-15.** In view of the higher cost of diesel generation, the approved tariff is not covering the full cost of supply. Historically, there has been a substantial gap between the actual cost of supply and the revenue realised. This gap so far has been borne by the administration of A&N.

Keeping the above facts 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.

6.7 Operation & Maintenance Expenses

Petitioner's Submission

Petitioner has submitted the Operation & Maintenance Expenses for Review based on the provisional values of O&M expense incurred by ED, A&N for the FY 2014-15 and requested to approve the same.

The Operation and Maintenance Expenses comprise of the following heads of expenditure:

- **Employee Expenses** which include the salaries, dearness allowance, dearness pay, other allowances and retirement benefits paid to the staff.
- **Repair and Maintenance (R&M) expenses**, which include all expenditure incurred on the maintenance and upkeep of transmission and distribution assets; and
- **Administrative and General Expenses**, which include all expenditure incurred in operating a business. These include telephone charges, regulatory and consultancy fees such as energy auditing and chartered accountant fees, conveyance and travel expenses, water charges, etc.

Employee Cost

Petitioner's Submission

The petitioner has stated that the employee cost approved for FY 2014-15 and provisional value of employee cost incurred by the Electricity Department A&N Islands for FY 2014-15 is furnished in the table below and requested to approve the same.

Table 6.22: Employee Cost Review (Rs. Crore)

Sl. No	Particulars	As approved by Commission	Provisional as per accounts	Deviation
1	Employee Cost	54.03	64.5	10.47
	Total	54.03	64.5	10.47

Commission's Analysis

The Commission has noted that the increase in employee cost is considerable.

However, the Commission considers Rs. 64.50 Crore towards employees cost in the review for FY 2014-15 as detailed in the table shown below as it is stated to be based on provisional accounts. It is subject to final adjustment at the time of true up based on the Audited Annual accounts for the FY 2014-15.

Table 6.23: Employee Cost considered by Commission in the APR for FY 2014-15
(Rs. Crore)

Sl. No	Particulars	As approved by Commission in the T. O. for FY 2014-15	Petitioner Submission for FY 2014-15 (RE)	Considered for APR for FY 2014-15
1	Employee Cost	54.03	64.50	64.50
	Total	54.03	64.50	64.50

Repair & Maintenance Expenses

Petitioner's Submission

The petitioner has submitted that the Repair & Maintenance expense approved for FY 2014-15 and provisional value of Repair & Maintenance expense of A&N Electricity Department for FY 2014-15 are as given in the table below and requested to approve the same.

Table 6.24: R&M Cost

(Rs. Cr)

Sl. No	Particulars	As approved by Commission	Provisional as per accounts	Deviation
1	Repair & Maintenance Cost	38.30	38.98	0.68
	Total	38.30	38.98	0.68

Commission's Analysis

Repair and Maintenance Expenses are allowed to meet the repair and maintenance cost of the existing assets of the utility. The Commission has observed that R&M expenses are essential for up keep of transmission and distribution system. The R&M expenditure under revised estimate is almost same as approved by the Commission. Hence the Commission considered Rs. 38.98 Crore towards R&M expense in the review for FY 2014-15 as shown in the table below, subject to final adjustment at the time of true up based on the Audited Annual accounts for the FY 2014-15.

Table 6.25: R&M Cost considered in the APR for FY 2014-15

(Rs. Cr)

Sl. No	Particulars	As approved by Commission in the T. O. for FY 2014-15	Petitioner Submission for FY 2014-15 (RE)	Considered for APR for FY 2014-15
1	Repair & Maintenance Cost	38.30	38.98	38.90
	Total	38.30	38.98	38.98

Administrative & General Expenses

Petitioner's Submission

The petitioner has submitted that the Administrative & General expenses approved for FY 2014-15 and provisional value of Administration & General expenses incurred by the A&N Electricity Department for FY 2014-15 is given in the table below and requested to approve the same.

Table 6.26: Administration Cost

(Rs. Cr)

Sl. No	Particulars	As approved by Commission	Provisional as per accounts	Deviation
1	Administrative & General Expense	2.68	1.30	-1.38
	Total	2.68	1.30	-1.38

Commission's Analysis

The Commission has observed that the A&G expenses estimated at Rs. 1.30 Crore in the Review petition is lower than what was approved in the Tariff order for FY 2014-15. Hence the Commission considers Rs. 1.30 Crore towards A&G expense in the review for FY 2014-15 as projected by the Petitioner as shown in the table below, subject to final adjustment at the time of true up based on the Audited Annual accounts for the FY 2014-15.

Table 6.27: Administration Cost considered in the APR for FY 2014-15

(Rs. Cr)

Sl. No	Particulars	As approved by Commission in the T. O. for FY 2014-15	Petitioner Submission for FY 2014-15 (RE)	Considered for APR for FY 2014-15
1	Administrative & General Expense	2.68	1.30	1.30
	Total	2.68	1.30	1.30

6.8 Depreciation

Petitioner's Submission

The petitioner has submitted that the approved depreciation for FY 2014-15 and provisional value of depreciation for FY 2014-15 (RE) is provided in the table below and requested to approve the same.

Table 6.28: Depreciation Review

(Rs. Cr)

Sl. No	Particulars	As approved by Commission	Provisional as per accounts	Deviation
1	Depreciation	5.95	7.51	1.56
	Total	5.95	7.51	1.56

Commission's Analysis

The Commission has observed that the petitioner has computed Depreciation at Rs. 7.51 Crore in the Review petition using CERC depreciation rates, assets classification rate wise in the review for FY 2014-15. Therefore the Commission considers the depreciation at Rs. 7.51 Crore in APR for FY 2014-15 as given in the table below, subject to final adjustment at the time of true up based on the Audited Annual accounts for the FY 2014-15.

Table 6.29: Depreciation considered in the APR for FY 2014-15

(Rs. Cr)

Sl. No	Particulars	As approved by Commission in the T. O. for FY 2014-15	Petitioner Submission for FY 2014-15 (RE)	Considered for APR for FY 2014-15
1	Depreciation	5.95	7.51	7.51
	Total	5.95	7.51	7.51

6.9 Interest & Finance Charges including working Capital

Petitioner's Submission

The petitioner has submitted that the Interest & Finance charges (including Interest on working capital) approved for FY 2014-15 and provisional value of Interest & Finance charges of A&N Electricity Department for FY 2014-15 (RE) is given in the table below and requested to approve the same.

Table 6.30 Interest & Finance Charges (including Int. on working Capital)**(Rs. Cr)**

Sl. No	Particulars	As approved by Commission	Provisional as per accounts	Deviation
1	Interest & Finance Charges	22.01	21.40	-0.61
	Total	22.01	21.40	-0.61

Commission's Analysis

The Commission has observed that the interest on loan claimed under RE for FY 2014-15 is less than what is observed and hence Interest and Finance charges for review of FY 2014-15 are considered as given in the table below, subject to final adjustment at the time of true up based on the Audited Annual accounts for the FY 2014-15.

Table 6.31 Int. & Fin. Charges (including Int. on working Capital) considered in the APR for FY 2014-15**(Rs. Cr)**

Sl. No	Particulars	As approved by Commission in the T. O for FY 2014-15	Petitioner Submission for FY 2014-15 (RE)	Considered for APR for FY 2014-15
1	Interest & Finance Charges	21.90	21.40	21.40
	Total	21.90	21.40	21.40

6.10 Non-Tariff Income**Petitioner's Submission**

The petitioner has submitted that the Non-Tariff Income approved for FY 2014-15 and provisional value of Non-Tariff income of A&N Electricity Department for FY 2014-15 is provided in the table below and requested to approve the same.

Table 6.32: Non-Tariff Income**(Rs. Cr)**

Sl. No	Particulars	As approved by Commission	Provisional as per accounts	Deviation
1	Non-Tariff Income	2.20	2.45	0.25
	Total	2.20	2.45	0.25

Commission's Analysis

The Commission has observed that the petitioner has estimated the Non tariff Income at Rs. 2.45 Crore in Review for FY 2014-15. The Commission considers the

Non tariff Income at Rs. 2.45 Crore for review of FY 2014-15 as given in the table below, subject to final adjustment at the time of true up based on the Audited Annual accounts for the FY 2014-15.

Table 6.33: Non-Tariff Income considered in the APR for FY 2014-15

(Rs. Cr)

Sl. No	Particulars	As approved by Commission in the T. O. for FY 2014-15	Petitioner Submission for FY 2014-15 (RE)	Considered for APR for FY 2014-15
1	Non-Tariff Income	2.20	2.45	2.45
	Total	2.20	2.45	2.45

6.11 Return on Equity/Capital Base

Petitioner's Submission

The Petitioner has stated the Return on Equity/on capital base as approved by the commission for FY 2014-15 and provisional value of Return on Equity for A&N Electricity Department for the FY 2014-15 are given below and requested to approve the same.

Table 6.34: Return of Equity

(Rs. Cr)

Sl. No	Particulars	As approved by Commission	Provisional as per accounts	Deviation
1	Return on Equity / on Capital base	3.54	2.99	-0.55
	Total	3.54	2.99	-0.55

Commission's Analysis

The Commission has observed the return on Equity at Rs. 2.99 Crore in the APR petition for FY 2014-15 is lower than what was approved in the Tariff order for FY 2014-15. Hence the Commission accordingly considers Rs. 2.99 Crore towards Return on Equity/Capital base in the review for FY 2014-15 as projected by the Petitioner shown in the table below, subject to final adjustment at the time of true up based on the Audited Annual accounts for the FY 2014-15.

Table 6.35: Return of Equity

(Rs. Cr)

Sl. No	Particulars	As approved by Commission in the T. O. for FY 2014-15	Petitioner Submission for FY 2014-15 (RE)	Considered for APR for FY 2014-15
1	Return on Equity	3.54	2.99	2.99

	Total	3.54	2.99	2.99
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6.12 Review of ARR for FY 2014-15

Petitioner's Submission

The Petitioner has submitted that the Annual Revenue Requirement approved for FY 2014-15 and provisional value of Annual Revenue Requirement for FY 2014-15(RE) is provided in the table below and requested to approve the same.

Table 6.36: ARR Review 2014-15

(Rs. Cr)				
Sl. No	Item of Expense	As Approved by Commission	Provisional as per Accounts	Deviation
1	Cost of Fuel	265.15	180.55	-84.60
2	Cost of Power Purchase	182.18	281.55	99.37
3	Employee Costs	54.03	64.50	10.47
4	R&M Expenses	38.30	38.98	0.68
5	Administrative and General Expenses	2.68	1.30	-1.38
6	Depreciation	5.95	7.51	1.56
7	Interest & Finance Charges (including interest on working Capital)	21.90	21.40	-0.61
8	Return on Equity/on Capital Base	3.54	2.99	-0.55
9	Provision for bad debts	0.00	0.00	0.00
10	Total Revenue Requirement	573.85	598.77	24.92
11	Less: Non Tariff Income	2.20	2.45	0.25
12	Net Revenue Requirement	571.65	596.32	24.67
13	Revenue from tariff	112.24	106.45	-5.79
14	Gap (12-13)	459.41	489.87	30.46

Commission's Analysis

The Aggregate Revenue Requirement (ARR) approved in the Tariff Order dated 11th April, 2014, claimed by the Commission in the Performance Review for FY 2014-15 is as given in the Table below:

Table 6.37: ARR Review 2014-15

(Rs. Cr)				
Sl. No	Item of Expense	As approved by Commission in the T. O. dated 11 th April, 2014 for FY 2014-15	Petitioner Submission for FY 2014-15 (RE)	Considered for Annual Performance Review for FY 2014-15
1	Cost of Fuel	265.15	180.55	180.55
2	Cost of Power Purchase	182.18	281.55	281.55
3	Employee Costs	54.03	64.50	64.50
4	R&M Expenses	38.30	38.98	38.98
5	Administrative and General Expenses	2.68	1.30	1.30
6	Depreciation	5.95	7.51	7.51
7	Interest & Finance Charges (including interest on working Capital)	21.90	21.40	21.40
8	Return on Equity / on Capital Base	3.54	2.99	2.99
9	Provision for bad debts	0.00	0.00	0.00
10	Total Revenue Requirement	573.73	598.78	598.78
11	Less: Non Tariff Income	2.20	2.45	2.45
12	Net Revenue Requirement	571.53	596.33	596.33
13	Revenue from tariff	112.24	106.45	106.45
14	Gap (12-13)	459.29	489.88	489.88

The comparison of revised estimate of ED, A&N in FY 2014-15 with approved ARR in the Tariff Order dated 11th April, 2014 resulted in deviation of Rs. 30.59 Crore.

The Actual performance per FY 2014-15 will be reviewed with reference to the audited annual accounts for FY 2014-15 and sharing Gains/Losses as per JERC Regulation will be considered at the time of Truing up for FY 2014-15 as the revised estimate figures are not supported with any back-up data.

7. Aggregate Revenue Requirement for FY 2015-16

7.1 Background

The Aggregate Revenue Requirement (ARR) & Tariff Petition has been filed by the Electricity Department, UT of Andaman & Nicobar Islands for the MYT Period FY 2015-16 to FY 2017-18 in accordance with the relevant provisions of the MYT Tariff Regulations, 2014. The Petitioner has submitted its Aggregate Revenue Requirement and Tariff application as per Regulation 4.2 of JERC MYT Tariff Regulations, 2014, to estimate the revenue requirement for FY 2015-16 to FY 2017-18 on the basis of actual figures of FY 2013-14, revised estimates for FY 2014-15 and forecasted figures for the period FY 2015-16 to FY 2017-18.

As discussed in para 3.3, the Commission has taken a decision to determine the ARR for FY 2015-16 only instead of MYT period of FY 2015-16 to FY 2017-18 and determine the tariff FY 2015-16 considering the various provisions of the JERC Tariff Regulations. Accordingly, the figures projected for FY 2015-16 only are considered in this chapter.

In this chapter, the Commission has analysed the Petition of ED-A&N, based on the provisions mentioned in the Regulations, figures approved for FY 2013-14 in the Order dated 11th April, 2014 and revised estimates of FY 2014-15 submitted by the Petitioner. The Commission has taken the following into consideration:

1. Actual Performance in FY 2013-14;
2. Financial figures approved for FY 2013-14 in the Order dated 11th April, 2014.
3. Reviewed estimates of FY 2014-15, including the category-wise sales, revenue and expenditure.

7.2 Analysis of Aggregate Revenue Requirement for FY 2015-16

The determination of Aggregate Revenue Requirement requires an assessment of the quantum of energy sales, T&D losses, as well as various cost elements like power purchase cost, O&M expenses, interest cost and depreciation. Revised estimates/actuals submitted by the Petitioner as regards the various components of

ARR of the previous year, the Commission's Analysis thereon and decision in respect of the items are indicated in the succeeding Para's.

- Assessment of Energy Requirement
 - I. Sales Projections
 - II. T&D Loss Trajectory
 - III. Energy Balance
 - IV. Power Purchase Sources
- Assessment 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.

7.3 Consumers, Connected load and Energy Sales

Petitioner's Submission

Energy Sales

The Petitioner has stated that "The consumer base of ED-A&N consists of Domestic, Commercial and Industrial consumers. The sales mix is primarily dominated by Domestic consumers, followed by Commercial consumers. The total consumption of Domestic consumers is approximately 50 percent and Commercial consumers contribute to around 26 percent of the total sales. Thus, the sales forecast would

completely depend on the sales expected in the Domestic & Commercial Categories.

The sales forecast is based on the trends observed in the sales pattern of various categories over the past years, new developments on account of Government Policies, Socio economic changes, industrial growth, etc., that would affect consumption across various categories of consumers. The CAGR (%) for the period of five years (FY 2013-14 over FY 2009-10) for different categories has been adopted for estimating the energy sales for FY 2014-15 and for projecting the energy sales for the MYT period. Energy sales towards temporary connections have been added to the commercial category since it has been observed that temporary connections are predominantly utilised for commercial purposes. Consumption in the temporary connections category in 2013-14 was 0.72MUs. The same has been projected for the years FY 2014-15 and for the MYT period according to the trend of the previous year. In addition, the growth trend in the number of consumers and connected load has been taken as a guiding factor for arriving at the requirement of demand and energy.”

The Petitioner has considered the past trend for projecting the Energy Sales (MUs) and No. of Consumers base, as mentioned in the Table below:

Table 7.1: Details of Energy Sales during the previous years and estimation for FY 2015-16 (MU)

Sl. No.	Category	Sales in MU's					FY 2014-15 (Estimated)	FY 2015-16 (Projected)
		FY 2009-10 (Actuals)	FY 2010-11 (Actuals)	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)		
1	Domestic	83.96	90.20	93.98	101.36	107.38	112.80	118.49
2	Commercial	49.12	52.17	54.02	55.22	56.93	58.69	60.50
3	Industrial	8.72	8.64	10.89	11.17	11.97	12.76	13.59
4	Bulk	25.99	26.02	29.57	28.98	29.32	30.03	30.77
5	Public Lighting	8.36	9.15	9.26	8.72	9.24	9.42	9.61
6	Irrigation Pumps & Agriculture	0.74	0.83	0.90	0.91	0.87	0.90	0.93
	Total	176.89	187.01	198.62	206.35	215.71	224.60	233.89

The Petitioner has considered the average growth rate (%) for projecting the Energy Sales (MUs) for FY 2015-16, as mentioned in the following Table:

Table 7.2: Growth rate considered over FY 2013-14 for projecting sales for FY 2015-16 (%)

Sl. No	Category	Assumed Growth rate over FY 2013-14 (%)
1	Domestic	5.04%
2	Commercial	3.13%
3	Industrial	6.55%
4	Bulk	2.44%
5	Public Lighting	2.02%
6	Irrigation Pumps & Agriculture	3.35%

As part of additional information submission, the Petitioner has submitted the month-wise actual category-wise energy sales of FY 2013-14 and FY 2014-15 (upto September).

Number of Consumers

The Petitioner has stated that the forecast of number of consumers is based on the trends observed in the connections pattern of various categories over the past years, new developments on account of Government policies, Socio-economic changes, industrial growth, etc., that would affect consumption across various categories of consumers. The CAGR (%) for the period of five years (FY 2013-14 over FY 2009-10) for different categories has been adopted for estimating the number of consumers for FY 2014-15 and for projection for FY 2015-16. However, normalisation has been undertaken for certain categories where an abnormal rise or reduction has been observed. Temporary Connections have been added to the commercial category as it is observed that temporary connections are predominantly utilised for commercial purposes. The numbers of consumers estimated for the FY 2014-15 and for FY 2015-16 are tabulated below:

Table 7.3: Number of Consumers during the Previous Years and Projections for FY 2015-16

Sl. No.	Category	FY 2009-10 (Actuals)	FY 2010-11 (Actuals)	FY 2011-12 (Actuals)	FY 2012-13 Actuals	FY 2013-14 (Actuals)	% Increase	FY 2014-15 (Estimated)	FY 2015-16 (Projected)
1	Domestic	76479	81741	91843	93757	97738	5.03%	102652	107813
2	Commercial	15626	16131	16822	17291	17885	2.27%	18257	18664
3	Industry	461	457	493	501	514	2.20%	525	537
4	Bulk	44	48	55	56	57	5.31%	60	63
5	Public Lighting	434	505	552	649	626	7.60%	674	725
6	Irrigation Pumps & Agriculture	177	186	237	218	226	5.01%	237	249
	Total	92660	98070	110002	112472	117046		122406	128051

Commission's Analysis

As per Sub-Regulation (2) (ii) of Regulation 13 of JERC Tariff Regulations 2009:

“(ii) Estimated figures for the current financial year should be based on the 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.”

The Commission has considered the actual figures for the second half of FY 2011-12, FY 2012-13 and FY 2013-14 and has accordingly estimated the second half of the current financial year, based on the actual figures of the second half of FY 2013-14.

The 4 year, 3 year, 2 year and Y-O-Y growth rates for different consumer categories have been considered and appropriate growth rate applied to different categories, as discussed in the subsequent paragraphs for sales projection.

The 4 year, 3 year and 2 year CAGR of sales and number of consumers from FY 2009-10 to FY 2013-14 is given in the Table below:

Table 7.4: CAGR of Category wise sales up to FY 2013-14

Sl. No	Category	FY 2009-10 (Actuals)	FY 2010-11 (Actuals)	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	CAGR OF 4 Years (FY 2009-10 to FY 2013-14)	CAGR OF 3 Years (FY 2010-11 to FY 2013-14)	CAGR OF 2 Years (FY 2011-12 to FY 2013-14)	CAGR OF 1 Years (FY 2012-13 to FY 2013-14)
1	Domestic	83.96	90.20	93.98	101.36	107.38	6.34	5.98	6.89	5.94
2	Commercial	49.12	52.17	54.02	55.22	56.93	3.76	2.95	2.66	3.10
3	Industrial	8.72	8.64	10.89	11.17	11.97	8.24	11.48	4.84	7.16
4	Bulk	25.99	26.02	29.57	28.98	29.32	3.06	4.06	-0.42	1.17
5	Public Lighting	8.36	9.15	9.26	8.72	9.24	2.53	0.33	-0.11	5.96
6	Irrigation, Pumps & Agriculture	0.74	0.83	0.90	0.91	0.87	4.13	1.58	(1.68)	(4.40)
	Total	176.89	187.01	198.62	206.36	215.71	5.09	4.87	4.21	8.60

Table 7.5: CAGR of Category-wise Number of Consumers up to FY 2013-14

Sl. No	Category	FY 2009-10 (Actuals)	FY 2010-11 (Actuals)	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	CAGR OF 4 Years (FY 2009-10 to FY 2013-14)	CAGR OF 3 Years (FY 2010-11 to FY 2013-14)	CAGR OF 2 Years (FY 2011-12 to FY 2013-14)	CAGR OF 1 Years (FY 2012-13 to FY 2013-14)
1	Domestic	76479	81741	91843	93757	97738	6.32	6.14	3.16	4.25
2	Commercial	15626	16131	16822	17291	17885	3.43	3.50	3.11	3.44
3	Industrial	461	457	493	501	514	2.76	4.00	2.11	2.59
4	Bulk	44	48	55	56	57	6.69	5.90	1.80	1.79
5	Public Lighting	434	505	552	649	626	9.59	7.42	6.49	-3.54
6	Irrigation, Pumps & Agriculture	177	186	237	218	226	6.30	6.71	(2.35)	3.67
	Total	93221	99068	110002	112472	117046	5.85	5.72	3.15	4.07

The Category-wise sales analysis for the projections for FY 2015-16 is as follows:

In general, the Petitioner has adopted the growth rates over the actuals sales of FY 2013-14 for arriving at the revised sales of FY 2014-15 and for FY 2015-16. The Commission considers it appropriate to arrive at the sales (RE) of 2014-15, based on 6 months' consumption, as mentioned in Chapter 6 and adopt the CAGR over the RE sales of 2014-15 for arriving at the sales for FY 2015-16.

Domestic:

The sales to this category constitute about 50% of total sales.

The Petitioner adopted a CAGR of 5.04% over the sales (Actuals) of FY 2013-14 to arrive at revised sales of FY 2014-15 and for FY 2015-16.

The minimum CAGR of this category up to FY 2013-14 from the earlier years works out to 5.98%, as shown in the Table above. It is considered reasonable to adopt this growth rate over the sales (RE) of FY 2014-15 for projection of sales for the control period.

Accordingly, the approved sales for domestic category are as given in the Table below.

Table 7.6: Approved Sales for the FY 2015-16 for the Domestic category (MU)

Category	Projections by the Petitioner			Approved		
	FY 2014-15 (RE)	CAGR Adopted	FY 2015-16	FY 2014-15 (RE)	CAGR Adopted	FY 2015-16
Domestic	112.80	5.04%	118.49	113.13	5.98%	119.89

Commercial:

The sales to this category constitute about 26% of the total sales.

The Petitioner adopted a CAGR of 3.13% over the sales (Actuals) of FY 2013-14 to arrive at revised sales of FY 2014-15 and for FY 2015-16. The Y-O-Y growth of FY 2013-14 over FY 2012-13 is 3.13% and is considered reasonable to adopt this growth rate.

Accordingly, the sales for this category are approved by adopting a growth rate of 3.13% over the sales (RE) of FY 2014-15, as given in the Table below:

Table 7.7: Approved Sales for FY 2015-16 for the Commercial Category

(MU)

Category	Projections by the Petitioner			Approved		
	FY 2014-15 (RE)	CAGR Adopted	FY 2015-16	FY 2014-15 (RE)	CAGR Adopted	FY 2015-16
Commercial	58.69	3.13%	60.50	58.68	3.13%	60.52

Industrial:

The sales to this category constitute about 5.5% of the total sales.

The Petitioner adopted a CAGR of 6.55% over the sales (Actuals) of FY 2013-14 to arrive at the RE sales of FY 2014-15 and for FY 2015-16. The 4 year, 3 year and 2 year figures of CAGR of this category up to FY 2013-14 vary between 4.84% to 11.48%. The Y-O-Y growth rate works out to 7.16%. The Commission considers the CAGR of 6.55% adopted by the Petitioner to be reasonable. Accordingly, the sales for this category are approved by adopting a CAGR of 6.55% over the revised sales of FY 2014-15, as given in the Table below:

Table 7.8: Approved Sales for FY 2015-16 for the Industrial Category
(MU)

Category	Projections by the Petitioner			Approved		
	FY 2014-15 (RE)	CAGR Adopted	FY 2015-16	FY 2014-15 (RE)	CAGR Adopted	FY 2015-16
Industrial	12.76	6.55%	13.59	12.73	6.55%	13.56

Bulk:

The sales to this category constitute about 13.59% of the total sales.

The Petitioner adopted a CAGR of 2.44% over the sales (Actuals) of FY 2013-14 to arrive at the revised sales of FY 2014-15 and for FY 2015-16. The 4 year and 3 year CAGR of this category up to FY 2013-14 work out to 3.06% and 4.06% respectively and the 2 year CAGR is negative. The YOY growth rate works out to 7.16%. The Commission considers the CAGR 2.44% adopted by the petitioner as reasonable.

Accordingly, the sales for this category are approved by adopting a CAGR of 2.44% over the revised sales of FY 2014-15, as given in the Table below:

Table 7.9: Approved Sales for FY 2015-16 for the Bulk Category (MU)

Category	Projections by the Petitioner			Approved		
	FY 2014-15 (RE)	CAGR Adopted	FY 2015-16	FY 2014-15 (RE)	CAGR Adopted	FY 2015-16
Bulk	30.03	2.44%	30.77	29.06	2.44%	29.77

Public Lighting:

The sales to this category constitute about 4.28% of the total sales.

The Petitioner adopted a CAGR of 2.02% over the sales (Actuals) of FY 2013-14 to arrive at the revised sales of FY 2014-15 and for FY 2015-16. The 4 year CAGR of this category up to FY 2013-14 works out to 2.53% and the CAGR adopted by the petitioner 2.02% is considered to be reasonable.

Accordingly, the sales for this category are approved by adopting a CAGR of 2.02% over the revised sales of FY 2014-15, as given in the Table below.

Table 7.10: Approved Sales for FY 2015-16 for the Public Lighting Category (MU)

Category	Projections by the Petitioner			Approved		
	FY 2014-15 (RE)	CAGR Adopted	FY 2015-16	FY 2014-15 (RE)	CAGR Adopted	FY 2015-16
Public Lighting	9.42	2.02%	9.61	9.34	2.02%	9.53

Irrigation Pumps and Agriculture:

The sales to this category constitute about 0.4% of the total sales.

Hence, the sales, as projected by the Petitioner, are approved, as given in the Table below:

Table 7.11: Approved Sales for FY 2015-16 for Irrigation Pumps and Agriculture category (MU)

Category	Projected for FY 2015-16	Approved for FY 2015-16
Irrigation Pumps & Agriculture	0.93	0.93

Based on the above, the category-wise sales approved for FY 2015-16 are as given in the Table below:

Table 7.12: Category-wise sales approved for FY 2015-16 (MU)

Category	Projections by the Petitioner			Approved by Commission		
	FY 2014-15 (RE)	CAGR Adopted	FY 2015-16	FY 2014-15 (RE)	CAGR Adopted	FY 2015-16
Domestic	107.38	5.04%	118.49	113.13	5.98%	119.90
Commercial	58.69	3.13%	60.50	58.69	3.13%	60.52
Industrial	12.76	6.55%	13.59	12.76	6.55%	13.56
Bulk	30.03	2.44%	30.77	30.03	2.44%	29.77
Public Lighting	9.42	2.02%	9.61	9.42	2.02%	9.53
Irrigation Pumps & Agriculture			0.93			0.93
Total	218.28		233.89	224.03		234.20

Number of Consumers:

The Petitioner adopted a CAGR of 5.03%, 2.27%, 2.20%, 5.31%, 7.60% and 5.01% for Domestic, Commercial, Industry, Bulk, Public Lighting and irrigation pumps and agriculture respectively. But, the Commission considers it reasonable to adopt the 4 year CAGR up to FY 2013-14 and approves the number of consumer for FY 2015-16. Thus, the number of consumers approved for FY 2015-16 is as given in the Table below:

Table 7.13: Approved category-wise Number of Consumers for FY 2015-16

Sl. No.	Category	FY 2013-14 (Actuals)	CAGR Approved (%)	FY 2015-16 (Approved)
1	Domestic	97738	6.32%	110482
2	Commercial	17885	3.43%	19133
3	Industrial	514	2.76%	543

Sl. No.	Category	FY 2013-14 (Actuals)	CAGR Approved (%)	FY 2015-16 (Approved)
4	Bulk	57	6.69%	65
5	Public Lighting	626	9.59%	752
6	Irrigation Pumps & Agriculture	226	6.30%	255
	Total	117046		131230

Category-wise connected Load:

The category-wise connected load is approved by adopting the same CAGR as for number of consumers, and the approved connected load is as given in the Table below:

Table 7.14: Approved Category-wise Connected Load for FY 2015-16 (kW)

Sl. No.	Category	FY 2013-14 Actuals	CGAR Approved (%)	FY 2015-16 Projected
1	Domestic	93662	6.32%	105875
2	Commercial	52401	3.43%	56057
3	Industrial	10705	2.76%	11304
4	Bulk	9425	6.69%	10728
5	Public Lighting	2993	9.59%	3595
6	Irrigation Pumps & Agriculture	727	6.30%	821
	Total	169913		188381

7.4 Transmission & Distribution Losses

Petitioner's Submission

“ED-A&N has been trying to reduce the distribution losses during the recent years. ED-A&N submits that the system improvement works executed every year under the Plan schemes have also contributed to the reduction of distribution losses. However, it may also be noted that reduction of distribution losses may not be possible beyond a certain level, due to topographical conditions and technical limitations. The distribution losses in the ED-A&N distribution network have been in the range of approximately 18% to 20% in the past. For the purpose of FY 2015-16, the losses have been retained at 17%. The Petitioner also submits that the

actual losses for FY 2013-14 as 19.39% and for FY 2014-15 (RE), the same would be 17%.”

Commission’s Analysis

As indicated in Para 6.4 of this Order, the Commission is of the view that substantial CAPEX is being infused in the system improvement works by the ED-A&N. This includes: extension of T&D lines, erection of new distribution transformers, replacement of old defective meters, distribution transformer metering, replacement of old conductors, and providing HT meters in feeders. It is hoped that these measures will lead to progressive reduction in losses.

The Commission is of the view that the loss level targeted by the Petitioner for the FY 2015-16 is reasonable, the actual losses being 19.39% for FY 2013-14 in view of the topography of these islands and system improvement schemes being undertaken.

Accordingly, for the purpose of this Order the Commission, considering the coastal atmosphere and topography of these Islands, approves the loss level targets for the control period, as given in the Table below:

Table 7.15: Approved T&D Losses for FY 2015-16 (%)

Particulars	FY 2015-16
T & D Losses	17.00%

7.5 Energy Balance

Petitioner’s Submission

The Petitioner has submitted that the energy requirement for the sale within the Islands is as follows, after considering the T&D losses of 17% for FY 2015-16:

**Table 7.16: Projected Energy Requirement for FY 2015-16
(MU)**

Energy Balance	FY 2013-14 (Estimated)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
Energy Requirement			
Energy Sales			
LT Supply	215.71	224.60	233.89
HT Supply	0.00	0.00	0.00
Total Energy Sales	215.71	224.60	233.89
Overall T & D Losses (%)	19.39%	17.00%	17.00%
Overall T & D Losses (MUs)	51.89	46.00	47.91
Total Energy requirement	267.60	270.60	281.80
Energy availability at the Periphery			
Power Purchase	169.47	169.47	169.47
Own Generation	98.15	101.14	112.33
Total Energy Availability	267.62	270.61	281.80
Energy Surplus / (Gap)	NIL	NIL	NIL

The Petitioner has submitted;

“The energy requirement of ED-A&N is mainly met from own generation and power purchase from IPP (M/s Surya Chakra Corporation Limited), HPPs & NTPC (SPV). There is no availability of power from Central Generating Stations or from other sources/ open market/ power exchanges, etc. Own generation accounted for around 46.56% and 36.68% of the total power requirement for FY 2012-13 & 2013-14 respectively and power purchase accounted for around 53.44% & 63.32 of the total power requirement for 2012-13 & 2013-14 respectively and it is estimated that approximately 37.37% & 62.63% of the total energy requirement for FY 2014-15 would be met by own generation and power purchase respectively. The present scenario is likely to continue and it is projected that energy requirement for FY 2015-16 and mix of own generation and power purchase would be approximately in the ratio of 45:55”

Commission’s Analysis

The Commission has approved the T&D losses, energy sales in the foregoing paragraphs. The projected and approved energy requirement and purchase for FY 2015-16 is shown in the Table below:

Table 7.17: Approved Energy requirement for FY 2015-16

(MU)

Sl. No.	Particulars	Projected by the Petitioner FY 2015-16	Approved by the Commission FY 2015-16
A)	ENERGY REQUIREMENT		
1	Energy sales within the State/UT		
2	Total sales within the UT	233.89	234.20
3	Transmission and Distribution losses		
i)	%	17.00%	17.00%
ii)	MU	47.91	47.97
	Energy required at the Generator End for Sale to Retail Consumers	281.80	282.17
B)	ENERGY REQUIRED AT GENERATOR END		
1	Gross Availability		
A	NTPC Solar		
B	Hydel		
C	IPP		
D	HPP		
	Power Purchase (a+b+c+d)	169.47	172.39
E	Own Generation	112.33	109.61
3	Gross Purchase including PX	281.80	282.00

7.6 Power Purchase Quantum and Cost

Petitioner's Submission

Source of Power

The Petitioner has submitted that the ED-A&N has 53 own generating stations and meets around 40%-45% of its total energy requirement from its own generation capacity. The balance requirement of power is met from purchase from IPP (SPCL), HPPs & NTPC (SPV). The details of power generating stations, submitted as part of additional submission, are given below:

Table 7.18: Details of Power Generating Stations for FY 2014-15

Sl. No.	Source	Location	Installed Capacity (in MW)			Power House wise Installed Capacity (in MW)	De-rated Capacity (in MW)
			DG Size (KW)	Nos.	MW		
Power Purchase							
1	IPP – SPCL	South Andaman	5000	4	20	20	15
2	HPP-I	South Andaman	1000	5	5	5	0.6
3	HPP-II	South Andaman	1250	8	10	10	10
4	HPP-III	North Andaman	1000	1	1	1	1
5	G/Ch. SPV	South Andaman	5000	1	5	5	5
Own Generation							
6	Chatham	South Andaman	2500	6	15	15	12.5
7	Phoenix Bay	South Andaman	1000	2	2	8	6.6
			1200	5	6		
8	Raj Niwas	South Andaman	256	2	0.512	1.024	0.6
9	Medical	South Andaman	256	1	0.256		
10	Secretariat	South Andaman	256	1	0.256		
11	Rut Land	Rutland	12	1	0.012	0.024	0.024
12	45 Acre	Rutland	12	1	0.012		
13	Neil Island	Neil Island	128	3	0.384	0.634	0.371
			100	2	0.2		
			50	1	0.05		
14	Havelock	Havelock	256	5	1.28	1.73	1.44
			50	1	0.05		
			400	1	0.4		
15	Hut Bay	Little Andaman	250	1	0.25	5.65	2.595
			800	3	2.4		
			1000	3	3		
16	Dugong Creek	Little Andaman	16	2	0.032	0.047	0.025
			15	1	0.015		
17	Strait Island	Strait Island	15	1	0.015	0.015	0.028
18	Baratang	Middle Andaman	256	1	0.256	0.512	0.512
			256	1	0.256		
19	Rangat Bay	Middle Andaman	800	4	3.2	10.036	6.71
			1000	5	5		
			248	7	1.736		
			100	1	0.1		
20	Bangaon	Middle	16	1	0.016	0.016	

Sl. No.	Source	Location	Installed Capacity (in MW)			Power House wise Installed Capacity (in MW)	De-rated Capacity (in MW)	
			DG Size (KW)	Nos.	MW			
		Andaman						
21	Hanspuri	Middle Andaman	12	1	0.012	0.027		
			15	1	0.015			
22	Long Island	Middle Andaman	128	4	0.512	0.892	0.551	
			65	2	0.13			
			50	5	0.25			
23	Gandhi Nagar	North Andaman	60	1	0.06	0.06	0.23	
24	Ganesh Nagar		65	1	0.065	0.065		
25	Shanti Nagar		65	1	0.065	0.065		
26	Smith Island		40	1	0.04	0.04		
27	Sita Nagar		256	3	0.768	2.37	2.37	
			800	2	1.6			
28	KHEP**			1750	3	5.25	5.25	4.8
29	Kinyuka NPH		Car Nicobar	1000	4	4	5.636	2.7
		100		1	0.1			
30	Headquarters	256		5	1.28			
		128		2	0.256			
31	Kamorta	Kamorta	256	4	1.024	1.236	0.96	
32	Bunderkhari		12	1	0.012			
33	Derring		8	1	0.008			
			12	1	0.012			
34	Alukheak		6	1	0.006			
			12	1	0.012			
35	Changua		6	1	0.006			
			24	1	0.024			
36	Manak		12	1	0.012			
			8	1	0.008			
37	Pillpillow		24	1	0.024			
			32	1	0.032			
38	Kakana		24	1	0.024			
			32	1	0.032			
39	Champion		Nancowry	65	3			0.195
		50		2	0.1			
40	Hitoi	12		1	0.012			
			8	2	0.016			
41	Katchal NTPC	Katchal	250	3	0.75	1.23	1.03	
			256	1	0.256			
			100	1	0.1			
42	Katchal NPH		50	2	0.1			
			12	2	0.024			
43	Upper Katchal							
44	Teressa	Teressa	50	3	0.15	0.756	0.53	
			256	2	0.512			

Sl. No.	Source	Location	Installed Capacity (in MW)			Power House wise Installed Capacity (in MW)	De-rated Capacity (in MW)
			DG Size (KW)	Nos.	MW		
45	Chukmachi		32	1	0.032		
			12	1	0.012		
46	Minyuk		50	1	0.05		
47	Chowra	Chowra	50	2	0.1	0.164	0.164
			32	2	0.064		
48	Campbell Bay	Great Nicobar	800	3	2.4	2.848	2.3
			256	1	0.256		
			50	1	0.05		
			24	1	0.024		
49	Afra Bay		32	1	0.032		
50	Pilolow		12	1	0.012		
51	Pilobha		12	1	0.012		
52	Pilowpanja		12	1	0.012		
53	Macachuwa		50	1	0.05		
Total			32289	176	104.65	104.65	78.72
Power Purchase			13250	19	41	41	31.6
Own Generation			19039	157	63.648	63.65	47.12

Assumptions for Power Generation/Projections of Power Purchase

The merit order dispatch principles are typically adopted when determining the power purchases from various generating stations. However, in the present case, there are limited sources of purchase of power and 100% of the generation is available to ED-A&N. Accordingly, ED-A&N has considered utilisation /purchase of the entire power available from all the possible sources during the MYT period to meet the demand to the extent possible.

Power Purchase cost is a function of the energy requirement and price of available power from different sources for meeting the energy requirement. The energy requirement of ED-A&N for the MYT period is proposed to be met from own generation and power purchase from sources, as detailed above.

ED-A&N has projected the quantum of power generation from own generating stations, based on the units generated for the FY 2013-14 & 2014-15. The details of the computation of power generation and purchases are provided in Format-4 submitted along with the Petition.

Table 7.19: Summary of Power Purchase Expenses Submitted by the Petitioner for FY 2015-16

Source	Purchase (MU)	Pool Losses	Energy recd. by Licensee (MU)	FC (Rs. crore)	VC (Rs. crore)	Others (Rs. crore)	Total (Rs. crore)	Avg. Cost (Rs/ Unit)
IPP (SPCL)	89.78	0.00	89.78	17.12	137.75	0.00	154.87	17.25
HPP- I	2.65	0.00	2.65	0.36	4.27	0.00	4.63	17.48
HPP-II	69.39	0.00	69.39	9.59	111.77	0.00	121.36	17.49
(SPV)NTPC	6.48	0.00	6.48	0.00	5.03	0.00	5.03	7.76
Others	4.48	0.00	4.48	1.69	7.21	0.00	8.91	19.87
Total	172.77	0.00	172.77	28.76	266.03	0.00	294.79	17.06

Estimation of Power Purchase and Cost

The generation forecast is based on the plant availability and energy demand for the period. Accordingly, generation for FY 2014-15 and FY 2015-16 has been estimated.

Table 7.20: Estimated Power Generation for FY 2015-16

Units Generated and Sent Out (MUs)							
	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Units Generated	94.28	99.24	109.41	123.29	102.19	106.92	118.49
Auxiliary Consumption	3.57	4.14	4.05	4.42	4.04	5.78	6.16
Sent Out	90.71	95.1	105.36	118.87	98.15	101.14	112.33

Cost of Fuel

“Out of total generation of 102.19 MU in FY 2013-14, 89.77MU were generated from Diesel power houses and only 12.42MUs were generated from the Hydro Power Station. Hence, the cost of fuel (HSD & Lubricants) is a major component of the cost of generation.”

Table: 7.21: Estimated Cost of Fuel for FY 2015-16

(Rs. Crore)

Cost of Fuel			
Type of Fuel	FY 2013-14 (Actual)	FY 2014-15 (Estimated)	FY 2015-16 (Projected)
HSD	162.07	178.04	207.17
Lubricant	2.29	2.51	2.92
Total	164.36	180.55	210.09

Commission's Analysis

Quantum and Cost of Power Generation and Purchase of Power

Diesel Generating Station – IPP- M/s SPCL

While estimating the energy availability and cost for FY 2014-15, the following has been considered for estimating the energy availability and cost for FY 2014-15 from M/s SPCL:

- The Plant availability has been considered at the level of FY 2014-15 (H1).
- Auxiliary Consumption of 3.70%, verified from the power purchase bills submitted by the Petitioner for FY 2014-15, has been considered for the MYT period.
- HSD and Lubricating oil consumption has been calculated by considering the following, as per the power purchase bills of FY 2013-14:
 - For consumption & cost of HSD:
 - Gross heat rate of 2010 Kcal/kWh;
 - Average Calorific Value and Density of HSD of FY 2014-15;
 - Actual Cost of HSD of Rs. 61392/- per Kilolitre, as on September 2014.
 - For consumption & cost of Lubricating Oil:
 - Normative usage has been considered (as 1.1 gm per unit);
 - Average Density of Lub. Oil of FY 2014-15;
 - Actual Cost of Lub. Oil, as in September 2014.
- No escalation has been considered in the fixed cost as approved in FY 2014-15 and the same will be considered at the true-up stage.
- Rebate, as calculated for previous year, has not been considered for maintaining the high PLF.

Diesel Generating Station – Hired Power Plants (HPPs)

While estimating the energy availability and cost for FY 2015-16, the following has been considered for estimating the energy availability and cost for

MYT Period from HPPs:

- The Plant availability at the levels of FY 2014-15 (H1).
- Average auxiliary consumption of the previous year for the MYT period.
- HSD and Lubricating Oil consumption has been calculated considering the following:
 - For consumption & cost of HSD:
 - Gross heat rate, as approved for FY 2014-15.
 - Average Calorific Value and Density of HSD of FY 2014-15.
 - Actual Cost of HSD of Rs. 61392/- per Kilolitre, as in September 2014.
 - For consumption & cost of Lubricating Oil:
 - Normative usage at 1.1 gm per unit;
 - Average Density of Lub. Oil of FY 2014-15;
 - Actual Cost of Lub. Oil, as on September 2014.
- Fixed Costs, as per approved PPAs.

NTPC's Solar plant

While estimating the energy availability and cost for FY 2015-16, the following has been considered for estimating the energy availability and cost for FY 2015-16 from NTPC Solar Plant:

- The Plant availability at the levels of FY 2014-15 (H1).
- Average auxiliary consumption of FY 2014-15 (H1) for the MYT period.
- Per unit rate of Rs 7.76 per kWh as proposed by the petitioner has been provisionally considered. This will be reviewed at the time of true-up.

Department's Own Generation

Inconsistencies have been observed in the submitted information in the Petition in the absence of actual data in respect of PLF, heat rate, consumption of HSD, lubricating oil of the DG Sets owned by the ED- A&N.

For the purpose of ARR for FY 2015-16, the Commission has considered the auxiliary consumption, heat rate and PLF, as approved for FY 2014-15 (H1), average calorific value of fuel, density of fuel and consumption of lubricating oil during the first half of FY 2014-15 (H1), cost of HSD as on September 2014 and the consumption of lubricating oil in the month of September 2014 by the existing DG sets and consumption of lubricating oil per litre, de-rated capacity of the first half of FY 2014-15 (H1) for estimating the energy availability and cost for FY 2015-16.

Accordingly, the Commission approves the following availability from the below-mentioned stations, based on the merit order dispatch principles for FY 2015-16.

Table 7.22: Summary of Power Purchase (Energy in Units) for FY 2015-16

Sl. No.	Station	Location	Capacity (in MW)		Generation on its Full load (kWh)	Actual Generation (MU)	Availability / PLF in %	Auxiliary Consumption (%)	Net Energy Available sent out (MU)
			Installed	De-rated					
Thermal Power Generation									
1	IPP – SPCL	South Andaman	20	15	131400000	95.90	72.98%	3.70%	92.35
2	G/Charama SPV	South Andaman	5	5	43800000	6.50	14.84%	0.00%	6.50
Power Purchase (Hired power plants)									
3	HPP-I	South Andaman	5	5	43800000	2.12	4.84%	3.70%	2.04
4	HPP-II	South Andaman	10	10	87600000	68.86	78.61%	3.70%	66.31
5	HPP-III Mayabunder	North Andaman	1	1	8760000	5.38	61.42%	3.70%	5.18
Total Power Purchase						178.76			172.39
Own Generation									
6	Chatham	South Andaman	15	12.50	84096000	24.27	28.86%	4.74%	23.12
7	Phoenix Bay	South Andaman	8	6.60	57816000	13.20	22.83%	2.58%	12.86
8	Raj Niwas	South Andaman	0.512	0.40	4485120	0.11	2.36%	0.00%	0.11
9	Medical & Secretariat	South Andaman	0.512	0.20	4485120	0.00	0.00%	0.00%	0.00
10	Neil Island	South Andaman	0.634	0.70	3249960	1.34	41.08%	2.14%	1.31
11	Havelock	South Andaman	1.73	1.44	9644760	5.19	53.86%	0.22%	5.18
12	RutLand	South Andaman	0.024	0.01	210240	0.04	20.15%	2.96%	0.04

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Sl. No.	Station	Location	Capacity (in MW)		Generation on its Full load (kWh)	Actual Generation (MU)	Availability / PLF in %	Auxiliary Consumption (%)	Net Energy Available sent out (MU)
			Installed	De-rated					
13	Baratang	Middle Andaman	0.512	0.50	4485120	0.40	8.98%	0.75%	0.40
14	Rangat Bay and Banagaon	Middle Andaman	10.052	6.60	58543080	21.70	37.07%	5.01%	20.61
15	Long Island	Middle Andaman	0.892	0.55	2365200	0.57	24.03%	8.58%	0.52
16	Strait Island	South Andaman	0.015	0.02	131400	0.11	80.69%	0.03%	0.11
17	Hanspuri	Middle Andaman	0.027	0.02	236520	0.02	8.83%	12.45%	0.02
18	Jagannath Dera	North Andaman	0	0.00	0	0.00	0.00%	6.95%	0.00
19	Paschim Sagar	North Andaman	0	1.00	0	0.00	0.00%	3.54%	0.00
20	Smith Island	North Andaman	0.23	0.04	2014800	0.00	0.00%	4.27%	0.00
21	Sita Nagar	North Andaman	2.368	2.37	13315200	2.65	19.90%	1.26%	2.62
22	KHEP**	North Andaman	5.25	4.80	42048000	14.24	33.86%	1.47%	14.03
23	Hutbay	South Andaman	5.65	3.10	22732200	10.12	44.51%	4.28%	9.68
24	Dugong Creek	South Andaman	0.047	0.04	219000	0.04	19.36%	1.77%	0.04
25	NPH Car Nicobar	Nicobar	5.636	4.62	23652000	9.26	39.17%	5.09%	8.79
26	Karmorta +Community Power Houses)	Nicobar	1.124	0.96	5764080	2.44	42.30%	0.43%	2.43
27	Pillpillow	Nicobar	0.056	0.06	490560	0.00	0.00%	1.65%	0.00
28	Kakana	Nicobar	0.056	0.06	490560	0.00	0.00%	2.38%	0.00
29	Champion	Nicobar	0.323	0.20	700800	0.32	45.36%	2.13%	0.31
30	Katchal	Nicobar	1.23	1.03	6044400	1.29	21.39%	1.94%	1.27
31	Teressa	Nicobar	0.756	0.53	4099680	0.83	20.17%	1.68%	0.81
32	Choera	Nicobar	0.164	0.16	1033680	0.23	22.52%	4.20%	0.22
33	Campbell Bay	Nicobar	2.848	2.30	16950600	5.28	31.13%	2.61%	5.14
Total Own Generation						113.64			109.61
Grand Total						292.40			282.00

****Hydro Power Plant Kalpong, North Andaman**

Table 7.23: Summary of Power Purchase and Fuel Cost for FY 2015-16

Sl. No.	Station	Location	HSD Consumption (in Ltrs)	Lube oil Consumption (in Ltrs)	HSD Rate (Rs./ KL)	HSD Cost (Rs. Cr)	LSD Rs/KL	Lube Oil Cost (Rs. Cr)	Revised Billed Amount fixed charges (Rs. Crore)	Rebate (Rs. Cr)	Total Billed Amount (Rs. Cr)	Rs. Kwh H1
Thermal Power Generation												
1	IPP – SPCL	South Andaman	22851788	93825	61392	140.29	180.93	1.70	17.28	0.44	158.83	16.56
2	G/Charama SPV	South Andaman	0	6359	61392	0.00	180.93	0.12			5.04	7.76
Power Purchase (Hired power plants)												
3	HPP-I	South Andaman	721312	2074	61392	4.43	180.93	0.04	0.3		4.77	22.48
4	HPP-II	South Andaman	14539064	67370	61392	89.26	180.93	1.22	9.34		99.82	14.50
5	HPP-III Mayabunder	North Andaman	1135930	5264	61392	6.97	180.93	0.10	1.7		8.77	16.30
Total Power Purchase										0.44	277.23	
Own Generation												
6	Chatham	South Andaman	6328976	23741	61392	38.85	180.93	0.43			39.28	16.19
7	Phoenix Bay	South Andaman	3443069	12916	61392	21.14	180.93	0.23			21.37	16.19
8	Raj Niwas	South Andaman	27651	104	61392	0.17	180.93	0.00			0.17	16.19
9	Medical & Secretariat	South Andaman	0	0	61392	0.00	180.93	0.00			0.00	0.00
10	Neil Island	South Andaman	348248	1306	61392	2.14	180.93	0.02			2.16	16.19
11	Havelock	South Andaman	1354911	5083	61392	8.32	180.93	0.09			8.41	16.19
12	Rutland	South Andaman	11051	41	61392	0.07	180.93	0.00			0.07	16.19
13	Baratang	Middle Andaman	105069	394	61392	0.65	180.93	0.01			0.65	16.19
14	Rangat Bay & Banagaon	Middle Andaman	5659822	21231	61392	34.75	180.93	0.38			35.13	16.19
15	Long Island	Middle Andaman	148218	556	61392	0.91	180.93	0.01			0.92	16.19
16	Strait Island	South Andaman	18413	104	61392	0.11	180.93	0.00			0.11	10.84
17	Hanspuri	Middle Andaman	5445	20	61392	0.03	180.93	0.00			0.03	16.19
18	Jagannath Dera	North Andaman	0	0	0	0.00	0.00	0.00			0.00	0.00
19	Paschim Sagar	North Andaman	0	0	0	0.00	0.00	0.00			0.00	0.00
20	Smith Island	North Andaman	0	0	0	0.00	0.00	0.00			0.00	0.00

Sl. No.	Station	Location	HSD Consumption (in Ltrs)	Lube oil Consumption	HSD Rate (Rs./ KL)	HSD Cost (Rs. Cr)	LSD Rs/KL	Lube Oil Cost (Rs. Cr)	Revised Billed Amount	Rebate (Rs. Cr)	Total Billed Amount	Rs. Kwh H1
21	Sita Nagar	North Andaman	691175	2593	61392	4.24	180.93	0.05			4.29	16.19
22	KHEP**	North Andaman	0.00	13928	0.00	0.00	0.00	0.00			0.00	0.00
23	Hutbay	South Andaman	2638630	9898	61392	16.20	180.93	0.18			16.38	16.19
24	Dugong Creek	South Andaman	11057	41	61392	0.07	180.93	0.00			0.07	16.19
25	NPH Car Nicobar	Nicobar	2415986	9063	61392	14.83	180.93	0.16			15.00	16.19
26	Karmorta +Community Power Houses)	Nicobar	635970	2386	61392	3.90	180.93	0.04			3.95	16.19
27	Pillpillow	Nicobar	0	0	0	0.00	0.00	0.00			0.00	0.00
28	Kakana	Nicobar	0	0	0	0.00	0.00	0.00			0.00	0.00
29	Champion	Nicobar	82917	311	61392	0.51	180.93	0.01			0.51	16.19
30	Katchal	Nicobar	337220	1265	61392	2.07	180.93	0.02			2.09	16.19
31	Teressa	Nicobar	215620	809	61392	1.32	180.93	0.01			1.34	16.19
32	Choera	Nicobar	60726	228	61392	0.37	180.93	0.00			0.38	16.19
33	Campbell Bay	Nicobar	1376101	5162	61392	8.45	180.93	0.09			8.54	16.19
	Total Own Generation									0.00	160.86	
	Grand Total									0.44	438.09	

**Hydro Power Plant Kalpong, North Andaman

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 3.3% of the total consumption of all the consumers in its area as power purchase from renewable sources for FY 2014-15, including 0.60% for Solar and 2.70% for Non-Solar sources.

The projected availability of renewable power from NTPC Solar and KHEP and consequential RPO Compliance for FY 2015-16 is tabulated below:

**Table 7.24: Summary of RPO Compliance for FY 2015-16
(MU)**

S. No	Description	FY 2015-16
1	Sales Within the UT	234.20
2	RPO Obligation (in %)	
	- Solar	0.85%
	-Non Solar	2.70%
3	RPO Obligation (in MU)	
	- Solar	1.99
	-Non Solar	6.32
4	RPO Compliance (Actual Purchase)	
	- Solar	6.50
	-Non Solar	15.31
5	RPO Compliance (REC Certificate Purchase)	
	- Solar	0.00
	-Non Solar	0.00
6	Total RPO Compliance	
	- Solar	6.50
	-Non Solar	15.31
7	Shortfall in RPO Compliance	
	- Solar	0.00
	-Non Solar	0.00

It is evident from the above that the availability of solar and non-solar power from NTPC solar and KHEP is sufficient not only to meet the RPO Compliance for FY 2015-16.

However, keeping in view the lower cost of solar generation, as compared to diesel based generation, the Commission again emphasises on the direction of its previous Order regarding the Solar Plants at Neil Island- 50 KWp, Havelock - 50 KWp, wherein it was stated that:

In the light of 100 KWp solar projects installed on the Andaman & Nicobar Islands, the Petitioner is directed to revive the operations of the said plants and may go in for Annual Maintenance Contract of these small solar power plants with the organisation responsible for carrying out the maintenance activity of the proposed 5 MW solar power plant; so that the AMC contractor shall not be hesitant to come from the mainland for such a small contract and as such, the consumers of A&N would be able to get un-interrupted green power and the burden on the Administration of A&N due to high cost of diesel power is reduced. Besides, it would

also help A&N to meet its RPOs.

Additionally, four to six engineers/technicians of ED-A&N who shall be actually deployed for the job of maintenance of solar power plants; should be initially trained at the new site of 5 MW Solar Power Plant for upkeep and maintenance of 2 x 50 kWp plants, so as to equip the officials of the department with the available technologies and spares for such purpose. This may reduce the frequent dependency on the mainland for the purpose of maintenance.

Summary of total approved Power Purchase Cost for FY 2015-16

While estimating the total power purchase cost, the station-wise energy availability and power purchase cost and fuel cost, as indicated in the earlier Para's has been considered. The Commission considers Power purchase, Own generation quantum and costs for FY 2015-16 as follows:

Table 7.25: Power purchase, Own generation Quantum and Costs for FY 2015-16

Item	FY 2015-16	
	Quantum (MU)	Cost (Rs. Crore)
Power Purchase	178.76	277.23
Own Generation	113.64	160.86
Total	292.40	438.09

It is seen that in the case of A&N, majority of the generation is diesel based, making per unit cost of generation very high compared to other utilities. **If the units generated by hydro-electric plant are excluded from the total generation, the average fuel cost of DG sets of own generation would work out at Rs. 16.21 per unit for FY 2015-16.** In view of the higher cost of diesel generation, the approved tariff is not covering the full cost of supply. Historically, there has been a substantial gap between the actual cost of supply and the revenue realised. This gap so far has been borne by the Administration of A&N.

Keeping the above fact in view, the Commission is of the view that any variation in power purchase cost (including variation in cost of its own generation) should, for the time being, be borne by the utility and efforts to enforce energy efficiency be enhanced.

7.7 Operation and Maintenance Expenses

Petitioner's Submission

The Petitioner has submitted the MYT for the 3 year control period for FY 2015-16 to FY 2017-18 for approval of ARR for the Control Period FY 2015-16 to FY 2017-18 and determination of Tariff for FY 2015-16.

The Operation and Maintenance expenses comprise of the following heads of expenditure:

- **Employees Expenses** which include the salaries, dearness allowance, dearness pay, other allowances and retirement benefits paid to the staff;
- **Repair and Maintenance (R&M) Expenses**, which include all expenditure incurred on the maintenance and upkeep of transmission and distribution assets; and
- **Administrative and General Expenses**, which include all expenditure incurred in operating a business. These include: telephone charges, regulatory and consultancy fees such as energy auditing and chartered accountant fees, conveyance and travel expenses, water charges, etc.

The Petitioner has submitted the operation and maintenance costs of the previous years for consideration by the Hon'ble Commission, as mentioned below:

Table 7.32: O&M Expenses of the Previous Years & Projections for MYT Period

Financial Year	O&M Expenses (Rs. Crore)
2006-07	57.10
2007-08	60.70
2008-09	63.90
2009-10	68.70
2010-11	71.60
2011-12	78.26
2012-13	86.86
2013-14	98.87
2014-15	104.79
2015-16	111.05
2016-17	117.69
2017-18	124.73

Commission's Analysis

Regulation 27 (3) of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specify:

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

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

As specified in Regulation 27(3) (b) of JERC Regulations, 2009 the O&M expenses shall be adjusted according to variation in rate of WPI per annum to determine the O&M expenses for subsequent year. The WPI inflation Index used for computation of Employee Cost, A&G Expenses and R&M Expenses, is given in Table below:

Table 7.33: WPI inflationary index

S. No.	Financial year	Average WPI
1	FY 2013-14	177.64
2	FY 2012-13	167.62
3	Increase over previous year % [(1-2)/2]*100	5.98%

7.7.1 Employee Expenses

Petitioner's Submission

The expense head of employee cost includes salary and allowance, bonus, Leave Travel Concession (LTC) and Honorarium. ED-A&N has projected the employee cost as Rs.68.36 crore for FY 2015-16, taking into consideration the increase in the

basic salary, etc. at the rate of 5.98%, i.e., (WPI from 2012-13 to 2013-14) over the cost for the year 2013-14. The Petitioner has requested the Commission to approve the employee expenses of Rs. 68.36 crore for FY 2015-16, as projected.

Commission's Analysis

The Commission in terms of Regulation 27 (3) of JERC Tariff Regulations 2009 has computed the employee cost considering the Employee cost considered in review for FY 2014-15 as base expenses and projected the employee cost for FY 2015-16 with inflationary WPI indexation of 5.98%.

The Commission has approved Employee Cost as Rs.64.50 Crore in review for 2014-15. The Commission has computed the average WPI index increase at 5.98% per year in earlier paragraph. Based on the average WPI escalation factor of 5.98% during preceding year, the employee expenses for FY 2015-16 is computed as detailed in the Table below:

Table 7.34: Employee expenses approved for FY 2015-16

(Rs. Cr)

Sr. No	Particulars	Petitioner's submission	Approved for 2015-16
1	Employee cost (as per 2014-15 RE)	64.50	64.50
2	Inflationary index	5.98%	5.98%
3	Inflationary increase (1 * 2)	3.86	3.86
4	Employee cost (1+3)	68.36	68.36

7.7.2 Administration and General Expenses

Petitioner's Submission

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

- Domestic Travelling Expenses
- Office Expenses
- Legal, Regulatory & Consultancy Fees
- Insurance, etc.

The A&G expenses of ED-A&N for FY 2013-14 are Rs.1.23 crore, A&G expenses for the FY 2014-15 are estimated at Rs.1.30 crore (RE), which have been escalated by 5.98% i.e., (WPI from 2012-13 to 2013-14) to arrive at the A&G expenses of Rs.1.38 crore for FY 2015-16 and requested the Commission to approve the A&G Expenses, as proposed.

Commission's Analysis

The Commission in terms of Regulation 27 (3) of JERC Tariff Regulations 2009 has computed the administration and general expenses based on the A&G expenses considered in review for FY 2014-15 and projected the A&G expenses for FY 2015-16 with inflationary WPI indexation of 5.98%.

The Commission has approved A&G expenses as Rs.1.30 Crore in review for 2014-15. The Commission has computed the average WPI index increase at 5.98% per year in earlier paragraph. Based on the average WPI escalation factor of 5.98% during preceding year, the A&G expenses for FY 2015-16 is computed as detailed in the Table below:

Table 7.35: A & G expenses approved for FY 2015-16

(Rs. Cr)			
Sr. No	Particulars	Petitioner's submission	Approved for 2015-16
1	A & G expenses (as per 2014-15 RE)	1.30	1.30
2	Inflationary index	5.98%	5.98%
3	Inflationary increase (1 * 2)	0.08	0.08
4	A & G Expenses (1+3)	1.38	1.38

7.7.3 Repair and Maintenance Expenses

Petitioner's Submission

The ED-A&N has submitted the R&M Expenses at Rs.41.31 crore for FY 2015-16.

It is further submitted that the Petitioner has been undertaking various repairs and maintenance activities towards improvement of systems, reduction in breakdowns, reduction in response time and increasing preventive maintenance. The R&M expenses for FY 2015-16 have been projected duly escalated by 5.98% over the expenses of FY 2014-15 for inflationary increase and requested the Commission to approve the expenses, as proposed.

Commission's Analysis

The Commission in terms of Regulation 27 (3) of JERC Tariff Regulations 2009 has computed the repairs and maintenance (R&M) expenses based on the R&M expenses considered in review for FY 2014-15 and projected the R&M expenses for FY 2015-16 with inflationary WPI indexation of 5.98%.

The Commission has approved R & M expenses as Rs.38.98 Crore in review for 2014-15. The Commission has computed the average WPI index increase at 5.98% per year in earlier paragraph. Based on the average WPI escalation factor of 5.98% during preceding year, the R&M expenses for FY 2015-16 is computed as detailed in the Table below:

Table 7.36: R & M expenses approved for FY 2015-16

(Rs. Cr)			
Sr. No	Particulars	Petitioner's submission	Approved for 2015-16
1	R & M expenses (as per 2014-15 RE)	38.98	38.98
2	Inflationary index	5.98%	5.98%
3	Inflationary increase (1 * 2)	2.33	2.33
4	R & M Expenses (1+3)	41.31	41.31

O&M Expenses approved

Table 7.37: O&M Expenses approved by the Commission for FY 2015-16

(Rs. Cr)			
Sl. No	Particulars	Petitioner's submission	Approved for 2015-16
1	Employee Expenses	68.36	68.36
2	A&G Expenses	1.38	1.38
3	R&M Expenses	41.31	41.31
4	O&M Expenditure	111.05	111.05

7.8 Capital Expenditure and Capitalisation

Petitioner's Submission

The Petitioner has submitted that the CAPEX, during FY 2014-15, was Rs 66.41 crore for FY 2014-15, with capitalisation of Rs 20 crore. Further, the estimated capital expenditure for FY 2015-16, FY 2016-17 and FY 2017-18 is Rs. 83.10 crore, Rs. 90.5 crore and Rs. 99.00 crore respectively. The summary of the

proposed capital expenditure and capitalisation is given below:

Table 7.38: Capital Investment and Capitalization for the Control Period

(Rs. Cr)						
Sl. No	Item	2013-14 (Actual)	2014-15 (Estimated)	2015-16 (Estimated)	2016-17 (Estimated)	2017-18 (Estimated)
1	Opening balance	354.87	425.63	400.44	415.31	425.56
2	Add: New investments	82.05	66.41	83.10	90.50	99.00
3	Total	436.92	492.04	483.54	305.81	524.56
4	Less: Investment capitalized	11.29	91.59	68.23	80.25	88.65
5	Closing balance	425.63	400.45	415.31	425.56	435.91

Commission's Analysis

Since the capital investment is for augmentation of distribution system in the Island territory and is in line with expenditure for FY 2013-14, the Commission approves the capital investment in principle and capitalisation as proposed by the licensee.

7.9 Gross Fixed Assets (GFA)

Petitioner's Submission

The Petitioner has submitted that the opening value of gross fixed assets (GFA) for 2013-14 has been taken from the audited accounts for the FY 2011-12 and the same has been increased by addition of assets during FY 2012-13 and FY 2013-14 and the estimated addition during FY 2014-15. Thereafter, planned additions during 2015-16, 2016-17 and 2017-18 have been considered and, accordingly, the GFA has been computed for the Control Periods FY 2015-16, FY 2016-17 and 2017-18. The GFA movement is given in the Table below:

Table 7.39: Gross Fixed Asset Movement Submitted by the Petitioner

Financial Year	Opening Balance (Rs. crore)	Addition during year (Rs. crore)	Closing Balance (Rs. crore)
FY2012-13	62.78	36.85	99.63
FY2013-14	99.63	60.41	160.04
FY2014-15	110.92	91.59	202.51
FY2015 -16	202.51	68.23	270.74

Commission's Analysis

The GFA movement, as furnished by the Petitioner in the above Table, has been considered, subject to actual expenditure and additions during the MYT period to

be capitalised.

7.10 Depreciation

Petitioner's Submission

The Petitioner has submitted that the depreciation for FY 2013-14, FY 2014-15 and FY 2015-16 has been computed on the basis of the rates outlined as under:

Assets	Depreciation Rate
Plant & Machinery	5.28%
Buildings	3.34%
Vehicles	5.28%
Furniture	6.33%
Computers	5.28%

Depreciation has been calculated at the above rates on the average assets for FY 2015-16 as given in the Tables below:

Table 7.40: Depreciation FY 2015-16

Particulars	Opening Assets (Rs. crore)	Addition during year (Rs. crore)	Closing Assets (Rs. crore)	Average Assets (Rs. crore)	Depreciation Rates (%)	Depreciation Amount (Rs. crore)
Plant & Machinery	149.79	62.28	212.07	180.93	5.28%	9.55
Buildings	42.87	4.90	47.77	45.32	3.34%	1.51
Vehicles	6.30	0.00	6.30	6.30	5.28%	0.33
Furniture	2.40	0.90	3.30	2.85	6.33%	0.18
Computers	1.15	0.15	1.30	1.22	5.28%	0.06
Total	202.51	68.23	270.74	236.62		11.64

Commission's Analysis

The ED-A&N has claimed depreciation at Rs.11.64 crore for FY 2015-16. The depreciation has been computed on the basis of straight line method on the gross fixed assets in use at the beginning of the year and addition in assets during the financial year. The Commission has examined the computation of depreciation for FY 2015-16 in terms of JERC Tariff Regulations, 2009 and accordingly considers depreciation at Rs. 11.64 crore for FY 2015-16.

7.11 Return on Capital Base

Petitioner's submission

On the basis of JERC Regulation for determination of tariff, the capital based return has been computed by the Petitioner, as outlined below:

Table 7.41: Return on Capital Base projected for FY 2015-16

(Rs. Cr)

Sl. No	Item	2013-14 (Actuals)	2014-15 (RE)	Petitioner's submission for FY 2015-16
1	Gross block at beginning of the year	99.63	110.92	202.51
2	Less: accumulated depreciation	6.45	11.31	18.82
3	Net block at beginning of the Year	93.18	99.60	183.69
4	Less : accumulated consumer contribution	0.00	0.00	0.00
5	Net fixed assets at the beginning of the year	93.18	99.60	183.69
6	Reasonable return @3% of NFA	2.80	2.99	5.51

Commission's Analysis

The Commission has examined the computation of Return on Capital Base by the Petitioner, which is in line with the Regulation 23(2) of JERC Regulations, 2009. The Rate of Return is considered at 3% of NFA as prescribed in line with earlier tariff orders. The Commission accordingly, considers the Return on capital base for FY 2015-16 as given in the Table below:

Table 7.42: Return on Capital Base approved for FY 2015-16

(Rs. Cr)

Sl. No	Item	Petitioner's submission for FY 2015-16	Approved for FY 2015-16
1	Gross block at beginning of the year	202.51	202.51
2	Less: accumulated depreciation	18.82	18.82
3	Net block at beginning of the Year	183.69	183.69
4	Less : accumulated consumer contribution	0.00	0.00
5	Net fixed assets at the beginning of the year	183.69	183.69
6	Reasonable return @3% of NFA	5.51	5.51

7.12 Interest and Finance Charges

7.12.1 Interest on Loan / Debt

Petitioner's Submission

The Petitioner has submitted that since ED-A&N is a Government Department, the entire capital employed till date has been funded through equity infusion by the Central Government through budgetary support, without any external borrowings. The interest on debt/loan has been calculated by considering normative debt to be 70% of the GFA. The details of interest calculation are detailed in the Table below:

Table 7.43: Interest and finance charges projected for FY 2015-16 (Rs. Crore)

Sl. No	Particulars	Petitioner's submission
1	Opening Normative Loan / WIP	126.82
2	Add: Normative Loan during the year / GFA during the year	47.76
3	Less: Normative Repayment allowed during the previous years	17.78
4	Less: Normative Repayment for the year	12.68
5	Closing Normative Loan / GFA	161.90
6	Average Normative Loan	144.36
7	Rate of Interest @ SBI SBAR rate)	14.75%
8	Interest on Normative Loan	21.29

Commission's Analysis

The Commission has analysed the loan for capital expenditure and it is observed that the repayment of loan is claimed at Rs.12.68 crore for FY 2015-16. The repayment of normative loan has been considered at $\frac{1}{1}$ th of the loan outstanding at the beginning of the year in line with earlier tariff orders. Accordingly, the interest on normative loan has been calculated, as detailed in the Table below:

Table 7.44: Interest and finance charges approved for FY 2015-16 (Rs. Crore)

Sl. No	Particulars	Approved for FY 2015-16
1	Opening Normative Loan / WIP	108.04
2	Add: Normative Loan during the year / GFA during the year	47.76
3	Less: Normative Repayment allowed during previous years	17.78
4	Less: Normative Repayment for the year	11.64
5	Closing Normative Loan / GFA	126.38
6	Average Loan	117.21
7	Rate of interest	14.45%
8	Interest on Normative Loan	17.28

7.12.2 Interest on Working Capital

Petitioner's Submission

The Petitioner has submitted that The ED-A&N has computed the Interest on Working Capital for FY 2015-16 on normative basis. As per JERC Tariff Regulations, for the purpose of computation of normative working capital and Interest on working capital, the components of working capital should be as follows:

- Two month's Fuel Cost
- One month's Power Purchase Cost
- One month's Employee Costs
- One month's Administration & General Expenses
- One month's 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, which was 14.75%, as on 1st April, 2014.

The interest on working capital for FY 2015-16 is projected at Rs. 7.57 crore as given in the Table below:

Table 7.45: Interest on Working Capital projected for FY 2015-16 (Rs. Crore)

Sl. No	Item	Petitioner's submission
1	Fuel cost for two months	17.51
2	Power purchase cost for one month	24.57
3	Employee Cost for one month	5.7
4	A&G Expenses for one month	0.11
5	R&M Expenses for one month	3.44
6	Total Working Capital for one month	51.33
7	Security Deposit of Consumers	0.00
8	Net working capital for one month, after deducting security deposit considered by the Commission	51.33
9	SBI PLR Rate	14.75%
10	Interest on Working Capital	7.57

Commission's Analysis

The Commission has examined the computation of working capital and interest thereon in terms of Regulation 29 (3) of the JERC Tariff Regulations, 2009.

The Commission observes that the Security Deposit from consumers available with the Petitioner has not been adjusted against the working capital requirement. The Commission opines that there is working capital requirement to the extent of security deposits available with the Petitioner. Further, the Commission is allowing interest on security deposit to the petitioner on payment basis in the ARR. Hence, the Commission has considered the security deposit and adjusted the same against the working capital requirement. The Commission in the tariff order dated 11.04.2014 has considered security deposit at Rs.1.34 crore accordingly, the Commission considers the same for FY 2015-16 for computation working capital requirement and interest thereon as shown in the Table below.

Table 7.46: Interest on Working Capital Approved for FY 2015-16 (Rs. Crore)

Sl. No	Particulars	Approved for FY 2015-16
1	Fuel Cost for two months	26.81
2	Power Purchase Cost for one month	23.10
3	Employee Cost for one month	5.70
4	A&G Expenses for one month	0.12
5	R&M Expenses for one month	3.44
6	Total Working Capital for one month	59.17
7	Less: Security Deposit of Consumers	1.34
8	Net working capital for one month, after deducting security deposit considered by the Commission	57.83
9	SBI PLR Rate	14.75%
10	Interest on Working Capital	8.53

7.12.3 Interest on Security Deposit

Petitioner's Submission

The Petitioner has submitted that the Electricity Department collects deposits from consumers and contractors (as Earnest Money Deposit or security). While the security deposit from consumers is taken at the time of providing the connection and has to be repaid to the consumers at the time of surrender of the connection, security deposit from contractors is adjusted subsequent to satisfactory completion of the contracted work. These deposits are in the form of Fixed Deposits Receipts (FDR)/ Bank Guarantees and in case of FDR, the interest is directly paid to the consumer. Hence, no interest on security deposits has been projected in the Petition.

Commission's Analysis

The Security Deposit of Rs.1.34 crore (as per Tariff Order dated 11.04.2014) is considered as available to the Petitioner.

As per Section 47 (5) of the Electricity Act, 2003, the Petitioner has to pay the interest on the Security Deposits available with the ED-A&N and it should be claimed in the ARR filed by the Petitioner. The Petitioner should maintain the registers of Security Deposits collected from the consumers every year and pay the interest as per the bank rate of interest. However, the Petitioner has not considered any interest, on the plea that deposits are in the form of Fixed Deposits (FDR) and the interest is directly paid to the consumers.

The Commission observes the Petitioner is not paying the interest to the consumers and hence, no interest is considered for FY 2015-16.

7.12.4 Provision for Bad and Doubtful Debts

Petitioner's Submission

ED-A&N has not proposed any provision for bad debts of revenue from sale of power to the consumers. It is submitted that an exercise is being done to determine the category-wise bad debts and the same will be claimed in future filings. Thus, ED-A&N has not projected any provision for bad debts for FY 2015-16.

Commission's Analysis

As per Regulation 28 of the JERC Tariff Regulations, 2009 specify "*the Commission may after the licensee gets the receivables audited, allow a provision for bad debts at 1% of receivables in the revenue requirement of the licensee*".

The Commission in view of the regulation has not considered provision for bad and doubtful debts for FY 2015-16.

7.13 Non-Tariff Income

Petitioner's Submission

The Petitioner has estimated the Non-tariff income for FY 2015-16 by escalating the estimated Non-tariff income of FY 2014-15 by 5%. Accordingly, Non-tariff

income for FY 2015-16 has been calculated at Rs. 2.57 crore.

Commission's Analysis

The Commission has considered non tariff income at Rs.2.45 crore in review for FY 2014-15. Further, it is observed that non tariff income is uncontrollable is subject to true up based on audited accounts. Hence, the Commission considers the non tariff income as projected by the Petitioner at Rs.3.57 crore for FY 2015-16.

7.14 Aggregate Revenue Requirement for FY 2015-16

Petitioner's Submission

The Petitioner has submitted the Aggregate Revenue Requirement (ARR) for FY 2015-16 as given below:

Table 7.47: ARR projected by the Petitioner for FY 2015-16 (Rs. Crore)

Sl. No	Particulars	Petitioner's submission
1	Cost of fuel	210.09
2	Cost of power purchase for full year	294.79
3	Employee Costs	68.36
4	Repair and Maintenance Expenses	41.31
5	Administration and General Expenses	1.38
6	Depreciation	11.64
7	Interest and Finance charges (including interest on working capital)	28.86
8	Return on NFA /Equity	5.51
9	Provision for Bad Debt	0.00
10	Total Revenue Requirement	661.94
11	Less: Non-tariff income	2.57
12	Net Revenue Requirement	659.38
13	Revenue from Tariff	110.35
14	GAP	549.03
15	GAP carried forward from previous years	0.00
16	Total GAP	549.03
17	Revenue surplus carried over	0.00
18	Additional revenue from the proposed tariff	11.19
19	Regulatory asset	0.00
20	Energy sales (MU)	234.20

Commission's Analysis

Based on the discussions on the cost parameters in the preceding sections, the Commission approves the Aggregate Revenue Requirement (ARR) for FY 2015-16 as given in the Table below:

Table 7.48: Approved Aggregate Revenue Requirement (Rs. Crore)

Sl. No	Particulars	Petitioner's submission	Approved for FY 2015-16
1	Cost of fuel	210.09	210.09
2	Cost of power purchase for full year	294.79	294.79
3	Employee Costs	68.36	68.36
4	Repair and Maintenance Expenses	41.31	41.31
5	Administration and General Expenses	1.38	1.38
6	Depreciation	11.64	11.64
7	Interest and Finance charges	21.29	17.28
7	Interest working capital	7.57	8.53
8	Return on NFA /Equity	5.51	5.51
9	Provision for Bad Debt	0	0
10	Total Revenue Requirement	661.94	658.89
11	Less: Non-tariff income	2.57	2.57
12	Net Revenue Requirement	659.37	656.32
13	Revenue from Tariff	110.35	117.27
14	GAP	549.03	539.05
15	GAP carried forward from previous years	0.00	0.00
16	Total GAP	549.03	539.05
17	Revenue surplus carried over	0.00	0.00
18	Additional revenue from the proposed tariff	11.19	9.10
19	Regulatory asset	0.00	0.00

7.15 Average Cost of Supply

Petitioner's Submission

The Petitioner has submitted the Average Cost of Supply for the Control Period as shown in the Table below:

Table 7.49: Petitioner's Average cost of Supply for FY 2015-16

Sl. No.	Particulars	FY 2015-16
1	Net Revenue Requirement (Rs. Crore)	659.38
2	Energy Sales (MU)	233.89
3	Average Cost of Supply/unit	28.19

Commission's Analysis

The Commission has considered and approved the Average Cost of Supply based on actual revenue and sales and the same has been summarised in the Table below:

Table 7.50: Approved Average cost of Supply for FY 2015-16

Sl. No.	Particulars	FY 2015-16
1	Net Revenue Requirement (Rs.Crore)	656.32
2	Energy Sales (MU)	234.20
3	Average Cost of Supply (Rs/kWh)	28.02

7.16 Revenue at Existing Tariff and Gap for FY 2015-16

Petitioner's Submission

The estimated revenue at the existing tariff for FY 2015-16 and the gap is provided in the Table below:

**Table 7.51: Petitioners Revenue Gap at Existing Tariff FY 2015-16
(Rs. Cr)**

Sl. No	Particulars	FY 2015-16
1	Net Revenue Requirement	659.38
2	Revenue from Retail sales at Existing Tariff	110.35
3	Net Gap (1-2)	549.03
4	Gap of the previous year	--
5	Total Gap (3+4)	549.03

Commission's Analysis

The estimated (surplus) / gap have been mentioned in the following table. The revenue gap / (surplus) will be carried forward to the next tariff order and has accordingly been considered for FY 2015-16.

**Table 7.52: Approved revenue gap for FY 2015-16 (As per Commission)
(Rs. Cr)**

Sl. No.	Particulars	FY 2015-16
1	Net Revenue Requirement	656.32
2	Revenue from Retail sales at the Existing Tariff	126.37
3	Net Gap (1-2)	529.95
4	Gap of the previous year	--
5	Total Gap (3+4)	529.95
6	Budgetary Support from Government	529.95
7	Net Final Revenue Gap/ (Surplus) (5-6)	0.00

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 A&N. Therefore, keeping in view the past practice, the assessed gap of FY 2015-16 will be borne by the Administration of A&N through the Non-Plan funding in Annual Plan by the Govt. of India to the Electricity Department of the Andaman and Nicobar Islands.

8. DIRECTIVES

The Commission issued various directives in the earlier Tariff Orders. But the Petitioner has neither complied with the directives, nor submitted a report regarding the same.

The Commission reiterates the directives issued in the Tariff Order dated April 11' 2014, with the Commission's analysis there on. The directives and the progress of their compliance as mentioned in the order are reproduced below, along with Commission's observation on the compliances.

Compliance of Directives issued by the Commission in the tariff order on Petition no 65/2012 for FY 2012-13 dated June 04'2012.

Directive 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-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 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 audited accounts for consideration by the Hon'ble Commission.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"Accounts for the period April'12 to September'12 is under compilation. Review petition will be filed after preparation accounts for the period. Hon'ble Commission may kindly allow the same"

Commission's Comments

In view of the revised estimates submitted by the petitioner for FY 2012-13 along with half yearly actuals along with ARR and Tariff Petition for FY 2013-14, Commission has undertaken the review of FY 2012-13.

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 audited accounts for consideration by the Commission along with ARR & Tariff Petition for FY 2014-15.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's Submission

"It is submitted that the Annual accounts for the FY 2012-13 has not been audited. The petition for true-up shall be submitted after completion of audit.

It is further submitted that the accounts for the period April'13 to September'13 is under compilation. Submission for review shall be submitted subsequently."

Commission's Comments

The Petitioner is directed to expedite the preparation of annual accounts of FY 2012-13 and file true-up petition for FY 2012-13. The preparation of annual accounts for FY 2012-13 was expected to be completed by this year; the delay in submission of the same is not appreciated and Commission directs the utility to file true-up along with

the audited accounts in the next ARR & tariff filing. **The Commission further directs the petitioner that the accounts must be prepared on Commercial Principles of Accounting.**

Compliance / Action taken in the present petition

The petitioner has not submitted any compliance, inspite of directions by the Commission

Commission's Comments

The inaction of the petitioner is regretted. The petitioner is once again directed to expedite the preparation and auditing of annual accounts for FY 2012-13, FY 2013-14 and FY 2014-15 by 31st October 2015 and submit them to the Commission (Only pro-forma Accounts are received for FY 2011-12 and FY 2012-13).

Directive 2: Preparation of Fixed Asset Register: - Ref Petition 65/2012 –TO June 04, 2012

ED-A&N has stated that the complete updated data of fixed assets is not available. Unless the function wise, asset wise data is updated, correct asset value and depreciation thereon cannot be ascertained.

The petitioner is directed to submit the updated fixed asset register in line with JERC regulations as modified from time to time, with next ARR & Tariff Petition.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"Hiring of consultants for preparation of fixed assets register in line with JERC regulations is under process. Records are required to be collected & compiled from various power houses spread across A&N Islands. In view of the above ED-A&N prays for more time to comply with the directive.

Commission's Comments

The submission of the Petitioner is noted. The timeline stipulated for the submission as per the direction should be adhered to and progress report should be made available by September 30'2013.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

"The proposal for hiring of Consultant on Selection basis for preparation of Fixed Assets Register was turned down by the A&N Administration with the remarks to go for open tender. The tender for hiring of consultants for preparation of Fixed Assets Register has been floated. The Fixed Assets Register will be prepared within six months after finalization of tender for hiring of consultant for the purpose.

In view of the same the Electricity Department, A&N Administration prays before the commission to allow more time for submission of Fixed Assets Register."

Commission's Comments

The submission of the Petitioner is noted. The timeline as committed by the Petitioner in its submission should be adhered to and progress report should be submitted before the Commission by 30th September 2014, failing which the Commission will be constrained to initiate appropriate actions against the utility.

Compliance / action taken in the present petition

The petitioner has not submitted any compliance.

Commission's Comments

The non-compliance of the directive by the petitioner is regretted. The preparation of assets register should be completed by 30th September 2015 and progress report should be submitted by 30th June 2015, otherwise the commission will be compelled to take action under section 142.

Directive 3: Load Forecasting study: -- Ref Petition 65/2012 –TO June 04, 2012

The Petitioner is directed to conduct a detailed load forecasting study for short term (2-5 years), medium term (7-10 years) and long term (15-25 years) in order to understand the load requirements in their area at various periods and submits to Commission along with next tariff petition.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"The Central Electricity Authority (CEA), New Delhi under MOP, Govt. of India had conducted 18th EPS (Electric Power Survey) and submitted report containing forecast detail of A&N Islands also..... "

Commission's Comments

Action taken is noted. The growth projections of the load, sales and consumers etc as per ED (A&N) are at variance with 18th EPS. This may be taken up with CEA for alignment. The Petitioner is directed to submit the status report and progress in this regard by September 30' 2013.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

"The department is carrying out Load Forecasting study with respect to various categories of consumers across all inhabited islands viz-a-viz available sources of power. Subsequent to the compilation of above assessment report, the matter will be taken up with CEA as per the directive of the Hon'ble Commission to align the variance with the 18th EPS report. The Hon'ble Commission may kindly allow the same."

Commission's Comments

The submission of the Petitioner is noted. The Commission observes that considerable amount of time has passed since the issuance of the above directive; however, very little progress has been made. The Commission does not appreciate the delay by the Petitioner in adherence to the above directive. The status report on

the same should be submitted before the Commission by 30th September 2014 failing which the Commission will be constrained to take appropriate actions against the utility.

Compliance / action taken by the petitioner in the present petition

The petitioner has not reported any compliance.

Commission's comments

The inaction of the petitioner in this regard is regretted. The petitioner should complete the work of load forecasting study by 31st December 2015. If the report of ED –A&N is in variance with the status of CEA, the reasons may be explained in the report and a status report on the same should be submitted by 30th September 2015.

Directive 4: Optimization of Fuel Cost-- Ref Petition 65/2012 –TO June 04, 2012

There are 135 no. of diesel generating sets excluding 4 DG sets of M/s SPCL located in 29 islands of Andaman & Nicobar catering to their electricity needs; the capacity of diesel generating sets of ED-A&N varies from 12 KW to 2500 KW. 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 also be proper accounting of generating unit wise fuel receipts & issues. The ED A&N 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 along with the variation could be worked out. Accordingly the petitioner is directed to furnish such details along with the next filing.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"As per the Directive of the Hon'ble Commission the ED, A&N has already implemented a system of accounting of power house-wise fuel consumption and actual fuel consumption per unit of generation is being submitted.

Commission's Comments

Inconsistencies have been observed in the submitted information in the petition in the absence of actual data in respect of PLF, heat rate, consumption of HSD, lubricating oil of the DG Sets owned by the ED- A&N. Further with reference to page xxxiv (a) & (b), the petitioner has used the Station Heat Rate and Lubricating Oil consumption norm of the IPP to project the consumption of HSD and lubricating oil for FY 2012-13 and FY 2013-14 for its own DG sets, while the Commission desired the information with regard to actual consumption of HSD, Lubricating oil, actual generation, auxiliary consumption, calorific value of fuel and its density to determine the actual heat rate for FY 2011-12, FY 2012-13(H1) and as such the additional information as submitted by the petitioner is accordingly considered for estimating the cost of power purchase and fuel & lubricants. As can be observed from the actual data, the PLFs, worked out station heat rate of the DG sets owned by the ED-A&N compare poorly with DG sets of IPP.

Following submission of Petition 124/2014, the Petitioner has informed the Commission about the hiring of the DG Sets of 10 MW and 5 MW without prior approval of the same under section 86(1) or Section 62 of EA 2003, this is a fait accompli, which may not be falling under merit order procurement of Power. This will distort the assessment of quantities of Power Purchase under Self Generation or Purchase from IPP or generated through hired sets. It is hereby directed that the petitioner should follow consistency in the submissions made to the Commission.

In view of the above, the petitioner is also directed to carry out an energy audit to ascertain the pilferage and technical losses and list them separately.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

"To carry out an audit to ascertain the pilferage and loss, Rural Electrification Corporation has been approached to submit a Detail Project Report (DPR). The report ascertaining the pilferage and Loss will be submitted soon after its receipt from REC."

Commission's Comments

The submission of the Petitioner is noted. The compliance of the above directive should be ensured before the next ARR & tariff filing and status report should be submitted before the Commission by 30th September 2015.

Compliance / action taken as per the present petition

The petitioner has not submitted any compliance report.

Commission's comments

The inaction of the petitioner in complying with the directive is regretted. It is once again reiterated that the compliance of the above directive should be submitted by 30th July, 2015.

Directive 5: Bill Payment: Ref Petition 65/2012 –TO June 04, 2012

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

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"Collection of energy bill through 10 Consumer Service Centre (CSCs) under National e-Governance Programme has already been started in Port Blair Municipal area for the benefit of domestic consumers since December' 2011. For remaining consumers the same is under process. Online process is not in place and will be implemented in the 2nd phase."

Commission's Comments

Action taken is noted and the Petitioner is directed to submit the status report and progress in this regard by September 30' 2013.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

"The software for web-based collection of Energy bills is under test stage and will be implemented after completion / rectification of all shortcomings of the software. This software will enable the consumers of any area to pay their Electricity bills at any CSC counters or with the collection centres at various section offices.

The above Web-based software is compatible for use as On-line collection of energy bill; hence after successful use of this software for a year, on-line collection of energy bill will be started in the 2nd phase."

Commission's Comments

The efforts of the Petitioner in this regard are appreciated. The status on the 2nd phase of implementation should be submitted before the Commission by 30th September 2014. The online bill payment facility is likely to result into increased collection of revenue receipts by the utility; progress on the same should be submitted along with the status report on implementation.

Compliance / action taken as per the present petition

The petitioner has not submitted any compliance report.

Commission's comments

The inaction of the petitioner in this regard is regretted. The progress report on the 2nd phase of implementation should be submitted before September 2015.

Directive 6: Collection of Arrears: -- Ref Petition 65/2012 –TO June 04,2012

The Petitioner is directed to analyze the outstanding dues, bad debts etc. & construct a data base of such consumers including the 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.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"Outstanding dues & unrecoverable dues are being analysed and identification of outstanding of Rs. 50,000/- and above and more than six months from the consumers will be done. Compliance will be submitted to the Hon'ble Commission after completion of the exercise."

Commission's Comments

Action taken is noted and the Petitioner is directed to submit the status report and progress in this regard by September 30'2013.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

"It is submitted that since the arrears comprise of very old dues and consumers are spread across various islands, tracing of documents/details and analyzing the same for determination of recoverability of the dues will require further time. The Hon'ble Commission may kindly allow the report on the same to be submitted along with the next ARR."

Commission's Comments

The submission of the Petitioner is noted. The Petitioner, as per its request, is granted further time to comply with the above directive and is directed to submit the status report and progress in the collection of arrears along with the next ARR & tariff filing.

Compliance / action taken as per the present petition

The petitioner has not submitted any compliance report.

Commission's Comments

The petitioner is once again directed to submit the status report and progress in collection of arrears by 30th September 2015.

Directive 7: Capital expenditure: - Ref Petition 65/2012 –TO June 04,2012

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

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"Statement enclosed as Annexure -II."

Commission's Comments

The submission of the Petitioner is noted. As can be observed the submitted statement does not show the capitalization achieved. The timeline stipulated for the submission as per the direction should be adhered to and quarterly submissions should be made for the remaining quarters of FY 2012-13 and going forward for the coming years.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

"Details of Capital expenditure are submitted in the Format -5 of this petition"

Commission's Comments

The submission of the Petitioner is noted. The Petitioner is directed to submit a detailed capital investment plan highlighting the cost-benefit analysis of each scheme separately and submit the same as per the regulations. Separate approval of the capital investment plan should be obtained from the Commission

Compliance / action taken as per the present petition

The petitioner has not submitted any compliance report.

Commission's Comments

The inaction of the petitioner is regretted. A detailed capital investment plan along with cost benefit analysis may be submitted before the next tariff filing.

Directive 8: Metering of consumer installations / Replacement of Non-Functional or Defective Meters:- Ref Petition 65/2012 –TO June 04,2012

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 to all consumers. ED-A&N is directed to submit an action plan regarding installation/replacement of meters by 30th October 2012.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"100% metering has been done. Action plan is furnished below for replacement of defective meters. It is submitted that all the non-functional/ defective meters in operational area of the department shall be replaced within the schedule as provided below."

S.No.	Date	%
1.	31/03/2013	10
2.	31/03/2014	50
3.	31/03/2015	40

Commission's Comments

Action taken is noted and the Petitioner is directed to expedite the work for completing the same on earlier schedules than shown above and to submit the status report and progress in this regard by September 30' 2013.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**Petitioner's submission**

Metering by Electricity Department in A&N islands in line to the CEA Regulation, 2006 (Installation and Operation of Meters) has been implemented and 31592 out of 1,13,688 Meters are Mechanical Meters which are proposed to be replaced by Electronic Meters in a phased manner. The Current Status of the Consumer Metering is tabulated below:-

Sl. No.	Description	Status as on 30.9.2013
1.	Name of Licensee	A&N Electricity Department
2.	No. of consumers	113688
	(i) Without meter	Nil
	(ii) With meter	113688
3.	No. of consumers having	
	(i) Mechanical meter	31592
	(ii) Electronic meter	82096
4.	Condition of Mechanical meters	
	(i) Working	28630
	(ii) Non-working	2962
5.	Condition of Electronic meter	
	(i) Working	77323
	(ii) Non-working	4773
6.	Total meters required to be installed / replaced	
	(i) Non installed	Nil
	(ii) Non-working: Mechanical	2962
	Electronic	4773
	Working: Mechanical	28630
	Total = 6 (i+ii+iii):	36365

Commission's Comments

The submission of the Petitioner is noted. The Commission appreciates the efforts of the Petitioner in this regard; particularly with regard to the metering of all the consumers. The status report and progress in this regard should be submitted before the Commission by 30th September 2014.

Compliance / action taken as per the present petition

The petitioner has not submitted any compliance status report so far.

Commission's Comments

The status report and progress in respect of metering of consumer installations and replacement of non-functional / defective meters should be submitted by 30th September 2015.

Directive 9: Strengthening of the Consumer redressal system: - Ref Petition 65/2012 –TO June 04,2012

The Commission directs the petitioner to find a way to dispose all pending application as per provision 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 to follow the Standard of Performance notified by the Commission strictly and the status report are submitted for all the new/shifting connection application's pending with the reason for their pendency by more than 45 days.

The petitioner is directed to promote and give publicity to the functioning of the Consumer Grievance Redressal Forum, so that each consumer could approach to CGRF, for redressal of their grievances regarding electricity unresolved complaints/concerns.

Commission directs the petitioner to publicize the benefit to consumers, highlighting the steps and necessary documents required & to initiate the action on the following:

- *Complaint against fast meters/defective meters*
- *Application for Shifting of electricity connection*
- *Application for New Connection*

- *Complaint 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., Ex. En., and SE A&N to hear and settle the public grievances and complaints of Electricity at spot so that no consumer is forced to visit to the Port Blair.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"The directive of the Hon'ble Commission in this regard is being complied. Schedule for visit to different Islands by officers of the ED-A&N to hear and settle the public grievances and complaints of electricity has been made & the same is being followed."

Commission's Comments

Action taken is noted and the Petitioner is directed to submit the status report and progress in this regard by September 30' 2013.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

"The directive of the Hon'ble Commission is already being complied with by scheduled visit of officers of the department to different islands to settle the public grievance and complaints. The officials of CGRF are also making visits to different islands in coordination with the officers of the department to sensitize the public regarding their rights as a consumer of Electricity Department."

Commission's Comments

The submission of the Petitioner is noted. The status report with complete details such as the no. of visits by officials, settlement of grievances and issues unsettled/outstanding should be submitted before the Commission by every quarter henceforth.

Compliance / action taken as per the present petition

The petitioner has not complied with the directive.

Commission's Comments

The quarterly reports, as directed should be submitted regularly.

Directive 10: Demand Side Management and Energy Conservation: - Ref Petition 65/2012 –TO June 04, 2012

The petitioner should focus on Demand Side Management and Energy Conservation particularly in context of Peak load. ED A&N is directed to conduct a detailed study on demand side management and energy conservation for efficient use of electricity by various means. An action plan for the same shall be submitted by ED-A&N to the Commission by 30th October 2012.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"The ED, A&N has already taken initiatives in this regard. Energy Conservation schemes are being implemented. Action plan for the same will be submitted by 31.12.2012. It is submitted that Hon'ble Commission may kindly allow the same."

Commission's Comments

Action taken is noted. The action plan to be submitted by 31.12.2012 is still awaited. The Petitioner is directed to submit the status report and progress report on quarterly basis in this regard.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

"Demand Side Management is presently not followed due to the fact there is a substantial gap between the average cost of power generation and revenue realization. Moreover, majority of consumer are domestic consumer's i.e. 83% and

industrial consumers are hardly 0.5%. Energy Conservation Schemes are being implemented and consumers are sensitized throughout the year to use energy efficient electrical gadgets, use of solar water heaters in all the Hotels are mandatory in these islands.

It is submitted that Hon'ble Commission may kindly allow the same."

Commission's Comments

The submission of the Petitioner is noted. The status report on the various energy conservation schemes along with supporting details should be submitted before the Commission by 30th September 2014.

Compliance / action taken as per the present petition

The petitioner has not complied with the directive.

Commission's Comments

The petitioner is once again directed to submit a status report on the various energy conservation schemes along with supporting details by 30th September 2015.

Directive 11: Exploration of Alternative sources of Electrical Energy: - Ref Petition 65/2012 –TO June 04, 2012

Commission observed that there is huge dependency on diesel for generating electricity, which not only increased the average cost of supply but also puts a burden on the utility's financial health. Commission has noticed that the Petitioner has taken few initiatives in this regard but the firm execution is required so as to speed up the process of their construction and achievement of commercial operation date in the given timelines. Therefore, it is inevitable for this distribution licensee to explore alternative sources of Power, and also consumer's contribution in this regard is required in terms of installation of roof top solar, wind or hybrid equipments to reduce their 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 so as to speed up the process of its execution.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"Reports of initiatives taken for renewable energy sources are attached"

Commission's Comments

Action taken is noted and the Petitioner is directed to submit the status report and progress in this regard by September 30' 2013.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

" Memorandum of Understanding has been signed by the Electricity Department, A&N Administration with the following organizations to phase out the existing diesel based power plants:-

- i. Petronet LNG Ltd.(PLL) to carry out feasibility study for establishment LNG based power plant in Port Blair, South Andaman as pilot project and;*
- ii. The Energy Research Institute (TERI) to study the feasibility of Renewable Energy based Power Projects by assessment of Renewable Energy Sources (Wind, Solar and Biomass) in 16 islands of A&N Islands.*

Moreover, matter is also being taken with National Institute of Ocean Technology (NIOT) for harnessing of Tidal Energy for power generation in these islands.

It is submitted that Hon'ble Commission may kindly allow the same."

Commission's Comments

The efforts of the Petitioner in this regard are appreciated. The Solar Plants at Neil Island and Havelock Island should also be made operational at the earliest. The status report on the above should be submitted before the Commission by 30th September 2014.

Compliance / action taken as per the present petition

The petitioner has not submitted the status report.

Commission's Comments

The status report on the above shall be submitted by 30th September 2015.

Directive 12: Energy Audit: - Ref Petition 65/2012 –TO June 04, 2012

The Petitioner is directed to get an Energy Audit conducted to assess actual technical and commercial losses. The Energy audit of generating stations is also required for an actual assessment of losses. Based on the studies, ED A&N shall propose 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 October 2012.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"The appointment of agency is under process. Energy audit is required to be done by visiting various Islands and will take time to get completed. The Hon'ble Commission may kindly allow submitting the report along with next ARR."

Commission's Comments

Action taken is noted and the Petitioner is directed to submit the status report and progress in this regard by September 30' 2013.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

"The A&N Administration has conveyed approval for appointing M/s Petroleum Conservation Research Association (PCRA) on nomination basis. The signing of MOU

between A&N Administration and M/s PCRA is under process. The report will be submitted soon after its receipt from PCRA.”

Moreover, for reduction of losses the details of existing and proposed T&D Loss and associated ongoing/proposed works are as below:-

Sl. No.	Selected Items	Unit	2013-14 Existing		2014-15		2015-16		2016-17	
			-----Target-----							
1	T&D Loss	%	18		17		16		15	
2	Ongoing works		Tar.	Estt. Cost	Tar.	Estt. Cost	Tar.	Estt. Cost	Tar.	Estt. Cost
	Extension of T & D lines	Km.	90	138.00	70	130.00	75	160	80	175.00
	Erection of Dist. Transformer	Nos.	36	30.00	42	32.00	48	35	56	38.00
	Replacement of old defective meters	Nos.	9000	35.00	6000	30.00	6600	45	4600	50.00
	Dist. Transformer metering	Nos.	60	12.00	65	14.00	70	15	75	16.00
	Replacement of old conductor	Km	25	43.00	30	45.00	40	50	50	53.00
3	Source of funding	-	UT plan fund		UT plan fund		UT plan fund		UT plan fund	

The road map for reduction of T&D Loss is as below:-

Name of Licensee	T&D Losses			
	Existing	Targeted		
	2013-14	2014-15	2015-16	2016-17
ED, A&N Administration	18%	17%	16%	15%

Commission's Comments

The Commission understands that the process of energy audit would take time as the data/information is to be integrated across various islands. However, the same

should be complied with and status report on the progress of implementation of the above directive should be submitted before the Commission by September 30' 2014

Compliance / action taken as per the present petition

The petitioner has not submitted any compliance.

Commission's comments

The Commission observes that in the road map for T&D losses given by the Petitioner last year, as mentioned in table above, the Petitioner had themselves committed for targeting the T&D losses in FY 2014-15 and FY 2015-16 at 17% and 16% respectively, but in the instant petition, they have projected T&D loss of 17% in both the years.

Further, in the present tariff Petition submitted by them, the actual T&D losses claimed during FY 2013-14 are 19.39%, against the T&D loss of 18.03% approved in the review of FY 2013-14 in Tariff Order dated 11th April, 2014. It is also observed that for the current year FY 2014-15 and ensuing year FY 2015-16 they have projected T&D losses of 17% for both the years. This projection seems to erratic as in FY 2013-14 from 18.03%, utility jumped to 19.39% and then to 17%.

The Commission keeping in view the philosophy of continued loss reduction approves 17% for FY 2014-15 and FY 2015-16 as elaborated in Para 6.4 & 7.4 respectively of this Tariff Order.

Directive 13: Management Information System: - Ref Petition 65/2012 –TO June 04, 2012

Commission observes that the petitioner is not maintaining the sales and revenue data in the regulatory formats specified in the JERC tariff regulations. The slab wise and category wise data is required to be maintained monthly for proper analysis of sales and revenue.

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

The ED-A&N should conduct a study for a computerization of data and shall give a proposal for the same along with an action plan with target dates.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"Study for computerization is being done. Action plan and target will be submitted to the Hon'ble Commission will be submitted after completion of the study."

Commission's Comments

Action taken is noted and the Petitioner is directed to submit the status report and progress in this regard by September 30'2013.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

"The new Web-based billing software will take care of maintaining the sales and revenue data in the regulatory formats specified in the JERC tariff regulations. Hence, the same will be complied with the implementation of the software "

Commission's Comments

The submission of the Petitioner is noted. The status report on the progress of implementation of the above mentioned software should be submitted before the Commission by 30th September 2014.

Compliance / action taken report as per the present petition

There is no compliance from the petitioner.

Commission's Comments

The petitioner is once again directed to submit the status report on the progress of implementation of the above mentioned software before the Commission by 30th September 2015.

Directive 14: Annual Statement of Accounts: - Ref Petition 65/2012 –TO June 04, 2012

Commission observes that the department of Andaman & Nicobar is not maintaining the separate accounts 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.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

"ED-A&N has already compiled the Annual Accounts upto FY 2010-11 and same also been Audited. Annual Accounts for FY 2010-11 is attached."

Commission's Comments

Action taken is noted.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

" The Audited accounts for the FY 2011-12 is attached as Annexure-1"

Commission's Comments

The submission of the Petitioner is noted. However, the audited accounts for FY 2012-13 are still awaited. The same should be submitted along with the true-up petition for FY 2012-13. The Commission further directs that the accounts for FY 2012-13 must be prepared on the Commercial Principles for Accounting.

Compliance / action taken as per the present petition

The petitioner submitted only the pro-forma of Accounts for FY 2011-12 and FY 2012-13.

Commission's comments

The audited accounts for these years and for FY 2013-14 may be submitted before the next tariff filing.

Directive 15: Cost of Power Generation: - Ref Petition 65/2012 –TO June 04, 2012

“Commission observes that the department of Andaman & Nicobar is not maintaining the separate accounts for their Diesel generating sets, Hydro and Solar plants. Commission directs the petitioner to provide separate details of cost of Power Purchase and final arrived tariff from the following stations/sets:

- i. Power Purchase Cost and Tariff from each Diesel generating set.*
- ii. Power Purchase Cost and Tariff from Hydro – Generating Station.*
- iii. Power Purchase Cost and Tariff from Solar Power Plant.*
- iv. Power Purchase Cost and Tariff from other Renewable Power Plants.*

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14

Petitioner's submission

“Detailed statement of cost of power purchase & generation is attached –.....”

Commission's Comments

The petitioner noted the submission of the petitioner

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15

Petitioner's submission

“ the directive stands complied”

Commission's Comments

The submission of the Petitioner is noted and the Commission drops the directive in the current order.

Directive 16: Accredited Agency for Certifying Renewable Purchase Obligations (RPO):

An agency independent of Electricity Department may be informed to the Commission for its approval which can certify the RPOs in A&N.

Compliance / action taken as per the present petition

There is no compliance from the petitioner.

Commission's Comments

The petitioner is directed to comply with the above directive before filing of the next tariff petition.

8.1 New Directives

Directive 17. RPO – Reviving the operations of existing solar plants and Annual maintenance of the same.

Keeping in view of lower cost of solar generation as compared to Diesel based generation, as mentioned in this and earlier tariff orders, in regard to solar plants at Neil Island - 50 KWp , Havelock - 50 KWp, wherein it is stated that;

“In the light of 100 KWp solar projects installed on the Andaman & Nicobar Islands, the petitioner is directed to revive the operations of the said plants and may go in for Annual Maintenance Contract of these small solar power plants with the organization responsible for carrying out the maintenance activity of proposed 5 MW solar power plant; so that the AMC contractor shall not be hesitant to come from mainland for such a small contract and as such the consumers of A&N shall be able to get un-interrupted green power and the burden of the Administration of A&N due to high cost of diesel power is reduced. Besides it also

helps A&N to meet RPOs.

Additionally, four to six engineers/technicians of ED A&N who shall be actually deployed for the job of maintenance of solar power plants; should be initially trained at new site of 5 MW Solar Power Plant for upkeep and maintenance of 2 x 50 kWp plants, so as to equip the officials of department with the available technologies and spares for such purpose. This may reduce the frequent dependency on the mainland for the purpose of maintenance.”

The Petitioner is directed to comply with the above and report on this may be submitted to the Commission by 31st September, 2015.

Directive 18: 100% Metering

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 regulations 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. Action plan to install meters for all the unmetered connections may be given by 30th June, 2015.

Directive 19: Demand Side Management and Energy Conservation

Demand Side Management (DSM) and Energy Conservation are very important areas, which should be in focus in Electricity Department, UT of Andaman and Nicobar, particularly in the context of peak load and high per unit cost involved. In spite of repeated advice for carrying out DSM activities and Energy Conservation initiatives, ED-A&N has not submitted any scheme for approval to the Commission. ED-A&N is therefore directed to implement such schemes (e.g. LED bulbs, Peak load shaving, Demand response etc.) at the earliest so that the subsidy burden could be reduced.

Petitioner is further directed to inform the time bound action plan for the above, by 30th May, 2015.

Directive 20: 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 31st July, 2015.

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 their grievances.

The Commission also 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.

The Commission further directs the Petitioner to prepare monthly/ quarterly schedule for visit to different islands by officers i.e. S.D.O., Executive Engineers and Superintendent Engineer ED – A&N to bring in greater efficiency in the working of ED – A&N 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 ED – A&N.

Directive 21: Rebundling and Corporatization of Electricity Department as per Electricity Act 2003

Reforms in the Energy sector are absolutely necessary to overhaul the energy sector to make it more vibrant and commercially, viable. As part of the reforms envisaged, the government will have to consider seriously, the huge monopolistic role of government departments in the generation, transmission and distribution of electricity in the state.

The Electricity Department, A&N, in consultation with the Government of A&N, should initiate action for unbundling of the Electricity Department into separate Generation, Transmission and Distribution Departments and Corporatizing the same.

The action plan for the same may be submitted to the Commission by 31st December, 2015.

Directive 23: Safety Measures undertaken

The ED – A&N is directed to submit a report on the safety measures initiated by it to prevent fatal accidents for the departmental persons and general public, by 31st July, 2015.

The Petitioner is also directed to submit quarterly reports on fatal accidents which have occurred in the U.T and steps taken to prevent recurrence of the same.

The first quarterly report should be submitted by 31st July, 2015.

Directive 24: Business Plan for MYT Control Period

As elaborated in para 1.8 of this Tariff Order, the details in the Business Plan submitted by the utility are insufficient. The supporting data such as, Scheme-wise cost benefit analysis, financing plan, loss reduction trajectory have not been adequately submitted. In view of the same the Commission is constrained to defer the implementation of Multi-Year Tariff and concomitant business plan. The petitioner is therefore directed to submit the revised Business Plan for the period FY 2016-17 to FY 2018-19, along with requisite detail as provided in JERC (Multi Year Tariff) Regulations, 2014, latest by 31st July, 2015. **No further extension will be given**

as the MYT Petition would be required to be prepared only after approval of the Business plan. The MYT Petition submission deadline remains 30th November.

9. CONCLUSION OF COMMISSION'S ORDER

The Commission has considered the petitions submitted by Electricity Department of Andaman & Nicobar Islands for Approval of Aggregate Revenue Requirement (ARR) and determination of retail tariffs for supply of energy for MYT Period FY 2015-16 to FY 2017-18 bearing petition no. **155/2014**, and the Commission approves the Aggregate Revenue Requirement (ARR) and the tariff structure for the MYT Period FY 2015-16 to FY 2017-18.

- The break-up of the Aggregate Revenue Requirement approved for ED Andaman & Nicobar for the MYT Period FY 2015-16 to FY 2017-18 is given below.

(Rs. Crore)			
Sl. No	Particulars	Petitioner's submission	Approved for FY 2015-16
1	Cost of fuel	210.09	210.09
2	Cost of power purchase for full year	294.79	294.79
3	Employee Costs	68.36	68.36
4	Repair and Maintenance Expenses	41.31	41.31
5	Administration and General Expenses	1.38	1.38
6	Depreciation	11.64	11.64
7	Interest and Finance charges	21.29	17.28
7	Interest working capital	7.57	8.53
8	Return on NFA /Equity	5.51	5.51
9	Provision for Bad Debt	0	0
10	Total Revenue Requirement	661.94	658.89
11	Less: Non-tariff income	2.57	2.57
12	Net Revenue Requirement	659.37	656.32
13	Revenue from Tariff	110.35	117.27
14	GAP	549.03	539.05
15	GAP carried forward from previous years	0.00	0.00
16	Total GAP	549.03	539.05
17	Revenue surplus carried over	0.00	0.00
18	Additional revenue from the proposed tariff	11.19	9.10
19	Regulatory asset	0.00	0.00

- The approved retail tariff (as given below) for FY 2015-16 shall be as under
Energy charge Rs/KwH prepared for the Petitioner

S. No.	Category	Minimum Charges per connected load or part thereof per month (Rs./unit)	Energy Charges at Existing Rate (Rs./kWh)	Proposed by the Petitioner (Rs./kWh)	Approved by the Commission (Rs./kWh)
1	Domestic				
	Up to 100 Units	Rs.30.00 per KVA	2.00	2.20	2.00
	101-200 units		3.70	4.10	4.00
	201 units & above		5.10	5.60	5.50
2	Commercial				
	Up to 200 units	Rs.50.00 per KVA	5.40	5.95	5.95
	201 to 500 units		6.50	7.15	7.15
501 units & above	7.25		8.00	8.00	
3	Industry				
	Up to 500 units	a. Rs.50.00 per H.P. b. Rs. 200 Per month for rice Flour Millers of Rural Areas who are having 15 HP Capacity	4.45	4.90	4.90
	501 units & above		5.00	5.50	5.50
4	Bulk	Rs.50.00 per KVA	9.20	10.15	10.15
5	Public Lighting	Rs.60.00 per KVA	4.50	4.95	4.95
6	Irrigation Pumps & Agriculture	Rs.15.00 per KVA			
			1.25	1.40	1.40

3. The approved tariff of FY 2015-16 shall come into force with effect from 1st April 2015 and shall remain valid till further orders of the Commission. All existing provisions which are not modified by this order shall continue to be in force. The licensee shall publish the tariff structure and the salient features of the tariff within one week in three daily newspapers in Hindi, Bengali and in English, having wide circulation in its areas of supply. The distribution licensee shall also publish a booklet in Hindi, Bengali and English containing all details of tariff and its applicability for the benefit of consumers. It should be made available for sale to public at nominal price.
4. It is seen that in the case of A&N islands, 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 a substantial gap between the actual cost of supply and revenue realized. This gap so far has been borne by the administration of A&N. Keeping the above fact in view, the Commission is of the view that any variation in power purchase cost (including variation in cost of its own generation) should, for the time being, be borne by the utility.

5. Copy of this order may be sent to the petitioner, CEA and Administration of UT of Andaman & Nicobar Islands. It shall be placed on the website of the Commission.

-Sd-
(Sh. S.K. Chaturvedi)
Chairman

Place: Gurgaon

Date: 31.03.2015

Certified Copy
(Keerti Tewari)
Secretary

10. TARIFF SCHEDULE

1. DOMESTIC SUPPLY (DS) APPLICABILITY

This schedule shall apply for single delivery point including light, fan, domestic pumping sets and household appliances in the following premises:

- a) Single private house/flat.
- b) Housing colonies and multi storied flats/buildings as defined in Electricity Supply Code Regulations notified by the JERC.

NOTES:

- i. Where a portion of the dwelling is used for the mixed load purposes the connection shall be billed for the purpose for which the tariffs are higher.

TARIFF

Consumption range	Minimum Charge per connected load or part thereof per month	Energy charge Rs./KWh
Upto 100 units	Rs.30.00 per KVA connected Load or part thereof per Month	2.00
101 units – 200 units		4.00
201 units & above		5.50

2. COMMERCIAL

Applicability

This schedule shall apply to all consumers, using electrical energy for light, fans, appliances like pumping sets, motors of rating upto 3 HP used for commercial purpose, central air conditioning plant, lift, welding set, small lathe, electric drill, heater, battery charger, embroidery machine, printing press, ice candy, dry cleaning machines, power press, small motors in commercial establishments/ non-residential premises such as Printing Press, Hotels, Rest Houses, Restaurants, Hostels, Nursing Homes, Bus-stand, clubs, Auditorium, Communication, Cinema Theatre, Opera, Circus, Exhibition, All India Radio, SCI, Fisheries, Survey of India, Bakeries & Grinders & installations for private gains etc. Commercial supply shall also be applicable to multi consumer complexes including commercial

complexes as defined in the Electricity Supply Code Regulations notified by the JERC.

This schedule shall also apply to the Places of Worship, like Temples, Mosques, Churches, Gurudwaras, Buddhist Pongi Chung (not for residential or shopping complex only for Pooja places) Public Pooja celebration and religious ceremonies.

No separate circuit/connection for power load including pumping set/central air conditioning plant, lifts etc. is permitted.

Tariff

Consumption range	Minimum Charge per connected load or part thereof per month	Energy Charges Rs./kWh
Up to 200 units	Rs. 50.00 per KVA connected Load or part thereof per Month	5.95
201 units to 500 units		7.15
501 units & above		8.00

3. INDUSTRIAL SUPPLY

APPLICABILITY

The schedule shall apply for supply of energy for lighting , fan and power to Industrial establishments & Industries such as wood based, cottage, small scales, medium scales, finishing shell based and any other establishments/organizations engaged in the manufacturing and processing goods for sale, rice mills, flour mills, workshops, Dry dock, factories base repair organization, Public water works & Gem cutting units.

TARIFF

Consumption range	Minimum Charge per connected load or part thereof per month	Energy Charges Rs./kWh
Upto 500 units	a) Rs.50.00 per H.P. Connected load or part thereof.	4.90
501 units & above	b) Rs.200.00 per month for Rice, Flour Millers of Rural areas who are having 15 HP capacity.	5.50

POINT OF SUPPLY

The above mentioned tariff is based on the supply being given through a single delivery and metering point and at a single voltage.

4. IRRIGATION, PUMPING & AGRICULTURE**APPLICABILITY**

This schedule shall apply to all consumers for use of electrical energy for irrigation and agricultural purposes including animal husbandry.

TARIFF

Consumption range	Minimum Charge per connected load or part thereof per month	Energy Charges Rs./kWh
Upto 500 units	Rs.15.00 per KVA connected Load or part thereof per month	1.40

POINT OF SUPPLY

The above mentioned tariff is based on the supply being given through a single delivery and metering point and at a single voltage.

5. PUBLIC LIGHTING (PL) APPLICABILITY

This tariff schedule shall apply for lighting on public road, footpath, streets & through fares in parks & markets etc. Cost of spares, materials and labor required for maintenance to be borne by respective Panchayati Raj Institutions/Local Bodies.

TARIFF

Consumption range	Minimum Charge per connected load or part thereof per month	Energy Charges Rs./KWh
Public lighting system managed by Municipal Corporation, Panchayat and Street lights maintained/outsourced to an external agency	Rs.60.00 per KVA connected Load or part thereof per month	4.95

6. BULK SUPPLY**APPLICABILITY**

This tariff schedule shall apply to general or mixed loads receiving supply of energy through a bulk energy meter either at HT or LT supply and distribution is maintained by them. For dedicated transformer the complete cost of Technical transmission lines of transformers sub-station, switch gear & installation is to be borne by the consumer.

TARIFF

Consumption range	Minimum Charge per connected load or part thereof per month	Energy Charges Rs./KWh
Bulk category	Rs.50.00 per KVA connected Load or part	10.15

POINT OF SUPPLY

The above mentioned tariff is based on the supply being given through a single delivery and metering point and at a single voltage.

7. TEMPORARY SUPPLY APPLICABILITY

The supply may 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 maximum period of six months. Rate shall be the three times the rate applicable to the relevant category of consumers.

GENERAL CONDITIONS FOR LT & HT SUPPLY

The above mentioned LT/HT Tariffs are subjected to the following conditions, applicable to all categories of consumers.

- 1) 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 a 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.

- 2) If connected load of a domestic category is found to be at variance from the sanctioned/contracted load as a result of increase of load or due to replacement of lamps, fans, fuses, switches, low voltage domestic appliances, fittings, etc it shall neither fall under unauthorized use of electricity (Section 126 of EA 2003) nor under theft of electricity (Section 135 of EA 2003).
- 3) 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 provision of the Act & Supply Code Regulation.
- 4) **Additional charges for exceeding contracted load/contracted maximum demand,**

If in any month the consumer exceeds his contracted load/contracted demand the portion of the load/demand in excess of the contracted load/demand will be dealt with as per the provisions made in JERC (Electricity Supply Code), 2010.

This will not be applicable to the consumers who have self-declared their connected load as the provision under regulation 4.13 (2) of Supply Code Regulations, 2010 as amended from time to time.

5) Power Factor Incentive

The monthly average power factor of the plant and apparatus installed by the consumer should be maintained at better than 90% lagging. The monthly average power factor shall mean the ratio expressed as percentage of total kWh to total kVAh supplied during the month. The ratio shall be rounded up to two figures.

In case the monthly average power factor is above 95%, consumer shall get a rebate at a rate of 1% on billed energy charges for each 1% increase in monthly average power factor above 95%.

For example, if the average power factor in a month is 97%, then the consumer shall be given rebate of 2% on the billed energy charges for that month.

6) Incentive for usage of alternative (Renewable) Sources of Energy:

A concession of Rs. 50/- (Rupees Fifty only) per month in electricity bill will be given to the consumers using solar water heater in domestic/commercial establishments on one-time verification of original invoice of its purchase and verification of the installation of equipment by the Engineer in charge of the area. The concession will be given to the consumers on the basis of the ownership of equipment; concession will be divided amongst the consumers, if they are sharing common equipment of solar water heater.

A concession of Rs. 1.00 per KWh over the units generated per month using renewable energy including roof-top solar equipment, solar wind hybrid systems e.t.c. The actual units generated will be verified from the energy meter to be installed in such systems for recording the electricity generated. The concession will be given to the consumers on the basis of the ownership of equipment; concession will be divided amongst the consumers, if they are sharing the equipment of roof-top solar or solar wind hybrid systems.

The incentive will be reviewed in next ARR and tariff order.

7) Late Payment Surcharge

For the existing connections, if the payment is made after the due date (as mentioned on the bill), the consumer is liable to pay additional charges on delayed amount at the rate of 2% per month. However for disconnected consumers, additional amount at the rate of 10% per annum on the outstanding amount shall be charged.

8) Advance Payment Rebate:

If payment is made in advance well before commencement of the consumption period for which the 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) Taxes & Duties

The tariff does not include any tax or duty etc. on electricity energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall be payable by the consumer in addition to the tariff charges.

Annexure – 1

993


JOINT ELECTRICITY REGULATORY COMMISSION
(For the state of Goa and Union territories)
2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex,
Udyog Vihar, Phase V, Gurgaon (Haryana)
Ph: 0124-2342851, 2342852 Fax: 0124-2342853
Email: secretaryjerc@gmail.com

Petition No. 155/2014

In the matter of
Petition for Approval of Multi Year Tariff (MYT) and Revenue Requirement for the Control Period
FY 2015-16 to FY 2017-18 for Union Territory of Andaman & Nicobar Islands under Sections
61, 62 and 64 of the Electricity Act, 2003.

....Petitioner

To

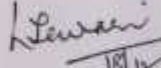
The Superintending Engineer,
Electricity Department,
Vidyut Bhawan,
U.T. of Andaman & Nicobar,
Port Blair- 744 101

Whereas you filed a Petition for Approval of Multi Year Tariff (MYT) and Revenue Requirement for the Control Period FY 2015-16 to FY 2017-18 for Union Territory of Andaman & Nicobar Islands under Sections 61, 62 and 64 of the Electricity Act, 2003. JERC (Conduct of Business) Regulations, 2009 and JERC (Multi Year Distribution Tariff) Regulations, 2014. The Petition is admitted by the Commission on 16th December, 2014 and numbered as 155/2014.

Therefore, in compliance of Regulation 29 of JERC (Conduct of Business) Regulations, 2009 and Regulation 12 (10) of JERC (Multi Year Distribution Tariff) Regulations, 2014, you are required to publish a notice in abridged form in at least three (3) newspapers, widely circulated in the area of UT of Andaman & Nicobar, highlighting the petition outlining the existing and the proposed tariff within three days of submission of your tariff proposals for inviting suggestions/objections from General public / stakeholders.

Under 12 (10) of JERC (Multi Year Distribution Tariff) Regulations, 2014, you are also required to put the petition on your website, in downloadable spreadsheet format showing detailed computations, the application made to the Commission along with all regulatory filings, information, particulars and documents.


Copies of such notices as published in the newspapers be sent to this Commission.


(Keerti Tewari)
Secretary

Annexure 2

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अण्डमानलक्षानिकोबारप्रशासन
अधीताक अभियंता का कार्यालय
विद्युतविभाग
पोर्ट ब्लेयर - 744 101



Andaman & Nicobar Administration
Office of the Superintending Engineer
Electricity Department
Port Blair - 744 101

Website : <http://electricity.and.nic.in> E-Mail : soed@and.nic.in - saelectricity@yshoo.co.in
दूरभाष/Tel : 03192-232404, टेलीफैक्स/Telefax : 03192-233365

F.No.3-1/EL/SE/Comm/Tariff/2014-15/ Port Blair dated 26/12/14.
To 5492

1. The Publicity Officer,
Directorate of IP&T,
A&N Administration,
Port Blair.
2. The Editor,
The Daily Telegram,
Govt. Press, P/Blair.
3. The State Informatics Officer
Technical Director,
NIC, Port Blair
A&N Islands.

Sub: -Publication of Public Notice in respect of Multi Year Tariff Petition - reg.

Sir,

Kindly arrange to publish the following Press Note in Local media & web site of Electricity Department (<http://electricity.and.nic.in>) and also in announcement for wide publicity.

PRESS NOTE

**PUBLIC NOTICE IN RESPECT OF
PETITION FOR MULTI YEAR TARIFF & REVENUE REQUIREMENT
FILED BY
ELECTRICITY DEPARTMENT, UT OF ANDAMAN & NICOBAR BEFORE
JOINT ELECTRICITY REGULATORY COMMISSION (FOR GOA AND UTS)
FOR
THE CONTROL PERIOD FY 2015-16 to 2017-18 (Petition no 155/2014)**

1. Notice is hereby given to all consumers and stake holders that the Electricity Department, UT of Andaman & Nicobar, a Deemed Licensee, has filed the Petition For Multi Year Tariff & Revenue Requirement for The Control Period FY 2015-16 to 2017-18 before the Joint Electricity Regulatory Commission for the State of Goa and Union Territories, on 15th December, 2014 under section 61, 62 & 64 of the Electricity Act 2003.

The petition has been admitted by the Hon'ble Commission on 16.12.2014 and numbered as 155/2014. The same is as summarized hereunder:

The Summary of ARR is given in the Table below. (Rs. in Crores)

2

Sr. No.	Item of expense	Approved by the Commission for FY 2014-15	Proposed by the Licensee FY 2015-16	Proposed by the Licensee FY 2016-17	Proposed by the Licensee FY 2017-18
1	2	3	4	5	6
1	Cost of fuel	265.15	210.09	243.12	279.99
2	Cost of power purchase	182.18	294.79	309.66	324.26
3	Employee costs	54.03	68.36	72.45	76.78
4	R&M expenses	38.30	41.31	43.79	46.40
5	Administration and general expenses	2.68	1.38	1.46	1.55
6	Depreciation	5.95	11.64	15.47	19.83
7	Interest charges (including interest on working capital)	22.01	28.86	35.56	42.94
8	Return on NFA /Equity	3.54	5.51	7.21	9.15
9	Provision for Bad Debt	0.00	0.00	0.00	0.00
10	Total revenue requirement	573.85	661.96	728.70	800.91
11	Less: non-tariff income	2.20	2.57	2.70	2.83
12	Net revenue requirement	571.65	659.38	726.00	798.07
13	Revenue from tariff (Existing)	112.24	110.35	114.39	118.61
14	Revenue Gap (13-14)	459.41	549.03	611.61	679.46
15	Additional revenue from proposed tariff	-	11.19	11.60	12.03
16	Net Revenue Gap (14-15)	459.41	537.84	600.01	667.43
17	Regulatory asset	0.00	0.00	0.00	0.00
18	Energy sales (MU)	231.49	233.89	243.61	253.76
19	Average Cost of Supply (Rs/kwh)	24.70	28.19	29.80	31.45
20	Average Revenue Realisation (Rs/kwh)	4.84	5.20	5.20	5.20

2. **Transmission and Distribution losses**

The transmission and distribution Losses as projected are detailed below:

Description	14-15(Provisional)	15-16 (Projected)
T&D Losses (%)	17.00%	17.00%

3. Copies of filings and application referred at para-1 above are available in the office of the Superintending Engineer, Electricity Department Port Blair – 744101.
4. Interested parties may inspect / peruse the said Multi Year Tariff petition and take note thereof during office hours at the office.
5. Copies of the above documents can also be obtained from the above offices on payment of Rs.200/- for each set from "Accounts Officer, Electricity Department, Port Blair".
The detailed petition document is also available on Electricity Department, A&N website <http://electricity.and.nic.in>
6. The tariff and charges for retail supply of Electricity to consumers proposed by the Electricity Department for the year 2015-16 are indicated in the schedule below.
7. Objections/ suggestions, if any on the Multi Year Tariff & Revenue Requirement for The Control Period FY 2015-16 to 2017-18 submitted by the Electricity Department, UT of Andaman & Nicobar, together with supporting material may be filed with the Secretary, Joint Electricity Regulatory Commission (JERC) for Goa & UTs, Second floor, HSHDC Office complex, VanijyaNikunj, Complex, UdyogVihar, Phase-V, Gurgaon – 122016 (Haryana) in five copies in person or through registered post so as to reach him on or before [REDACTED]
8. The Objection / suggestions as above should be filed in five copies and carry full name and postal address of the person sending the objections and should be supported by and affidavit duly attested. If the objection is filed on behalf of any organization or any class of consumers, same should also be mentioned.
It may also specifically mentioned if the person putting in objection / comments also wants to be heard in person.
9. The Joint Electricity Regulatory Commission (JERC), after perusing the written objection received in response to this notice may invite such objection as it considers appropriate for a hearing on the specified dates which will be notified by the commission in due course.

(4)

Tariff Schedule

Category	Category	Energy Charge (Rs./Kwh)	
		Existing	Proposed
Domestic Connection	0 to 100 units	2.00	2.20
	101 to 200 units	3.70	4.10
	201 units & above	5.10	5.60
Commercial	0-200 Units	5.40	5.95
	201 to 500 Units	6.50	7.15
	501 units & above	7.25	8.00
Industrial	0-500 Units	4.45	4.90
	501 Units & Above	5.00	5.50
Bulk	All Units	9.20	10.15
Public Lighting	All Units	4.50	4.95
Irrigation, Pumps & Agriculture	All Units	1.25	1.40

The Joint Electricity Regulatory Commission (JERC) can change the Tariff Proposal of ED-A&N based on the interaction at the Public hearing and after scrutiny of the records of ED- A&N.

Tariff Rationalization to bring the Tariff within +/- 20% as per Electricity Policy is also required to be completed progressively for which JERC is working on a road map for the same. Suggestions in this regard may also be sent to secy-jerc@nic.in and seelectricity@yahoo.co.in before [REDACTED]

Accounts Officer
for Superintending Engineer

Yours faithfully,


Accounts Officer
for Superintending Engineer

02/01/2011 05:59 03192233365

PA TO SE

PAGE NO

(5)

Copy to:

1. The Assistant Secretary (Power), A&N Administration for information.
2. The PA to SE for kind information of Superintending Engineer, Electricity Department, Port Blair.
3. The Asst Engineer (PI), Electricity Department Port Blair for information.
4. The Secretary, JERC, Gurgaon for information.
5. Notice Board.



Accounts Officer
for Superintending Engineer

D/C



अण्डमान तथा निकोबार प्रशासन
अधीक्षक अभियंता का कार्यालय
विद्युत विभाग
पोर्ट ब्लेयर - 744 101



Andaman & Nicobar Administration
Office of the Superintending Engineer
Electricity Department
Port Blair - 744 101

Website : <http://electricity.and.nic.in/>

E-Mail : seed@and.nic.in

seelectricity@yahoo.co.in

दूरभाष / Tel : 03192 -232404, टेलीफैक्स / Telefax : 03192 - 233365

क्र.स./ F.No.3-1/EL/SE/Comm/Tariff/2014-15/436 पोर्ट ब्लेयर / Port Blair, दिनांक / Dated: /02/2015

To

1. The Publicity Officer,
Directorate of IP&T,
A&N Administration,
Port Blair.
2. The Manager,
The Daily Telegrams,
Govt. Press,
Port Blair.
3. The State Informatics Officer,
Technical Director,
NIC, Port Blair,
A&N Islands.

Sub : Publication of Public Notice in respect of Multi Year Tariff Petition -
Regarding.

Sir,

Kindly arrange to publish the following Public Notice in Local Media for
wide publicity to public and other stakeholders for attending the public hearing
scheduled to be held on 06.02.2015 at 1000 hrs.

NOTICE FOR PUBLIC HEARING

Electricity Department, UT of Andaman & Nicobar Islands has filed the
Petition for determination of Multi Year Tariff & Revenue Requirement for the
Control Period FY 2015-16 to 2017-18 vide Petition No.155/2014 before the Joint
Electricity Regulatory Commission for the State of Goa and Union Territories.
Petition is available on website - <http://electricity.and.nic.in>

The Commission shall hold Public Hearing at **Port Blair** on **06.02.2015** for
determination of Multi Year Tariff & Revenue Requirement for the Control Period
FY 2015-16 to 2017-18.



Schedule of Public Hearing for all categories of consumers		
Date	Venue	Subject
06 th February, 2015 (Friday) from 1000 Hrs onwards	ALHW Multipurpose Hall, Foreshore Road (Beside Fisheries Jetty, Phoenix Bay)	Public Hearing of Multi Year Tariff & Revenue Requirement for the Control Period FY 2015-16 to 2017-18 (Petition No. 155/2014)

All the members of public and other stakeholders including those who are intending to file their objections/ suggestions may attend the said public hearing.

Superintending Engineer,
Electricity Department

Yours faithfully,

अधीक्षक अभियंता - Superintending Engineer

Copy to :-

1. The Secretary (Power), A&N Administration, Port Blair, for information.
2. The Secretary, Joint Electricity Regulatory Commission, Gurgaon, for information please.
3. All India Radio, Port Blair with a request to broadcast the contents of the above press note through AIR, Port Blair.
4. The Doordarshan, Port Blair, with the request to telecast the news in their Dweep Darphan Bulletin.
5. The Chairman, CGRF, Horticulture Road, Port Blair, for information.
6. All EEs, Electricity Department for information & necessary action.

अधीक्षक अभियंता - Superintending Engineer

8/10

21/1/15 1382
A & N Islands 3

at Rangat

service activities of Sai Seva informed about various controllable Diseases especially Asthma, Computer vision syndrome, Degenerative Diseases, etc. He said timely diagnosis at higher centres often helps to...

100 registrations were done. 100 eyes were examined till 4.30 p.m. detected about 10 new cases of cataract and one case of sudden blindness. The patients requiring glasses are given free glasses. Prescriptions requiring surgery have been referred to CHC Rangat for onward referral to Hospital or at centres of reference. On 21st January, the camp was held from 8.30 a.m. to 5.00 p.m. In January, it will provide free eye check-up for the benefit of the people of North Andaman. A press secretary, Andaman Sai Seva, said here today.

Open Volleyball Tournament

24th Jan to 26th Jan
2015 Youth of Dairy Farm are organization Open Volleyball Tournament on the republic day Entry Fees 800/- Per Team
Cash Price for winners team 10000/- Runner Team 5000/-

For further Details Contact:
9933254208
9933285744

Joint Electricity Regulatory Commission

(For The State of Goa and Union Territories)
2nd Floor, JERC Office Complex, Verdy Road, Udyog Vihar, Phase-III, Gurgaon-122014, Haryana, Ph.: 0124-3875312 Fax: 0124-3942831, Email: jerc@jerc.gov.in, Website: www.jerc.gov.in

Public Notice

Notice is hereby given to all stakeholders of the UT of Andaman & Nicobar Islands that Electricity Department, Andaman & Nicobar Administration, has filed the following petitions:-

1. Petition No. 152/2014 for Business Plan for MYT Control Period FY 2015-16 to 2017-18
2. Petition No. 155/2014 for approval of Multi Year Tariff and Revenue Requirement for the control period FY 2015-16 to 2017-18 under Section 61, 62 and 64 of the Electricity Act, 2003.

The above mentioned petitions have been admitted under petition No. 152/2014, and 155/2014 respectively and are available on the website of the Commission www.jerc.gov.in, and Electricity Department, Andaman & Nicobar Administration, www.electricity.and.nic.in

The Commission shall hold a Public Hearing on the above matters. The date, time and venue of the Public Hearing is given as under:-

Date and Time	Venue
08th February, 2015 (Friday) 11:00 AM Onwards	Multipurpose Hall of ALHW, Port Blair

Interested persons may file objections/ suggestions in six copies on the above matters in person or through e-mail registered post on or before 08th February, 2015 addressed to The Secretary, JERC (for Goa & UTs) with a copy to The Superintending Engineer, Office of the Superintending Engineer, Electricity Department, Port Blair-744101.

50/-
Secretary

areness

lives from the police department, Primary Health Centre, PRI members and the Headmistress of the Shorepoint School will attend the camp, says a communication received here today.

VIGYA FONE

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THE ECHO OF INDIA

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ANDAMAN & NICOBAR STATE CO-OPERATIVE BANK LIMITED

98, MOULANA AZAD ROAD
PORT BLAIR-744101
POSSESSION NOTICE
(For immovable property)
(Rule 8(1), Security Interest (Enforcement) Rule, 2002)

To
Smti Babita
W/o Ashtami Rajan
R/o Dollygunj

Whereas,
The undersigned being the authorized officer of the Andaman & Nicobar State Co-operative Bank Limited under the Securitisation and Reconstruction Assets and Enforcement of Security Interest Act, 2002 issued a demand notice dated 01.10.2014 calling upon the borrower Smti Babita, W/o Ashtami Rajan, R/o Dollygunj, Port Blair and guarantors/ mortgagors to repay the amount mentioned in the notice being ₹ 53,73,040/- (Rupees Fifty three lakhs seventy three thousand forty only) including interest calculated upto 01.10.2014 within 60 days from the date of the said notice.

The borrower/ guarantors having failed to repay the amount, notice is hereby given to the borrower/ guarantors and the public the general that the undersigned had taken possession of the property described herein below in exercise of powers conferred on him under Section 13 (4) of the said Act read with rule 9 of the said Rules on this 19th day January in the year 2015.

The borrower / guarantors in particular and the public in general is hereby cautioned not to deal with the properties and any dealing with the properties will be subject to the charge of the Andaman & Nicobar State Co-operative Bank Limited for an amount of ₹ 53,73,040/- (Rupees Fifty three lakhs seventy three thousand forty only) as on 01.10.2014 together with further interest at the contractual rate of 13% on the

AT LAXMIPUR, DIGLIPUR

Deposit Receipt from any able in favour of GE (I) (P) 105

Bankers Cheque from any ARRISON ENGINEER (I) (P) BLAIR - 744 105

MEMES with regard to having value works, Annual turnover

Gold Department

AC DRAWN COST OF ORDER SHALL

21-01-2015 • Wednesday • Port Blair

Classifieds

भारत इलेक्ट्रॉनिक्स लिमिटेड
BHARAT ELECTRONICS LIMITED

RECRUITMENT OF EX-DEFENCE PERSONNEL

BHARAT ELECTRONICS LIMITED requires Ex-Defence Personnel retired / retiring on or before 31.12.2014 who have 3 years Diploma in Engineering or equivalent in Electronics or Communication or Telecommunication discipline (Pladar / Radio Filter Trade) with Post qualification experience of 15 years and above in the rank of JCO or equivalent on short term basis for a period of 5 years in the Executive Cadre.

Interested candidates may visit our website www.bel-india.com for further details and application procedure.

Joint Electricity Regulatory Commission
 (for The State of Goa and Union Territories)

2nd Floor, IRI/DC Office Complex, Varley Nagar, Udyog Vihar, Phase-V, Gurgaon-122016, Haryana, Ph.: 0124-2675352 Fax: 0124-2242551, E-mail: secy-jerc@nic.in Website: www.jerc.co.in

Public Notice

Notice is hereby given to all stakeholders of the UT of Andaman & Nicobar Islands that Electricity Department Andaman & Nicobar Administration, has filed the following petitions :-

- Petition No. 152/2014 for Business Plan for MYT Control Period FY 2015-16 to 2017-18
- Petition No. 155/2014 for approval of Multi Year Tariff and Revenue Requirement for the control period FY 2015-16 to 2017-18 under Section 61, 62 and 64 of the Electricity Act, 2003.

The above mentioned petitions have been admitted under petition No. 152/2014, and 155/2014 respectively and are available on the website of the Commission www.jerc.co.in and Electricity Department, Andaman & Nicobar Administration, www.electricity.and.nic.in

The Commission shall hold a Public Hearing on the above matters. The date, time and venue of the Public Hearing is given as under-

Date and Time	Venue
08th February, 2015 (Friday) 11:00 AM Onwards	Multipurpose Hall of ALHW, Port Blair

Interested persons may file objections/ suggestions in six copies on the above matters in person or through e-mail/ registered post on or before 08th February, 2015 addressed to The Secretary, JERC (for Goa & UTs) with a copy to The Superintending Engineer, Office of the Superintending Engineer, Electricity Department, Port Blair-744101.

Sd/-
Secretary

AFFIDAVIT

By this deed I, the undersigned M. Navaneedan, S/o A. Muthu Raj, (New Name) previously called Navaneedan S/o A. Muthu Raj, (Old name), doing profession and resident of Valluvar Nagar, Bamboofat Village, Ferrar Gurj Tehsil, South Andaman District, A&N Islands (address) solemnly declare:-

- That for and on behalf of myself and my parents and remitter issue wholly renounce/relinquish and abandon the use of my former name/surname of Navaneedan, S/o A. Muthu Raj and in place thereof I do hereby assume from this date the name/surname M. Navaneedan, S/o A. Muthu Raj and so that I and my parents and remitter issue may hereafter be called known and distinguished not by my former name/surname, but assumed name/surname of M. Navaneedan, S/o A. Muthu Raj.
- That for the purpose of evidencing such my determination declare that I shall at all times hereafter in all records, deeds and wills and in all proceedings...

SHORT TENDER NOTICE

The Executive Engineer, Zilla Parishad, South Andam Adhyaksha, Zilla Parishad, South Andaman invites sealed i from bonafied and experienced contractors of approx APWD, MES, ALHW & P&T for the the following works:

- NIT No. EE/SA/ZP/2014-15/412 Unique no. 343 C/o 01 No. Bus Stand Near Pavitra Singh House at Campbell Bay by Zilla Parishad.
Estimated Cost Put to Tender: Rs.6,84,158/- , Earnest Rs. 13,683/- & Time of Completion : 04(Four) Months.

The tender forms and other details can be obtained from Executive Engineer, Zilla Parishad, South Andaman on paym respectively. The last date of application to purchase be 29/01/2015 upto 4:00 PM. The application for issue of te without EMD will be rejected. Other detail/information can be www.and.nic.in

IP/1816/15

(Signature)
 Executive Engineer
 Zilla Parishad
 (For and on be
 Zilla Parishad

NOTICE OF TENDER
MILITARY ENGINEER SERVICES

Commander Works Engineer Port Blair on behalf of President of India is eligible enlisted contractors of MES and contractors working with other Govt Depart criteria for selection of contractors for issue of tender of under mentioned works :-

Name of work	Provn of Standby 1000 KVA Step-up transformer at Birchgurj
Estimated cost of work	Rs.12.50 lakhs

Yours faithfully
(Signature)
 (Anshul K)
 EE (QS&C)
 DCWE (Cr
 for Comma

"INDO-TIBETAN BORDER POLICE
 (MINISTRY OF HOME AFFAIRS)
 GOVT. OF INDIA

RECRUITMENT FOR THE POST OF CONSTABLE (DR)

Indo-Tibetan Border Police Force invites applications from eligibl (Male) to fill up following vacancies of General Central Service Group (Non Ministerial) in the following pay scale & allowances as admissible in

NAME OF POST	Total vacancies to be filled up	Reservation stat			
		UR	SC	ST	OBC (Non)
Constable (Driver)	472	140	180	40	

Joint Electricity Regulatory Commission
(For The State of Goa and Union Territories)
3rd Floor, NSIC Office Complex, Vadda Khand, Udyog Vihar,
Phase-III, Gurgaon-122008, Haryana, Ph: 0124-5876332
Fax: 0124-5876333, E-mail: jerc@jerc.in Website: www.jerc.in

Public Notice

With reference to our Public Notice dated 23rd January, 2015, which is reproduced in the attached copy of the JERC Order on ARR & Tariff Petition for ED, UT of Andaman & Nicobar Administration, we have filed the following petitions:

- Petition No. 152/2014 for approval of Business Plan for MYT Control Period FY 2015-16 to 2017-18.
- Multitask No. 155/2014 for approval of Multi Year Tariff and Revenue Requirement for the control period FY 2015-16 to 2017-18 under Section 61, 62 and 64 of the Electricity Act, 2003.

The above mentioned petitions have been admitted under petition No. 952/2014 and 135/2014 respectively and are available on the website of the Commission www.jerc.in and Electricity Department, Andaman & Nicobar Administration, www.electricity.andnic.in.

The Commission shall hold Public Hearing on the above matters. The date, time and venue of the Public Hearing is given as under:

Date and Time	Venue
6th February, 2015 (Friday) 11:00 AM Onwards	Multipurpose Hall of ANMW, Port Blair

Interested persons may file objections/objections in six copies in the above matters in person or through e-mail registered post on or before 15th February, 2015 addressed to The Secretary, JERC for Goa & UTs with a copy to The Superintending Engineer, Office of the Superintending Engineer, Electricity Department, Port Blair-744101. Oral submission can also be made before the Commission during the aforementioned public hearing.

Secretary

DOLLYGUNJI

Contact :
233133
9933268598

with District Permit (South, North & Middle) all in Excellent Running Condition

Contact :
9434292370
9933281567

THE ECHO OF INDIA

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NOTICE INVITING APPLICATIONS

The Director (Tourism), Andaman and Nicobar Administration intend to engage 03 New Life Guard on DRM basis @ Rs. 3100 per day for a period of 06 months for Radha Nagar Beach, Havelock. Applications are invited from the eligible Male candidates for engagement as Life Guard on DRM basis. The age of the candidates should be 18-35 years.

The interested candidates are advised to submit Xerox copy of the Educational Certificates, Employment Exchange Registration Card, Proof of age in the prescribed format in the Department on or before 13.02.2015 at 3.00 PM to the in-charge Dolphin Report, Havelock and the interview will be held on 17.02.2015 at 10.00 AM at Radha Nagar Beach, Havelock.

The candidates are also advised to bring Original Educational Qualification Certificates, Employment Exchange Registration Card and proof of age at the time of attending interview. Submitting Test

Essential Qualification:-

- Skilled Category (Life Guard) Minimum Vth Pass with certificate courses in Life Saving, if any.

Other Terms and Conditions:

- The Candidates must pass swimming test, conducted by Directorate of Tourism.
- The engagement is purely on Daily Wages Basis.
- There is no provision for re-engagement after a expiry of six months and no claim for regular appointment.
- No TADA shall be paid for attending the interview/Skill test.
- The Director (Tourism) has right to terminate the engagement of the candidates if his performance is not found satisfactory or such other reasons deemed to be fit without assigning any reason thereof.

Assistant Director (Admin.)

NO. TENDER-DB/NACD/MB/2014-15/545
OFFICE OF THE EXECUTIVE ENGINEER
NORTH ANDAMAN CONSTRUCTION DIVISION
ANDAMAN PUBLIC WORKS DEPARTMENT
MAYABUNDER.

Mayabunder, dated the 29/01/2015

NOTICE INVITING TENDER

The Executive Engineer, NACD, APWD, Mayabunder, on behalf of President of India invites separate sealed bids (in form CPWD-4) from approved and eligible experienced Contractors of appropriate class to 3.00 P.M. on 25/02/2015 for under mentioned work.

Name of Work	Estimated Cost Put to Tender	Cost of Tender Documents	Earnest Money Deposit	Time of Completion
Installation of 03 Bourabbi path, Oil Cooler and Extension of Engine foundation at House Planting, under Sub-Division No.1, APWD, Mayabunder.	₹ 11,18,83	₹ 550/-	₹ 8,237/-	15 (Fifteen) Days
Installation of Ambulance Parking shed and Garage at Dr. R.P. Hospital, Mayabunder under Sub-Div. No.1, NACD, Mayabunder.	₹ 4,42,034/-	₹ 600/-	₹ 5,501/-	02 (Two) Months
Installation of Camp at Dr. R.P. Hospital, Mayabunder, APWD, Mayabunder.	₹ 42,244/-	₹ 500/-	₹ 1,343/-	03 (Three) Months

Receipt of application: 15/02/2015 upto 4.00 PM.
Sale of Tenders: 22/02/2015 upto 4.00 PM.
Date of receipt of tenders: 25/02/2015 upto 3.00 P.M.
Date of opening of tenders: 26/02/2015 at 3.30 P.M.

The tenders should be valid on the last date of sale of tenders. In case only the last date of tender is extended, the validity of contractor should be valid on the original date of sale. In case both the last date of receipt of application and sale of tenders are extended, the validity should be valid on either of the two dates i.e. original date of sale of tender or on the extended date of tenders.

The tender documents consisting of plans, specifications, the schedule of quantities of the various classes to be done and the set of terms & conditions of contract to be compiled with by the Contractor, which are to be accepted and other necessary documents can be seen in the office of the Executive Engineer, PWD, Mayabunder between 11.00 A.M. & 04.00 P.M. every day except on Saturday, Sunday and holidays. Tender documents, including standard form will be issued from his office, during the hours above, on payment of ₹500/- (Non-refundable) in cash as cost of tender.

Earnest Money of Rupee indicated above in cost/entry; Treasury Challan/Deposit as full receipt shall be Bank fixed deposit receipt of schedule bank/demand draft of a schedule bank issued in favour of Executive Engineer, NACD, Mayabunder should accompany with the tender document.

The tender and the earnest money shall be placed in separate sealed envelopes, each marked "Tender" and "Money" respectively. Both the envelope shall be submitted together in another sealed envelope with a list of work. The envelopes marked "Tender" if only those tenders shall be opened, whose earnest money in the other envelopes, is found to be in order.

The application Form without cost of Tender document, attested copy of valid enrollment, postal address with a number shall not be enclosed.

The Executive Engineer, NACD, APWD, Mayabunder reserves the right to accept/reject any or all of the without assigning any reason therefor and also does not bind himself to accept the lowest tender. A notice may also be seen at website www.andnic.in.

Executive Engineer
NACD, Mayabunder.

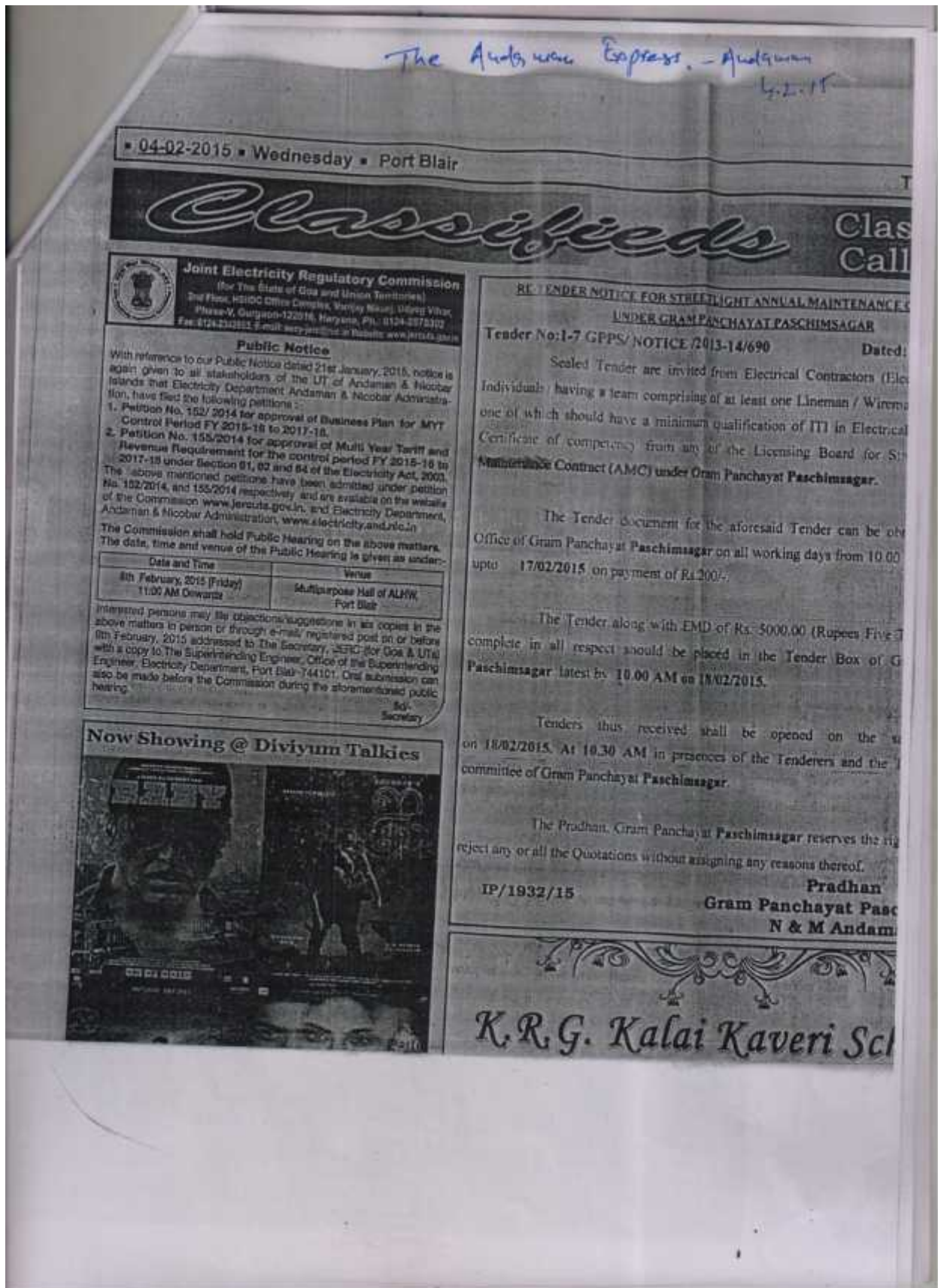
<p>1. Name (in Block Letter)</p> <p>2. Father's/Husband's Name</p> <p>3. Nationality</p> <p>4. Educational Qualification (enclosed attested copies)</p> <p>5. Other experience, if any</p> <p>6. Age with Date of Birth</p> <p>7. Whether in possession of Local Certificate</p> <p>8. Employment Exchange Registration No.</p> <p>9. Permanent Postal Address</p> <p>11. Present Communication Address</p> <p>12. Contact No.</p>	<p>Affixed attested photograph (pass port size)</p>
--	---

I hereby declare that the above details are true and correct to my knowledge and belief and any information furnished enclosed will make me liable for termination of service. I also understand that my engagement as contract DRM will not be below any of the contract regular appointment.

Place: _____
Date: _____

R. No. IP/1936/15 Signature of the applicant

IP/1930/15



...একটি প্রকল্প করার আশ্বাস দিয়েছে।
...পাঠি প্রকল্প, পাঠি টুয়েন্ট বি.এ., বি.এস.সি. বিকল্প প্রকল্প,
...সুত্রে ১০ বছরের ছাড়সহকারী জম্ম অধিগ্ৰহণ আদেশ। এটি
...প্রকল্পের পক্ষে থেকে বিদ্যুত্বিত্তিমালাকে তেজস্ক্রিয় ও মেগা
...সীমা কমে ছাড়সহকারী জম্ম অধিগ্ৰহণ শর্তে প্রকল্পের
...বিদ্যুত্বিত্তিমালাকে মজবুত করার মাধ্যমে প্রকল্পের ক্ষেত্রটি প্রকল্প। এটি
...এই প্রকল্প করার সারি জানিয়ে থাকেন।

...স্বায়ংসহকারী প্রকল্প, ছাড়সহকারী কেউ বিদ্যুত্বিত্তিমালা দেখাননি।
...স্বায়ংসহকারী প্রকল্প জানাচ্ছে এবং বিদ্যুত্বিত্তিমালা কমে, অল্প প্রকল্পের হলে,
...স্বায়ংসহকারী প্রকল্পের মাধ্যমে প্রকল্পের ক্ষেত্রটি প্রকল্প। এটি
...স্বায়ংসহকারী প্রকল্পের মাধ্যমে প্রকল্পের ক্ষেত্রটি প্রকল্প। এটি

...স্বায়ংসহকারী প্রকল্পের মাধ্যমে প্রকল্পের ক্ষেত্রটি প্রকল্প। এটি
...স্বায়ংসহকারী প্রকল্পের মাধ্যমে প্রকল্পের ক্ষেত্রটি প্রকল্প। এটি
...স্বায়ংসহকারী প্রকল্পের মাধ্যমে প্রকল্পের ক্ষেত্রটি প্রকল্প। এটি

...স্বায়ংসহকারী প্রকল্পের মাধ্যমে প্রকল্পের ক্ষেত্রটি প্রকল্প। এটি
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...স্বায়ংসহকারী প্রকল্পের মাধ্যমে প্রকল্পের ক্ষেত্রটি প্রকল্প। এটি

**ই-এমআইটি এবং মেনু কোডের
বহিঃস্থে বিজ্ঞাপন প্রদর্শন**

Advertisement

...বিজ্ঞাপন প্রদর্শনের মাধ্যমে বিদ্যুত্বিত্তিমালা প্রদর্শন করা হবে।
...বিজ্ঞাপন প্রদর্শনের মাধ্যমে বিদ্যুত্বিত্তিমালা প্রদর্শন করা হবে।
...বিজ্ঞাপন প্রদর্শনের মাধ্যমে বিদ্যুত্বিত্তিমালা প্রদর্শন করা হবে।

**সেন্ট্রাল পাবলিক
ওয়ার্কস ডিপার্টমেন্ট
ই-টেন্ডার আহ্বান
নোটিশ**

...সেন্ট্রাল পাবলিক ওয়ার্কস ডিপার্টমেন্ট
...ই-টেন্ডার আহ্বান নোটিশ

**বনগাঁ ভোক্তা
উদ্বাস্তুদের নাম
আওয়াজ তুল**

...বনগাঁ ভোক্তা উদ্বাস্তুদের নাম
...আওয়াজ তুল

Joint Electricity Regulatory Commission
(for The State of Goa and Union Territories)

...Joint Electricity Regulatory Commission
...for The State of Goa and Union Territories

পাবলিক নোটিশ

...পাবলিক নোটিশ
...পাবলিক নোটিশ

Barteman
(Bengali)
Kolkata
9.2.15



বনগাঁতে নামগোষ্ঠী

...বনগাঁতে নামগোষ্ঠী
...বনগাঁতে নামগোষ্ঠী
...বনগাঁতে নামগোষ্ঠী

Annexure 4

List of Objectors.

1. Sri. Ranjith, New Anumod Bakery.
2. Sri S.K Majumdar.
3. Sri Ramajayan, RMC. Akshay Orja.
4. Shri P. KANAN, President Govt Employee Federation.
5. Sri. C.P BABU
6. Sri. Jogeshwar Lal