

Order in Petition No. 186/2015

**APPROVAL OF BUSINESS PLAN
FOR
MYT CONTROL PERIOD
FY 2016-17 to FY 2018-19**

For

Electricity Department, Goa



22nd December 2015

संयुक्त विद्युत विनियामक आयोग (गोवा राज्य और संघ शासित प्रदेशों के लिए)
JOINT ELECTRICITY REGULATORY COMMISSION

For the State of Goa and Union Territories,

2 तल, वाणिज्य निकुंज, एचएसआईआईडीसी कार्यालय परिसर, उद्योग विहार फेज-V, गुडगांव-122016 हरियाणा

2nd Floor, HSIIDC Office Complex, Vanijya Nikunj,
Udyog Vihar, Phase-V, Gurgaon-122 016 (Haryana)

दूरभाष 0124-2875302 ,फैक्स 0124-2342853

Phone: 0124-2342852 Fax: 0124-2342853

Website: www.jercuts.gov.in

Email: secy-jerc@nic.in

**Before the
Joint Electricity Regulatory Commission
For the State of Goa and Union Territories, Gurgaon**

QUORUM

Shri. S.K. Chaturvedi (Chairperson)

Smt. Neerja Mathur (Member)

Petition No. 186/2015

In the matter of

Approval of Business Plan for MYT Control Period from FY 2016-17 to FY 2018-19 for Electricity Department, Goa

And in the matter of

Electricity Department, Goa.....**Petitioner**

ORDER

Passed On: 22nd December 2015

- a. This Order is passed in respect of the Petition filed by the Electricity Department, Goa for approval of its Business Plan for the MYT control period of three years commencing from 01st April 2016.
- b. In exercise of powers conferred by sub-section (1) of section 181 and clauses (zd), (ze) and (zf) of sub-section (2) of section 181, read with Sections 61, 62, 83 and 86, of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in this behalf, after previous publication, the Joint Electricity Regulatory Commission issued Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014 on 30th June 2014. The Commission has subsequently issued the first amendment to the said Regulations on 10th August 2015. The amendments to the Regulations have been considered appropriately.
- c. As per clause 3.1.6 of the JERC (Multi-year Distribution Tariff) Regulations, 2014 dated 30th June 2014, the “**Control Period**” was defined as multi-year period comprising of three financial years from FY 2015-16 to FY 2017-18.
- d. However, as detailed in the last Tariff Order issued in Petition no. 160/2014 and 161/2014 dated 06th April 2015, the Commission in directive no. 14, had ordered for deferment of the control period by one year and had directed the Petitioner to submit

the revised Business Plan for the period FY 2016-17 to FY 2018-19, along with requisite details as provided in JERC (Multiyear Distribution Tariff) Regulations, 2014, latest by 31st July 2015. The Commission in the last Tariff Order had noted that the supporting data such as scheme-wise cost benefit analysis, financing plan and the loss trajectory had not been adequately submitted and therefore, had ordered for deferment of the control period by one year.

- e. As per provisions in clause 5.1 (as per amendment dated 10th August 2015) and 12.1 of the JERC (Multi-year Distribution Tariff) Regulations, 2014, the Petitioner has filed for approval of its Business Plan for three years control period i.e. from FY 2016-17 to FY 2018-19 with details for each year of the control period before the Commission.
- f. As per provision in clause 5.1, 5.3 and 7.1 of the JERC (Multi-year Distribution Tariff) Regulations, 2014, the Business Plan shall comprise of but not be limited to detailed category-wise sales and physical targets, power procurement plan, capital investment plan and financing plan. The Distribution Licensees shall project the power purchase requirement after considering effect on the sales projections of target set for Energy Efficiency (EE) and Demand Side Management (DSM) schemes. The Business Plan shall also specify the operational norms and trajectories of performance parameters for each year of the Control Period.
- g. The primary focus of the business plan is on identification of the various schemes/works related to meeting the power requirement of the State, improvement in performance efficiency by way of reduction in losses and improvement in quality of supply to the consumers.
- h. Since detailed business plan has been submitted for the first time under the MYT regime, lot of scrutiny, discussions, collection of additional information and data were done with regard to the Petition before finalization and approval of the Business Plan.
- i. This Order is passed by the Commission, after detailed scrutiny of the information and documents filed with the Petition, filed subsequently during the course of the technical validation session and also other information as available with the Commission.
- j. After receiving the Petition, the Commission scrutinized the contents of the Petition and called for further information/data so as to take a prudent view of the Petition. The Commission also held a technical validation session of the Business Plan to determine the sufficiency of the Petition. Comments/objections/suggestions were also invited from the public/stakeholders. Public hearing was held and parties/people present were heard. The schedule of activities performed under this quasi-judicial process was as below:

Particulars	Details
Petition No.	186/2015
Date of Admission	20 th October 2015
Technical Validation Session	02 nd November 2015
Public Hearing	04 th November 2015

- k. After being satisfied reasonably regarding the availability of data, the Commission is issuing this Order mainly approving the Business Plan proposed by the Petitioner and as per observations/directives mentioned in the attached document. The Commission will further scrutinize the Multi-Year Tariff Petition when submitted, for assessing the other aspects of the business and issuance of Multi-Year Tariff Orders.
- l. The Commission has approved the Business Plan for three years control period FY 2016-17 to FY 2018-19 based on the information submitted by the Petitioner. Further, as per Regulation 22 of JERC (Multi-year Distribution Tariff) Regulations, 2014, if the capital expenditure is required for emergency work, the licensee shall submit an application, containing all relevant information along with reasons justifying the emergent nature of the proposed work, seeking post facto approval by the Commission. The Distribution Licensee shall take up the work prior to receiving the approval from the Commission provided that the emergent nature of the scheme has been certified by its competent authority.
- m. The Commission directs that all pending RPO obligations up to FY 2015-16, if any, must be fulfilled by the Petitioner by 31st March 2016 and no backlog would be allowed to be carried forward to the control period FY 2016-17 to FY 2018-19. The Commission expects that the Petitioner would give priority to obtaining physical solar and non-solar power.
- n. The Petitioner shall submit the duly approved MYT Petition for the Control period from FY 2016-17 to FY 2018-19 within 30 days of the issuance of this Order. The retail tariff proposal are to be submitted only for the first year of control period namely FY 2016-17 whereas ARR calculations are to be submitted for the full control period, FY 2016-17 to FY 2018-19.
- o. Ordered as above, read with attached document giving detailed reasons, grounds and conditions.
- p. Copy of this Order may be sent to Petitioner, CEA and Administration of Goa. It shall be placed on the website of the Commission.

-Sd-

नीरजा माथुर
सदस्य

-Sd-

सुधीर चतुर्वेदी
अध्यक्ष

संयुक्त विद्युत विनियामक आयोग
(गोवा और केंद्र शासित प्रदेशों के लिए)
(Certified Copy)

स्थान: गुडगाँव

दिनांक: 22 दिसंबर, 2015

कीर्ति तिवारी, सचिव

Table of Contents

1.	Introduction	1
1.1.	JERC Formation.....	1
1.2.	Electricity Department of Goa	1
1.3.	Electricity Regulatory Process in Goa	2
1.4.	JERC (Multiyear Distribution Tariff) Regulations, 2014	2
1.5.	Filing of Petition for approval of MYT Business Plan from FY 2016-17 to FY 2018-19	3
1.6.	Admission of Petition	3
1.7.	Interaction with the Petitioner.....	3
1.8.	Public Hearing Process.....	4
1.9.	Notice for Public Hearing.....	5
1.10.	Organization of the Order.....	6
2.	Approach of the Order	8
2.1.	Various Provisions of JERC (Multi Year Distribution Tariff) Regulations, 2014.....	8
2.2.	Commission's approach for approval of Capital Expenditure Schemes	9
2.3.	Commission's approach for approval of various other ARR components.....	10
3.	Salient Features of MYT Business Plan Petition filed by ED-Goa.....	11
3.1.	MYT Business Plan Petition filed by the Petitioner for FY 2016-17 to FY 2018-19	11
3.2.	Summary of the MYT Business Plan Petition	12
3.3.	Prayer to the Commission.....	19
4.	Summary of Objections received, Response from the Petitioner and Commission's Views	21
4.1.	Regulatory Process.....	21
4.2.	Public Hearing	21
4.3.	Stakeholders Comments, Response of the Petitioner and Commission views.....	21
5.	Capital Investment Plan for the MYT Control Period FY 2016-17 to FY 2018-19.....	41
5.1.	Details of Capital Expenditure.....	41
5.2.	Funding Plan	64
6.	Approval of the various ARR components for the MYT Control Period FY 2016-17 to FY 2018-19..	68
6.1.	Category-wise Energy Sales for the MYT Control Period FY 2016-17 to FY 2018-19.....	68
6.2.	Consumer profile.....	74
6.3.	Connected Load Growth.....	78
6.4.	Transmission and Distribution (T&D) Losses	82
6.5.	Aggregate Technical & Commercial (AT&C) Losses.....	83
6.6.	Energy Efficiency.....	83

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

6.7.	Energy Requirement.....	84
6.8.	Power Procurement Plan.....	85
6.9.	Renewable Purchase Obligation (RPO)	87
6.10.	Norms for O&M.....	88
6.11.	Norms for Employee Costs.....	88
6.12.	Norms for Administration & General (A&G) Expenses.....	91
6.13.	Norms for Repair & Maintenance (R&M) Expenses.....	92
6.14.	Normative levels of Availability for Wires and Supply Business.....	94
7.	Directives based on the Business Plan Analysis.....	95
7.1.	Audit Accounts from FY 2011-12 to FY 2014-15	95
7.2.	Submission of Status Reports	95
7.3.	Billing and Collection Efficiency	95
7.4.	Renewable Purchase Obligation (RPO)	95
7.5.	Capital Expenditure.....	96
7.6.	Sales, Number of Consumers and Connected Load	96
7.7.	Norms for O&M Expenses.....	96
7.8.	Unbundling and Corporatisation.....	96
	Annexure 1: Public Notices published by the Petitioner	98
	Annexure 2: Public Notices published by the Commission for intimation of Public Hearing	102
	Annexure 3: List of Stakeholders present during the public hearing	105

List of Tables

Table 1.1: Details of Tariff Petitions so far submitted by the Petitioner & Tariff Order Issued by JERC.....	2
Table 1.2: List of Interactions with the Petitioner.....	4
Table 1.3: Details of public notice published by the Petitioner	4
Table 1.4: Schedule of public hearing at Panaji.....	5
Table 1.5: Details of public notice published by the Commission	5
Table 1.6: Repeat public notice published by the Commission	5
Table 3.1: Sales (MUs) submitted by the Petitioner for control period.....	13
Table 3.2: Number of Consumers as submitted by the Petitioner for control period.....	13
Table 3.3: Connected Load (kW/kVA/HP) submitted by the Petitioner for control period.....	14
Table 3.4: Energy Requirement as submitted by the Petitioner for Control Period.....	15
Table 3.5: Capital Expenditure proposed by the Petitioner for Control Period (Rs Crores)	15
Table 3.6: Capitalization proposed by the Petitioner for Control Period (Rs Crores).....	17
Table 3.7: Employee parameters submitted by Petitioner for last six years.....	18
Table 3.8: A&G parameters submitted by Petitioner for last five years	19
Table 3.9: R&M expense submitted by Petitioner for last five years	19
Table 5.1: Capital Expenditure proposed by the Petitioner (Rs. Crores).....	42
Table 5.2: Capital Expenditure and Capitalization as proposed by the Petitioner and approved by the Commission (Rs. Crores).....	43
Table 5.3: Work wise cost breakup of Scheduled Tribe development scheme (Rs. Crores).....	44
Table 5.4: Capital Expenditure and Capitalization as proposed by the Petitioner and approved by the Commission (Rs. Crores).....	45
Table 5.5: Capital Expenditure and Capitalization approved by the Commission for Erection and Augmentation of 33/11 KV S/S line (P) (Rs. Crores).....	46
Table 5.6: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores).....	47
Table 5.7: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores).....	48
Table 5.8: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores).....	49
Table 5.9: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores).....	50
Table 5.10: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores).....	52
Table 5.11: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores).....	52
Table 5.12: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crore).....	54
Table 5.13: Work wise breakup of Underground cabling scheme	55
Table 5.14: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores).....	56
Table 5.15: Capital Expenditure and Capitalization approved by the Commission for Public Lighting Scheme (Rs. Crores)	57
Table 5.16: DPR Value of various schemes (Rs. Crores).....	58

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Table 5.17: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores).....	59
Table 5.18: Work wise cost breakup of EHV new Transmission / Sub-Station / Capacitor banks scheme (Rs. Crores).....	61
Table 5.19: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores).....	62
Table 5.20: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores).....	63
Table 5.21: Total Capital Expenditure and Capitalization as Proposed by the Commission and approved by the Commission (Rs Crores).....	63
Table 5.22: Funding of Capital Expenditure proposed by the Petitioner for control period.....	64
Table 5.23: Scheme-wise funding approved by the Commission (Rs Crores)	65
Table 6.1: Category-wise energy sales FY 2009-10 to FY 2014-15 (MUs)	68
Table 6.2: Category-wise energy sales projected by the Petitioner for the MYT Control Period FY 2016-17 to FY 2018-19 (MU)	69
Table 6.3: Category-wise growth rate for energy sales as considered by the Commission	72
Table 6.4: Category-wise Energy Sales as approved by the Commission for MYT Control Period (In MU)	73
Table 6.5: Category-wise number of consumers FY 2009-10 to FY 2014-15.....	74
Table 6.6: Category-wise number of projected consumers for the control period FY 2016-17 to FY 2018-19 (No.)	75
Table 6.7: Category-wise growth rate for number of consumers as considered by the Commission.....	76
Table 6.8: Category-wise number of consumers as approved by the Commission for MYT Control Period	77
Table 6.9: Consumer category-wise connected load from FY 2009-10 to FY 2014-15 (kW/HP/kVA).....	78
Table 6.10: Category-wise projected connected load for the Control Period FY 2016-17 to FY 2018-19 (kW/kVA/HP).....	79
Table 6.11: Category-wise growth rate for connected load as considered by the Commission.....	80
Table 6.12: Category-wise connected load as approved by the Commission for MYT Control Period (in kW/kVA/HP).....	81
Table 6.13: T&D Loss Trajectory as proposed by the Petitioner and approved by the Commission.....	82
Table 6.14: AT&C Losses approved by the Commission for the control period.....	83
Table 6.15: Energy savings under DELP scheme approved by the Commission (MU).....	84
Table 6.16: Energy requirement for the Control Period approved by the Commission (MU)	84
Table 6.17: Sources of Power proposed by the Petitioner.....	85
Table 6.18: Sources of Power Approved by the Commission.....	86
Table 6.19: RPO obligation for each year approved by the Commission for the control period.....	87
Table 6.20: Employee Expense Parameters for last six years submitted by Petitioner.....	88
Table 6.21: Historical Employee Expenses (Rs. Crores).....	89
Table 6.22: Employee Expense Parameters for last six years considered by Commission	90
Table 6.23: Historical A&G Expenses (Rs. Crores)	91
Table 6.24: A&G Expense Parameters for last five years submitted by Petitioner	91
Table 6.25: A&G Expenses Norms considered by the Commission (Rs. Crores).....	92
Table 6.26: Norms for R&M proposed by the Petitioner.....	93
Table 6.27: R&M Expenses considered by the Commission.....	93

List of Abbreviations

Abbreviation		Full Form
A&G	:	Administration & General
Act	:	The Electricity Act, 2003
ARR	:	Aggregate Revenue Requirement
BNP	:	Bharat Nirman Programme
CAGR	:	Compound Annualized Growth rate
Capex	:	Capital Expenditure
CC	:	Current Consumption
CEA	:	Central Electricity Authority
CERC	:	Central Electricity Regulatory Commission
CGS	:	Central Generating Station
COD	:	Commercial Operation Date
Commission/JERC	:	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
CKt. Km	:	Circuit Kilometer
DDUGJY	:	Deendayal Upadhyaya Gram Jyoti Yojana
DISCOM	:	Electricity Department of Goa
CPSU	:	Central Public Sector Undertaking
EA 2003	:	The Electricity Act, 2003
FC	:	Fixed Charges
FPPCA	:	Fuel & Power Purchase Cost Adjustment
FY	:	Financial Year
GFA	:	Gross Fixed Assets
HP	:	Horse Power
HT	:	High Tension
IPDS	:	Integrated Power Development Scheme
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
NFA	:	Net Fixed Assets
O&M	:	Operation & Maintenance
PGCIL	:	Power Grid Corporation of India Ltd.
PLF	:	Plant Load Factor
PX	:	Power Exchange
R-APDRP	:	Restructured Accelerated Power Development and Reforms Programme

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Abbreviation		Full Form
REC	:	Renewable Energy Certificate
RoE	:	Return on Equity
RPO	:	Renewable Purchase Obligation
R&M	:	Repair & Maintenance
SLDC	:	State Load Dispatch Centre
SBI CAPS	:	SBI Capital Market Limited
SBI PLR/SBAR	:	SBI Prime Lending Rate/State Bank Advance Rate
SCC	:	System Control Centre
T&D	:	Transmission & Distribution
UI	:	Unscheduled Interchange
VC	:	Variable Charges

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 02ndMay2005. Later with the joining of the state of Goa, the Commission came to be known as “Joint Electricity Regulatory Commission for the State of Goa and Union Territories” as notified on 30th May2008. 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 Gurgaon, Haryana.

1.2. Electricity Department of Goa

Goa, a tiny emerald land on the west coast of India, the 25th State in the Union of States of India, was liberated from Portuguese rule in 1961. It was part of Union territory of Goa, Daman & Diu till 30thMay1987 when it was carved out to form a separate State. Goa covers an area of 3,702 Square Kms and comprises two Revenue districts viz North Goa and South Goa with headquarters at Panaji and Margao respectively. Boundaries of Goa State are defined in the North by the Terekhol River which separates it from Maharashtra, in the East and the South by Karnataka State and in the West by the Arabian Sea.

The entire State comprises of 11 talukas. For the purpose of implementation of development programs, the State is divided into 12 community development blocks. As per 2011 census, the population of the State was ~14,58,000. Administratively the State is organized into two districts North Goa comprising six talukas with a total area of 1736 sq. Kms. and South Goa comprising five talukas with an area of 1966 sq. Kms. In all there are 383 villages of which 233 are in North Goa district and 150 in South Goa district.

The Electricity Department of Goa was formed in January 1963 under the Government of Goa, Daman & Diu. It is the only licensee operating in the State of Goa for transmission and distribution of Electricity. The State of Goa doesn't have its own generation. The majority of the power requirement for the State of Goa is met through its share from Central Sector Power Stations of the National Thermal Power Corporation (NTPC) as allocated by the Central Government and Others.

1.3. Electricity Regulatory Process in Goa

The Electricity Department of Goa had submitted their Petitions for Determination of Aggregate Revenue Requirement and Tariff before the Commission and the Commission subsequently issued the following tariff orders.

Table 1.1: Details of Tariff Petitions so far submitted by the Petitioner & Tariff Order Issued by JERC

Sr. No.	For FY	Filing date	Date of Tariff Order
1.	2011-12	19 th October 2011	27 th June 2012
2.	2012-13	31 st December 2011	27 th June 2012
3.	2013-14	31 st January 2013	31 st March 2013
4.	2014-15	07 th January 2014	15 th April 2014
5.	2015-16	14 th January 2015	06 th April 2015

1.4. JERC (Multiyear Distribution Tariff) Regulations, 2014

In exercise of powers conferred by sub-section (1) of section 181 and clauses (zd), (ze) and (zf) of sub-section (2) of section 181, read with Sections 61, 62, 83 and 86, of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in this behalf, after previous publication the Joint Electricity Regulatory Commission issued Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014 on 30th June 2014.

As per clause 3.1.6 of these Regulations, the “**Control Period**” was defined as multi-year period comprising of three financial years from FY 2015-16 to FY 2017-18.

However, as detailed in the last Tariff Order issued in Petition no. 160/ 2014 and 161/2014 dated 06th April 2015, the Commission in directive no. 14, had ordered for deferment of the control period by one year. The Commission had cited that the details provided in the business plan were insufficient for approval of the same. Supporting data such as scheme-wise cost benefit analysis, financing plan, loss trajectory etc. had not been adequately submitted. In view of this, the Commission deferred the implementation of multi-year tariff and concomitant business plan by one year.

The Commission has issued the first amendment to the JERC Multi-year Distribution Tariff Regulations 2014 vide notification dated 10th August 2015. As per clause 5.1 of the amendment to the said regulations, the Control Period for Multi-Year Tariff implementation, is from FY 2016-17 to FY 2018-19.

1.5. Filing of Petition for approval of MYT Business Plan from FY 2016-17 to FY 2018-19

As per provisions in clause 5.1 and 12.1 of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014 (hereinafter referred to as “MYT Regulations, 2014”), the Petitioner is required to file for approval of the Commission its Business Plan for three years control period i.e. from FY 2016-17 to FY 2018-19 with details for each year of the control period. The Commission, in previous Tariff Order, had directed the Petitioner to submit the revised business plan for the period FY 2016-17 to FY 2018-19, along with requisite details as provided in MYT Regulations 2014, latest by 31st July 2015.

ED-Goa vide email dated 04th August 2015 sought extension in submission of MYT Business Plan for the control period FY 2016-17 to FY 2016-19 up to 31st August 2015. The Commission, vide letter dated 10th August 2015 extended the time limit to 31st August 2015. Further, the Petitioner as per affidavit dated 11th September 2015, sought extension of time up to 30th September 2015, which the Commission granted vide letter dated 14th September 2015. The Petition for approval of MYT Business Plan was filed by the ED-Goa vide letter dated 30th September 2015; which was received at the Commission’s office on 06th October 2015.

1.6. Admission of Petition

The Commission, initially, was not satisfied with the details furnished in the Petition. The Petitioner was, therefore, asked to submit additional details as per the deficiency note of the Commission vide its letter dated 28th October 2015.

Meanwhile, the Commission, in the interest of timely issuance of the Order, admitted the Petition on approval of Business Plan for the Control Period FY 2016-17 to FY 2018-19 on 20th October 2015 as Petition no. 186/2015.

The response to the deficiencies pointed out by the Commission was received vide ED-Goa letter dated 18th November 2015.

1.7. Interaction with the Petitioner

This Order has referred at numerous places to various actions taken by the “Commission”. It may be mentioned for the sake of clarity, that the term “Commission”, except for the hearing and Orders, refers Secretariat of the Commission for carrying out the technical due

diligence and validation of data of the Petitions filed by the utilities, obtaining and analyzing information/clarifications received from the utilities and submitting relevant issues for consideration of the Commission.

For purpose of analysis of the Petition, 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 by the Petitioner. The Commission's staff interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for the analysis of the Business Plan. The Commission's staff conducted Technical Validation Session (TVS) with the Petitioner during which the discrepancies in the Business Plan Petition were pointed out and additional information as required by the Commission was indicated. The TVS was held at the Office of ED- Goa on 02nd November 2015. The Petitioner submitted its replies, as shown below, in response to the various queries raised by the Commission during the course of analysis of the Petition, which were taken into account for finalization of the business plan Petition.

Table 1.2: List of Interactions with the Petitioner

S.No.	Date	Subject
1.	20 th October 2015	Admission of Petition
2.	28 th October 2015	Deficiency note on the Petition sent by the Commission
4.	02 nd November 2015	Technical Validation Session (TVS) held at Electricity Department Goa's office in Panaji.
7.	18 th November 2015	Reply submitted by the Petitioner on the queries raised by the Commission during the deficiency note and the TVS.
9.	10 th December 2015 and 15 th December 2015	Response of the Petitioner to the public hearing comments

1.8. Public Hearing Process

The Commission directed the Petitioner to publish Summary of the Business Plan proposal in the abridged form to ensure public participation. The public notices were published by the Petitioner for inviting objections/ suggestions from the stakeholders on the business plan Petition:

Table 1.3: Details of public notice published by the Petitioner

Sr. No.	Date	Name of Newspaper	Place of Circulation
1	03 rd November 2015	O-Herald (English)	Goa
2	03 rd November 2015	Gomantak (Marathi)	Goa
3	03 rd November 2015	Navhind Times (English)	Goa

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Sr. No.	Date	Name of Newspaper	Place of Circulation
4	04 th November 2015	Gomantak (Marathi) (Corrigendum)	Goa

The Petitioner also uploaded the Petition on its website www.electricity.goa.gov.in for inviting objections and suggestions on the Petition. Interested parties/stakeholders were requested to file their objections/ suggestions on the Petition to the Commission with a copy to the Petitioner on or before 30th October 2015. Copies of the public notices published by the Petitioner are attached as **Annexure 1** to this Order. The Commission received four written objections/suggestions on the Petition, for filing objections/suggestion. The replies to the objections during the public hearing were sent by the Petitioner after the hearing.

1.9. Notice for Public Hearing

The Commission also published a Public Notice in the leading newspapers giving due intimation to stakeholders, consumers, objectors and the public at large about the public hearing to be conducted by the Commission on 04th November 2015 at Goa State Museum Auditorium Hall, Directorate of Museum, Patto, Panaji –Goa. The Commission also interacted with the various stakeholders on the provisions of JERC Solar Power Regulations 2015 immediately after the public hearing. The schedule of public hearing conducted by the Commission was as below:

Table 1.4: Schedule of public hearing at Panaji

Sr.No.	Date & Time	Venue of Hearing	Subject
1.	04 th November 2015	Goa State Museum Auditorium Hall, Directorate of Museum, Patto, Panaji –Goa	Approval of Business Plan for MYT Control Period

The details of the Public Notice published by the Commission are as below:

Table 1.5: Details of public notice published by the Commission

S.No.	Date	Name of Newspaper	Place of Circulation
1.	24 th October 2015	O-Herald (English)	Goa
2.	24 th October 2015	Gomantak (Marathi)	Goa
3.	24 th October 2015	Navhind Times (English)	Goa

The repeat Public Notices for due intimation of the public hearing were published in the following newspapers as shown below:

Table 1.6: Repeat public notice published by the Commission

S.No.	Date	Name of Newspaper	Place of Circulation
1.	02 nd November 2015	O-Herald (English)	Goa

S.No.	Date	Name of Newspaper	Place of Circulation
2.	02 nd November 2015	Gomantak (Marathi)	Goa
3.	02 nd November 2015	Navhind Times (English)	Goa

Copies of the public notice published by the Commission for intimation of public hearing are attached as **Annexure 2** to this Order.

During the public hearing, each objector was provided with an opportunity to present his views on the Petition filed by the Petitioner. All those present in the hearing, irrespective of whether they had given written objections or not, were given an equal opportunity to express their views. The list of stakeholders is attached at **Annexure 3** to this Order. The list includes the Objectors who gave their written objections; those who gave their written objections and presented before the Commission; and other stakeholders who did not give their written objection or prior intimation but presented their submissions before the Commission orally. The Commission has examined the issues and concerns expressed by stakeholders. The major issues raised/indicated during the public hearing, along with the comments/replies of the utility and the views of the Commission, thereon, have been summarized in **Chapter 4** to this Order.

1.10. Organization of the Order

This Order is organized in the following chapters:

- ❖ **Chapter 1** to the Order provides the background and brief description of the regulatory process undertaken by the Commission;
- ❖ **Chapter 2** to the Order lists out the Approach of the Commission in finalization of this Order;
- ❖ **Chapter 3** to the Order summarizes the salient features of the Business Plan Petition filed by ED-Goa
- ❖ **Chapter 4** to the Order lists out various suggestions and objections raised by the stakeholders in writing as well as during the public hearing before the Commission. Various comments, suggestions and objections have been summarized, followed by the response of the Petitioner on them and the views of the Commission on the various issues;
- ❖ **Chapter 5** discusses the Capital Investment Plan for the MYT Control Period FY 2016-17 to FY 2018-19, key issues and Commission views on the same;

- ❖ **Chapter 6** discusses the views of the Commission on the approval of various other ARR components for purposes of Business Plan approval; and,
- ❖ **Chapter 7** to the Order provides directives of the Commission to ED-Goa,

2. Approach of the Order

2.1. Various Provisions of JERC (Multi Year Distribution Tariff) Regulations, 2014

Regulation 5 of the MYT Regulations 2014 and the subsequent amendment to the said Regulations dated 10th August 2015 states that:

“5.1 The Distribution Licensee shall file Business Plan, for Control Period of three financial years from 01st April 2016 to 31st March 2019, which shall comprise but not be limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financial plan and the physical targets.

Provided that in case the Commission issues guidelines and formats, from time to time, the same shall be adhered to by the Distribution Licensees.

5.2 The capital investment plan shall show separately, on-going projects that will spill into the financial year 2016-17 and new projects (along with justification) that will commence and scheduled to be completed within or beyond the tariff period i.e. by or beyond 31.03.2019. The Commission shall consider and approve the capital investment plan for which the Distribution Licensee shall provide relevant technical and commercial details.

5.3 The Distribution Licensees shall project the power purchase requirement after considering effect of target set for Energy Efficiency (EE) and Demand Side Management (DSM) schemes.

Provided that the power purchase cost of the respective Distribution Licensee shall be allowed after considering the target set by the Commission for Energy Efficiency (EE) and Demand Side Management (DSM) schemes, if any, and any shortfall in meeting the target shall be disallowed by the Commission at marginal cost of power purchase of that Distribution Licensee for determination of tariff”

In view of the above, ED-Goa is required to submit the following details in the Business Plan:

1. Category-wise sales projections
2. Power Procurement Plan (including purchase of RE power and REC in compliance of RPO targets)
3. Scheme-wise capital investment plan and financing plan
4. Target for Energy Efficiency and Demand Side Management schemes

As per Regulation 4.2 (ii) of the MYT Regulations 2014, it is stated:

“A detailed Business Plan based on the Operational Norms and trajectories of performance parameters specified in these Regulations, for each year of the Control Period, shall be submitted by the applicant for the Commission's approval;”

Regulation 7 of the first amendment to the MYT Regulations 2014 dated 10th August 2015 states that:

“The Commission shall stipulate a trajectory while approving the Business Plan for certain variables having regard to the reorganization, restructuring and development of the electricity industry in the State:

Provided that the variables for which a trajectory may be stipulated include, but are not limited to, Operation & Maintenance expense norms, supply availability and wires availability and distribution losses and collection efficiency; “In view of the above ED - Goa is required to submit the following operational norms and performance parameters:

- 1. Status/Action plan for reorganization, restructuring and development of the electricity industry in the state (Regulation 7 of the MYT Regulations, 2014)*
- 2. Norms for Employee Costs (Regulation 7 and 21 of the MYT Regulations, 2014)*
- 3. Norms for R&M Expenses (Regulation 7 and 21 of the MYT Regulations, 2014).*
- 4. Norms for A&G Expenses (Regulation 7 and 21 of the MYT Regulations, 2014).*
- 5. Normative levels of Availability for Wires and Supply Business of the Distribution Licensee on the basis of past performance (Regulation 7 and 34 (c) of the MYT Regulations, 2014).*
- 6. Trajectory of Distribution Losses (Regulation 7 and 17 of the MYT Regulations, 2014).*
- 7. Trajectory of Collection Efficiency (Regulation 7 of the first amendment to the MYT Regulations 2014 dated 10th August 2015)*

2.2. Commission's approach for approval of Capital Expenditure Schemes

The primary focus of the business plan is on identification of the various schemes/works related to meeting out the power requirement in the State, improvement in operational efficiency of the utility by way of reduction in losses and improvement in quality of supply to the consumers, along with associated Capital expenditure of the schemes, as these key parameters are the most important driver for development of the utility; however, it is vital to carry out a prudent assessment of the Capital expenditure of various schemes as it invariably affects the tariff of the utility and subsequent pass-through of the same to the retail consumers.

The Commission has, thus, reviewed the Capital expenditure schemes in detail along with their financing pattern and accordingly accorded approval to the schemes along with justification as detailed in **Chapter 5** of this Order.

Further, as per Regulation 22 of the MYT Regulations 2014, if the Capital expenditure is required for emergency work, the licensee shall submit an application, containing all relevant information along with reasons justifying the emergent nature of the proposed work, seeking *Post facto* approval by the Commission. The Distribution Licensee can take up the work prior to receiving the approval from the Commission provided that the emergent nature of the scheme has been certified by its Competent Authority.

2.3. Commission's approach for approval of various other ARR components

The Commission, while approving the various other ARR components, as mandated by Regulations to be furnished along with the Business Plan, has laid emphasis on the consideration of nature of the individual components along with the fact that the Commission's efforts should not be duplicated while approving these components at the time of finalization of the MYT Tariff Order.

Accordingly, while dealing with the various other components of ARR in **Chapter 6**, the Commission has detailed the rationale for approving these components. The Commission has also detailed the reasons for not considering some of these components for purposes of approval of Business Plan.

3. Salient Features of MYT Business Plan Petition filed by ED-Goa

3.1. MYT Business Plan Petition filed by the Petitioner for FY 2016-17 to FY 2018-19

In line with the MYT Regulations 2014, ED-Goa has submitted the Petition for business plan for the period from FY 2015-16 to FY 2017-18 last year; however as per the Tariff Order dated 06th April 2015, the Commission deferred the implementation of the MYT Regulations 2014 by one year due to insufficiency of details provided in the business plan. Supporting data such as scheme-wise cost benefit analysis, financing plan, loss trajectory etc. was not adequately submitted. The Commission carried out the approval of ARR & tariff for the FY 2015-16 as per the JERC (Terms & Conditions for Determination of Tariff) Regulations 2009. The Commission as per Order dated 06th April 2015 directed the Petitioner to submit the revised business plan for the control period from FY 2016-17 to FY 2018-19 along with the requisite details as per the MYT Regulations 2014 latest by 31st July 2015.

ED-Goa vide communication dated 04th August 2015 sought extension of time in submission of MYT Business Plan for the control period from FY 2016-17 to FY 2016-19 by up to 31st August 2015. The Commission vide letter dated 10th August 2015 extended the time limit to 31st August 2015. Further, the Petitioner as per Affidavit dated 11th September 2015, sought another extension of time up to 30th September 2015. The Commission, vide letter dated 14th September 2015 extended the time limit to 30th September 2015. The MYT Business Plan Petition was then filed by ED-Goa vide letter dated 30th September 2015, which was received at the Commission's office on 06th October 2015. The Petitioner has submitted the category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan, O&M Norms and targets of distribution loss for the control period from FY 2016-17 to FY 2018-19. The Petitioner has submitted that it has developed the business plan considering the strengths and weaknesses of the department and after evaluating its business environment, taking into account SWOT analysis, market issues & challenges and past performance of the utility.

Regarding the availability of the audited accounts, the utility has submitted:

Quote

ED-Goa submits that the meter reading, billing and collection process is being streamlined and is going through a transformation phase. In the past it was maintained by several different agencies separately in each division. Each agency had its separate logic build up for bill calculation and bill generation. However now a common agency has taken over all the billing and collection data for LT consumers (from 01st January 2015) and a common process will be followed for all the division to avoid ambiguity in the process and data. While this

streamlining and transformation is in process some errors in the legacy data has been discovered and the error rectification process is going on.

It is also submitted that the audited accounts of ED-Goa are available till FY 2010-11 and the audited accounts from FY 2011-12 onwards are in process and hence the data considered in the business plan related to Sales, No of Consumers, Connected Load, Gross Fixed Assets, O&M Expenses, T&D Loss etc may get revised subsequently after the finalization of respective financial statements.

Due to data discrepancies and lack of proper energy audit in place, the transmission and distribution loss and corresponding Aggregate Technical & Commercial (AT&C) loss may also change during accounts finalization and / energy audit exercise.

Unquote

The projections made by ED-Goa are based on the audited figures up to FY 2010-11 and unaudited figures for FY 2011-12 and beyond. ED-Goa has submitted that the basic principles considered while preparing the business plan are to address the initiatives to enhance the performance of power sector in Goa i.e. network development, tariff management, efficient operation and customer service.

Further, the Petitioner has submitted various initiatives being undertaken by it to improve the power system such as DELP (DSM based Efficient Lighting Program), technology up-gradation etc.

3.2. Summary of the MYT Business Plan Petition

The Petitioner has submitted that it has plotted CAGR for last four, five and six years (FY 2014-15 and beyond) and then assumed an escalation which synchronizes with these plotted CAGR's for better perception of growth in a particular category. This growth rate assumed for each category is applied on the sales that are estimated as per escalation on 2014-15 actual sales figures for FY 2015-16; for estimating sales of FY 2016-17 to FY 2018-19. The Petitioner has provided justification for considering a particular growth rate for all consumer categories showing negligible, negative or abnormal growth in the past years.

The Petitioner also submitted that certain categories has been revised vide Tariff Order dated 6th April 2015 for which no historical analysis is possible at present and may result in incorrect picture therefore, it has considered sales, consumers and connected load CAGR based on old categories.

Further, the audited figures are available till FY 2010-11 and preparation of audited books for FY 2011-12 onwards is in progress. Therefore, the Petitioner submitted that the figures from FY 2011-12 to FY 2014-15 are yet to be audited and hence are provisional actual. In order to deal with such a situation, Petitioner has considered three scenarios before

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

considering a growth rate for entire control period. The Petitioner has calculated CAGR for past three, four and five years starting from FY 2014-15 and then considered a growth rate for projections of control period so that audited numbers of FY 2009-10 and FY 2010-11 also form part of this exercise.

The sales, consumers and connected load as projected by the Petitioner for the control period are as follows.

Table 3.1: Sales (MUs) submitted by the Petitioner for control period

Sr. No	Consumer Category	Projections		
		FY 17	FY 18	FY 19
	LT Supply	1,388	1,455	1,525
1(a)	Tariff LTD/Domestic and Non-Comm.	802	842	884
1(b)	Tariff LTD/Low Income Group	5	5	5
1(c)	Tariff LTD/Domestic Mixed	9	10	11
2	Tariff-LTC/Commercial	295	310	325
3	Tariff LTI/Industry	211	221	232
6	Tariff-LTP/Mixed (Hotel Industries)	6	6	7
7	Tariff-LTAG/Agriculture	24	24	24
8	Tariff-LTPL/Public Lighting	37	37	37
	Temporary Supply	22	22	22
9	Tariff-LT/Temporary	22	22	22
10	Tariff-HT/Temporary	-	-	-
11	Hoarding/Signboard	0	0	0
	HT Supply	1,946	2,029	2,120
12	HTI/Industrial	1,325	1,397	1,476
13	H.T.Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive)	588	599	611
14	Tariff-HTAG/Agriculture	6	6	6
15	H.T. MES/Defense Establishments	27	27	27
	Total Sales	3,356	3,507	3,667

Table 3.2: Number of Consumers as submitted by the Petitioner for control period

Sr. No	Consumer Category	Projections		
		FY 17	FY 18	FY 19
	LT Supply	5,94,261	6,05,668	6,17,303
1(a)	Tariff LTD/Domestic and Non-Commercial	4,77,436	4,86,985	4,96,725
1(b)	Tariff LTD/Low Income Group	3,049	3,049	3,049
1(c)	Tariff LTD/Domestic Mixed	4,399	4,399	4,399
2	Tariff-LTC/Commercial	89,263	91,048	92,869
3	LTI/Industry	6,341	6,403	6,466
4	Tariff-LTP/Mixed (Hotel Industries)	212	222	233
5	Tariff-LTAG/Agriculture	10,821	10,821	10,821

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Sr. No	Consumer Category	Projections		
		FY 17	FY 18	FY 19
6	Tariff-LTPL/Public Lighting	2,740	2,740	2,740
	Temporary Supply	2,600	2,600	2,600
7	Tariff-LT/Temporary	2,581	2,581	2,581
8	Tariff-HT/Temporary	-	-	-
9	Hoarding/Signboard	19	19	19
	HT Supply	835	842	850
10	Tariff HTI/Industrial	758	765	772
11	H.T.Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive)	24	24	24
12	Tariff-HTAG/Agriculture	41	42	42
13	H.T. MES/Defense Establishments	12	12	12
14	H.T. Industrial (Steel Rolling)	-	-	-
	Total Number of Consumers	5,97,697	6,09,111	6,20,753

Table 3.3: Connected Load (kW/kVA/HP) submitted by the Petitioner for control period

Sr. No	Consumer Category	Projections		
		FY 17	FY 18	FY 19
1(a)	Tariff LTD/Domestic and Non-Comm.	11,62,728	11,68,541	11,74,384
1(b)	Tariff LTD/Low Income Group	338	338	338
1(c)	Tariff LTD/Domestic Mixed	13,044	13,044	13,044
2	Tariff-LTC/Commercial	2,80,133	2,81,533	2,82,941
3 (a)	Tariff-LTP/Motive Power	1,09,269	1,09,269	1,09,269
3 (b)	Tariff-LTP/ Ice Manufacturing	2,433	2,433	2,433
3(a)	Tariff-LTP/Mixed (Hotel Industries)	4,285	4,285	4,285
4	Tariff-LTAG/Agriculture	34,481	34,481	34,481
5	Tariff-LTPL/Public Lighting	9,598	9,598	9,598
6	Tariff-LT PWW/Public Water Works	3,877	3,877	3,877
	Total LT Category	16,20,186	16,27,400	16,34,650
7	Tariff HT-Mixed	75,073	75,073	75,073
8(a)	Tariff HTI/Industrial	2,49,086	2,49,086	2,49,086
8(b)	Tariff HTI/Hotel Industries	44,402	44,402	44,402
8(c)	Tariff HTI/Ice Manufacturing	364	364	364
9	H.T.Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive)	94,416	94,416	94,416
10	Tariff-HTAG/Agriculture	8,378	8,378	8,378
11	EHTI/Industrial	53,166	53,166	53,166
12	H.T. PW/Public Water Supply & Sewage	30,885	30,885	30,885
13	H.T. MES/Defense Establishments	7,080	7,080	7,080
14	H.T. Industrial (Steel Rolling)	20,340	20,340	20,340
15	Tariff HT-Industries (IT High Tech).	7,004	7,004	7,004

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Sr. No	Consumer Category	Projections		
		FY 17	FY 18	FY 19
	Total HT Category	5,90,194	5,90,194	5,90,194
C	Temporary Supply	1,098	1,098	1,098
16	Tariff-LT/Temporary	1,098	1,098	1,098
17	Tariff-HT/Temporary	-	-	-
	Hoarding / Sign Board	35	35	35
	Total Connected Load	22,11,477	22,18,692	22,25,942

The projection for energy requirement has been arrived at by grossing up the above consumption projections with distribution loss trajectory proposed by ED-Goa. Considering the optimal distribution loss levels, ED-Goa finds it technically difficult to further reduce the transmission and distribution loss. Efforts are being taken to further reduce these losses and with implementation of APDRP schemes it expects results in the Control Period.

The energy requirements as projected by the Petitioner for the Control Period are as below:

Table 3.4: Energy Requirement as submitted by the Petitioner for Control Period

Sr. No.	Particulars	Projections		
		FY 2016-17	FY 2017-18	FY 2018-19
1	Metered Sales to Consumers	3356	3507	3667
2	Distribution Losses (%)	14.00%	13.75%	13.50%
3	Distribution Losses	546	559	572
4	Energy Required at Goa Periphery	3903	4066	4239

The Petitioner has considered energy savings of 66.60 MU annually to accrue from the DSM based Efficient Lighting Program (DELP) under demand side management measures.

ED-Goa has proposed the following capital expenditure along with the financing details for implementation during the control period.

Table 3.5: Capital Expenditure proposed by the Petitioner for Control Period (Rs Crores)

Sr. No.	Particulars	EDF	Equity –Govt. of Goa/ED - Goa	Capital Subsidy/Grant	Loan	Total
1	Scheduled castes development scheme(P)		1.57			1.57
2	Schedule Tribe Development Scheme (P)		263.58			263.58
3	Machinery and Equipment's (Plan) Motor Vehicles		0.83			0.83
4	Infrastructure development through Electricity Duty (Plan)	705.00				705.00
5	Erection and Augmentation of 33/11		26.00			26.00

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Sr. No.	Particulars	EDF	Equity –Govt. of Goa/ED - Goa	Capital Subsidy/Grant	Loan	Total
	KV S/S line (Plan)					
6	Normal Development Schemes (Plan)		95.82			95.82
7	System Improvement Schemes (Plan)		15.21			15.21
8	Construction of staff quarters and office buildings (Plan)		9.89			9.89
9	Erection of 220/33 KV 1X50 MVA Sub- Station at Cuncolim				72.74	72.74
10	Erection of 220 KV line from Xeldem to Cuncolim				15.87	15.87
11	Strengthening of 220 KV Transmission Network		11.85			11.85
12	Erection of 220/33KV, 1x50 MVA Sub-Station Xeldem		0.14			0.14
13	Accelerated Power Development Reforms Programme		0.06			0.06
14	Erection of 2nd 100 MVA transformer at Xeldem 220/110 KV S/S		0.28			0.28
15	Erection of 220/110/33/11 KV Sub-Station at Verna (New)		90.00			90.00
16	Erection of 220 KV line from Ponda-Verna-Xeldem		40.00			40.00
17	APDRP(State Schemes)		86.00			86.00
18	Restructured Accelerated Power Development and Reforms Program Part A			136.73		136.73
19	Research training and human research development		0.07			0.07
20	Underground Cabling		247.63			247.63
21	Public Lighting Scheme		4.68			4.68
22	R-APDRP Part B / IPDS			960.00	640.00	1,600.00
23	EHV new Transmission / Sub-Station / Capacitor banks schemes		800.00			800.00
24	Total	705.00	1,693.61	1,096.73	728.61	4,223.95

Majority of the capital expenditure is planned towards establishment of new substations and system strengthening. Also significant amount of capital expenditure is towards renovation and modernization / augmentation of system capacity under the IPDS / DDUGJY (R-APDRP Part B subsumed into these schemes).New EHV schemes have also been planned for having a robust transmission network. The proposed capital expenditure will definitely be helpful to achieve the loss targets set by ED-GOA in its distribution loss trajectory and to meet any additional load surge due to increase in demand.

Capital Expenditure Schemes other than Electricity Duty Fund are funded through the Internal Reserves/ Equity contribution from Government of Goa; however for R-APDRP schemes, funding is through a loan being facilitated by the Power Finance Corporation

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

(PFC), which shall later on get converted to grant upon timely completion of projects and as per the terms and conditions laid down in the agreement.

For IPDS / DDUGJY works, the Petitioner seeks to avail loan from the PFC / REC and also to link some of the works with IPDS scheme to avail the loans from Central Government. The Integrated Power Development Scheme (IPDS) which is being funded to the extent of 75% by Ministry of Power, Government of India has been proposed to be taken up (at present considered 60% in MYT).25% of the funding for this scheme is proposed to be arranged from the State's own resources.

The EHV new Transmission/ Sub-Station / Capacitor banks schemes have also been proposed to be taken up by availing loans from the financial Institutions like REC/PFC. Loan repayment is proposed to be arranged through State's own resources.

ED-Goa has submitted that since the account books are maintained on cash basis, even though the project is commissioned, if there are pending payments from the department side to contractors, it is not considered as capitalized. The capitalization schedule of the schemes and works as proposed by the ED-Goa for the Control Period are as below:

Table 3.6: Capitalization proposed by the Petitioner for Control Period (Rs Crores)

Sr. No.	Particulars	Total Capex	Actual FY 15	Proposed FY 16	Revised FY 16	Proposed FY 17	Proposed FY 18	Proposed FY 19
1	Scheduled castes development scheme(P)	1.57	-	-	0.07	-	1.00	0.50
2	Schedule Tribe Development Scheme (P)	263.58	10.00	60.00	75.00	10.00	30.00	30.00
3	Machinery and Equipment's (Plan) Motor Vehicles	0.83	62.81	48.00	48.00	96.00	100.00	50.00
4	Infrastructure development through Electricity Duty (Plan)	705.00	20.00	-	1.50	2.50	1.00	1.00
5	Erection and Augmentation of 33/11 KV S/S line (Plan)	26.00	21.82	16.00	16.00	18.00	20.00	20.00
6	Normal Development Schemes (Plan)	95.82	2.37	5.00	4.00	1.00	2.00	1.00
7	System Improvement Schemes (Plan)	15.21	1.89	1.50	1.50	2.00	2.50	1.00
8	Construction of staff quarters and office buildings (Plan)	9.89	2.00	1.00	13.00	-	-	-
9	Erection of 220/33 KV 1X50 MVA Sub- Station at Cuncolim	72.74	4.00	6.00	6.00	-	-	-
10	Erection of 220 KV line from Xeldem to Cuncolim	15.87	9.85	1.00	1.00	1.00	-	-
11	Strengthening of 220 KV Transmission Network	11.85	-	-	0.28	-	-	-
12	Erection of 220/33KV, 1x50 MVA Sub-Station Xeldem	0.14	-	-	-	-	79.00	11.00
13	Accelerated Power Development Reforms	0.06	-	-	-	-	34.00	6.00

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Sr. No.	Particulars	Total Capex	Actual FY 15	Proposed FY 16	Revised FY 16	Proposed FY 17	Proposed FY 18	Proposed FY 19
	Programme							
14	Erection of 2nd 100 MVA transformer at Xeldem 220/110 KV S/S	0.28	13.01	4.00	4.00	-	-	-
15	Erection of 220/110/33/11 KV Sub-Station at Verna (New)	90.00	-	110.00	106.73	30.00	-	-
16	Erection of 220 KV line from Ponda-Verna-Xeldem	40.00	19.63	25.00	38.00	40.00	50.00	50.00
17	APDRP(State Schemes)	86.00	0.68	1.00	1.00	1.00	1.00	1.00
18	Restructured Accelerated Power Development and Reforms Program Part A	136.73	-	200.00	-	300.00	500.00	500.00
19	Research training and human research development	0.07	-	-	50.00	-	300.00	450.00
20	Underground Cabling	247.63	-	-	0.07	-	1.00	0.50
21	Public Lighting Scheme	4.68	10.00	60.00	75.00	10.00	30.00	30.00
22	R-APDRP Part B / IPDS	1,600.00	62.81	48.00	48.00	96.00	100.00	50.00
23	EHV new Transmission / Sub-Station / Capacitor banks schemes	800.00	20.00	-	1.50	2.50	1.00	1.00
24	Total	4,223.95	168.06	478.50	366.08	501.50	1,120.50	1,121.50

The Petitioner has requested the Hon'ble Commission to approve the capital expenditure, source-wise funding and capitalization for the Control Period FY 2016-17 to FY 2018-19.

The MYT Regulations, 2014 provides that a separate trajectory of norms for each of the components of O&M expenses would be specified. **Accordingly, the Petitioner has submitted the O&M norms as below:**

The Employee expenses norms are to be determined based on number of personnel per 1000 consumers and number of personnel per sub-station. Accordingly, the following norms for the Employee expenses have been proposed:

Table 3.7: Employee parameters submitted by Petitioner for last six years

Sr. No.	Particulars	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
1	Number of employees at the end of the year	5873	5940	6157	6506	6326	6583
2	Number of consumers ('000)	538	574	580	585	583	576
3	No. of employees per '000 consumers	11	11	11	12	11	12
4	No. of employees per sub-station	120	119	123	130	127	124

The Administrative and General Expenses (A&G) expenses norms are to be determined based on combination of A&G expense per personnel and A&G expense per 1000

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

consumers. The A&G norms submitted by the Petitioner for the last five years are as below:

Table 3.8: A&G parameters submitted by Petitioner for last five years

S. No.	Particulars	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
1	A&G expense per employee (Rs lakh)	0.34	0.30	0.31	0.10	0.12	0.13
2	A&G expense per '000 consumers (Rs Lakh)	3.75	3.11	3.33	1.06	1.35	1.64

The Repairs and Maintenance expenses (R&M) are to be calculated as percentage (as per norm defined) of opening GFA for the year. The Petitioner has submitted the following actual R&M expenses for the last five years:

Table 3.9: R&M expense submitted by Petitioner for last five years

S. No.	Particulars	FY 10	FY 11	FY 12	FY 13	FY 14
1	R&M Expenses (Rs. Crores)	16.69	16.55	17.03	18.94	25.57
2	R&M Expense as %age of GFA	4.00%	3.30%	2.90%	2.70%	3.10%

The Petitioner has further submitted that every distribution licensee has a different consumer profile, sales mix, geographical area, network configuration, infrastructure requirement etc. and therefore has requested the Hon'ble Commission to determine the norms for the distribution licensee considering the above internal factors and may approve norms in such a manner that the O&M expenses for future years should not be less than that of actual of previous year plus arrears plus pay revisions if any and pension/ gratuity etc..

3.3. Prayer to the Commission

The Electricity Department, Goa (ED-Goa) respectfully prays to the Hon'ble Commission to:

“

1. Admit the Business Plan of ED - Goa for the Control Period FY 2016-17 to FY 2018-19 in accordance with Regulation 5 of JERC (Multi Year Distribution Tariff) Regulations, 2014
2. Approve the Business Plan of ED- Goa for the Control Period FY 2016-17 to FY 2018-19 in accordance with Regulation 4.2 and 5.1 of the JERC (Multi Year Distribution Tariff) Regulations, 2014
3. Approve the principles and methodology proposed by ED- Goa in the Business Plan

4. *Approve the Allocation Policy for wires and supply business as proposed by ED-Goa in the Business Plan*
5. *Approve the Demand and Sales Assessment and projections as proposed by ED-Goa in the Business Plan.*
6. *Approve the Power Purchase Plan as proposed by ED-Goa in the Business Plan*
7. *Approve the capital expenditure and source of funding as proposed by ED-Goa in the Business Plan*
8. *Approve the O&M norms as prescribed in the Business Plan*
9. *Approve the deviation from the norms prescribed by MYT Regulations, provisions thereof, as sought in this Business Plan during the control period FY 2016-17 to FY 2018-19*
10. *Pass any other Order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice*
11. *Grant any other relief as the Hon'ble Commission may consider appropriate*
12. *Condone any error/omission and to give opportunity to rectify the same*
13. *Condone delay in filing this business plan Petition*
14. *Permit ED-Goa to make further submissions, addition and alteration to this Business Plan as may be necessary from time to time "*

4. Summary of Objections received, Response from the Petitioner and Commission's Views

4.1. Regulatory Process

On admission of the Business Plan for Control Period from FY 2016-17 to FY 2018-19, the Commission directed the Petitioner to make available copies of the Petition to the public by way of uploading the Petition on the website and also published in the newspapers in an abridged form in the given format duly inviting comments/objections from the public as per the MYT Regulations 2014 as amended from time to time.

4.2. Public Hearing

Public hearing was held at Panaji on 04th November 2015. During the Public hearing, some of the stakeholders who had submitted their comments in writing also presented their objections/suggestions in person before the Commission. Other stakeholders, who could not submit written comments earlier, were also given an equal opportunity to offer their views/suggestions in respect of the business plan proposal of ED-Goa for the Control Period from FY 2016-17 to FY 2018-19. The list of objectors is attached as **Annexure 3** to this Order.

At the beginning of the hearing, the Commission ascertained from the stakeholders that those who had filed the written comments before the date of the public hearing had received the replies to their written objections. All stakeholders were provided an opportunity to present their views/suggestions. Those stakeholders who expressed their views, objections, suggestions during the hearing shall be replied to by the Petitioner after the hearing.

4.3. Stakeholders Comments, Response of the Petitioner and Commission views.

The Commission appreciates the efforts of various stakeholders for providing suggestions / comments / observations and making the Electricity Distribution Sector responsive and efficient. The details of Comments received from the Stakeholders, Response of the Petitioner thereon and the Commissions' Views on the same are as follows:

1. Mr. Sunil Salkar. MRF Tyres

- a) **Delayed Payment charges should be exempted for Cheque payments on the Last date. In this regard, Notice should be issued and the consumer be given an opportunity of being heard.**

Petitioner Reply:

As per the Supply Code Regulations, it is clearly mentioned that payment through cheque should be made at least 2 days before the due date as the electricity department requires at least 2 working days for the cheque/(s) to get cleared and hence cheque/(s) received on the last day will be considered as delayed payment and DPC will be levied. The consumers can, however, opt for other modes of payment if they wish to pay on the last day of the due date. As this issue is not under the preview of Business Plan Petition, the same will be handled separately by the ED-Goa.

Commission View:

The Commission is of the view that the said matter does not pertain to the Business Plan Petition and has to be dealt with at the time of processing of the MYT Petition. The relevant provisions of the latest Tariff Order dated 06th April 2015, in this regard are, however, summarized below:

Delayed Payment Charges (DPC): *In case the electricity bills are not paid within the due date mentioned on the bill, delayed payment charges of two percent (2%) (Computed on daily basis on outstanding bill from the due date till date of payment) shall be levied on the bill amount. However, if a consumer makes part payment of a bill (in exceptional circumstances, with prior approval of the Chief Electrical Engineer), within the due date, then the delayed payment charges shall be applicable only on the amount which was not paid within the due date. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paise shall be ignored and amount of 50 paise or more shall be rounded off to next rupee. 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 Electricity Act 2003 and Supply Code Regulations 2010 of JERC as amended from time to time. **In case of non-realization of payment through Cheque, a penalty of 5% of the cheque amount in addition to the Delayed Payment Charges (DPC) will be levied on the consumers.***

As per the above proviso it is clear that the penalty along with DPC can be levied only in case on non-realization of payment through cheque.

2. Mrs. Lona Fernandes. Goa Women Forum (GWF)

- a) **CGRF Advertisement: No awareness on CGRF functioning; No visiting of Talukas.**

Petitioner Reply:

CGRF has attended 180 cases in the FY 2015 (till Sept. 30th2015). The details of cases handled during the last three years are submitted below:

Sr.No	Period	Hearings	Cases	Pending
1	CY 2013	21	35	0
2	CY 2014	27	73	0
3	CY 2015 till date	22	180	48

Considering the increase in the number of cases, it can be interpreted that the consumer awareness with respect to CGRF is growing.

Commission View:

Even though this matter does not pertain to this Business Plan Petition, the Commission has and discussed with the nominated officials of CGRF to take action ensuring wider publicity of the functioning of CGRF and better accessibility for the consumers of Goa.

3. Mr. Roland Martin. GOACAN Coordinator

- a) **Compliance of the Action Plan and status of Previous Directives issued by the JERC.**

Petitioner Reply:

The status of compliance of few directives issued by the JERC is mentioned in the Business Plan as per relevance; and, the status of remaining directives shall be mentioned along with MYT Petition.

Commission View:

As the Commission is not reviewing and approving all the components of ARR and Tariff determination in the Business Plan Petition, the compliance of all the directives shall be reviewed at the time of approval of the MYT Petition.

- b) **No proper maintenance is resulting in Electric Shock- Deaths.**

Petitioner Reply:

Routine-preventive maintenance is being carried out on a regular basis in the licensed area and strict steps are taken to avoid any such cases.

Commission View:

The Commission is of serious view that there should be no such incidents. The Commission directs the Petitioner to submit month-wise details of such incidents for past 2 years by 31st January 2015 after which the Commission shall take appropriate action.

c) **Status of Audited Financial Statements**

Petitioner Reply:

Preparation of financial statements for the FY 2011-12 is finished and the CAG audit is awaited for the same. The draft preparation of Performa accounts for the FY 2012-13 is in process. The same will be submitted to the Hon'ble Commission once the audit is done for each financial year.

Commission View:

The Commission has already issued numerous directives to the Petitioner in this context. The Commission will review the compliance of the same at the time of issuance of the MYT Order and.

d) **Department used to have a Profit of Rs. 50 Lakhs in the past, but currently why it is in Losses.**

Petitioner Reply:

Department was having historic profits, but they eventually slipped down to losses because of increase in the Power Purchase Cost, Operating expenses, high inflation rate finally resulting in increase in the cost of supply, but at the same time the tariff and the billing rate in proportion to the increase in the cost has not been increased resulting in losses.

Commission View:

The Commission is of view that there are numerous factors, both internal and external which can lead to operational profits or losses. While the external factors are beyond the control of the utility, the Commission, after prudence check, ensures that that losses due to inefficiencies of the Petitioner are not passed on to the consumers.

- e) **Billing/Collection duty has been Outsourced, which is leading to increase in the expenses resulting in Loss to the department**

Petitioner Reply:

Billing and Collection work has been outsourced in order to increase the efficiency in the billing and collection and this has resulted in improvement; however, concern has been raised regarding the delay in billing in the past and we expect that outsourcing has resulted into streamlining the process of billing mitigating the delay process.

Commission View:

The Commission is of view that Petitioner should closely monitor the performance of the outsourced agencies so that the provisions of Supply Code, prevailing tariff order and other applicable regulations are strictly adhered to.

- f) **Planning of addition in the U/G Cables is usually influenced by Politicians, which instead should be done as per the need and demand.**

Petitioner Reply:

The U/G Cabling is done purely on need basis and priority is given to the lines connecting 33KV and 110KV sub-stations. A proper technical study is undertaken by the department to assess the need of the U/G cables addition and then after the approval, the same is undertaken for execution. Therefore, it is not influenced by the Politician but is purely decided by the technical planning as well as the load within the area.

Commission View:

The Commission has noted the submission of the Petitioner and advises it to take appropriate actions so that all the investments are made in a prudent manner keeping in view the technical planning requirement of the identified network/area.

- g) **U/G cabling layout should be marked, which prevents the damage during the works of other Government departments.**

Petitioner Reply:

ED Goa tries to maintain proper coordination/communication with other departments to avoid the damage done by others to the property of Electricity Department. The matter being serious is also discussed with the Government to take necessary corrective measures.

Commission View:

The Commission agrees with the submission of the stakeholder and advises the Petitioner to undertake necessary steps in advance so as to ensure that there is no damage to the property.

h) Reason for outages of power on 15th October for 6 hours.

Petitioner Reply:

This Issue is not in the preview of Business Plan Petition and the same shall be handled separately by the ED-Goa.

Commission View:

The Commission directs the Petitioner to ensure adequate publicity in advance to the affected consumers in case of planned shutdowns.

i) Forecasting of consumer count, sales and demand should be based on the Tourist load.

Petitioner Reply:

The forecasting of sales will be done considering all the factors which include economic indicators, social obligations, factors affecting growth, past consumption, GDP of the State, Development plans, etc. For forecasting, the historical consumption pattern of the whole year is considered and the factors like Tourism and others will be taken into account.

Commission View:

The Commission has appropriately factored in various parameters while projecting sales, number of consumers and connected load for the MYT Control Period.

j) Why the Poles numbering is not yet done.

Petitioner Reply:

It is submitted that, Pole indexing will be done as the part of R-APDRP Part A scheme and 100% numbering will be done before 31stMarch2016.

Commission View:

The Commission directs the Petitioner to furnish the status report by 30th September 2016.

4: A. S. Deshpande:

a) **The impact of Tourism should be considered while preparing Business Plan.**

Petitioner Reply:

The forecasting of sales will be done considering all the factors into consideration which includes economic indicators, social obligation, factors affecting growth, past consumption, GDP of the State, Development plans, etc. For forecasting, the historic consumption pattern of the whole year is considered and the factors like Tourism and others will be taken into account.

Commission View:

The Commission has appropriately factored in various parameters while projecting sales, number of consumers and connected load for the MYT Control Period.

b) **Stability in power supply during Peak hours should be ensured.**

Petitioner Reply:

ED-Goa humbly submits that, stability and reliability of power supply are the prime motives and they are taking all the steps to provide the quality service to the public. ED-Goa has employed adequate man power to tackle the technical issues on war footing. In order to ensure the reliable supply, ED-Goa has planned to buy electricity from the Power Exchange in order to meet the surged demand during peak hours.

Commission View:

The Commission has noted the submission of the Petitioner and advises the Petitioner to use latest load forecasting techniques and accordingly explore the better options of power procurement including competitive bidding.

5: Sunil K. Representative from PCC Goa

a) **Compliance of JERC Directives**

Petitioner Reply:

The status of compliance of few directives by JERC is mentioned in the Business Plans as per the relevance and the status of remaining directives will be mentioned along with MYT petition.

Commission View:

As the Commission is not reviewing and approving all the components of ARR and Tariff determination in the Business Plan Petition, the compliance of all the directives shall be reviewed at the time of approval of the MYT Petition.

- b) **Non-working meters should be replaced immediately to avoid sharing of loss of revenue by other consumers.**

Petitioner Reply:

ED-Goa is in the process of replacing the non-working meters with working electronic meters, which will be replaced by 31st March 2016.

Commission View:

The Commission has noted the submission of the Petitioner and directs to furnish the status report by 30th September 2016.

6: Suraj (Representing Tivim Industrial Area)

- a) **Planning of Capital Investment should be done in consultation with the Industrial Associations and the Goa Chamber of Commerce.**

Petitioner Reply:

The planning of Capital Investment is done in coordination with the Industries department; however, Electricity Department Goa welcomes the suggestions from the Industrial Associations and the Goa Chamber of Commerce on the same.

Commission View:

The Commission agrees with the suggestion of the stakeholder and advises the Petitioner to take cognizance of the comments/suggestions of the Industrial Associations and Goa Chamber of the Commerce for proper assessment of anticipated load growth in the industrial areas and thus ensuring better network planning.

7: Martin Rodrigues (Civic Consumer Forum):

- a) **Source of funding of CAPEX should be explained.**

Petitioner Reply:

The scheme wise source of funding for CAPEX is already mentioned in the Business Plan.

Commission View:

The Commission has examined the funding of each scheme in detail as proposed by the Petitioner and accorded approval to the same in respect of all the approved schemes.

- b) Solar energy would be expensive and therefore the Commission is requested to remove the RPO.**

Petitioner Reply:

Considering the current market trend, the price of solar energy has been reducing drastically. Also, RPO is the mandate provided in the Act as well as the Regulations so as to promote clean energy; however, it is a fact that the solar energy is costlier compared to the conventional sources and the same will be passed on to the consumers which may result in tariff hike.

Commission View:

The Commission agrees with the response of the Petitioner. There is already nation wise thrust for the promotion of clean energy. Also, the market rates have substantially dipped over the years and in fact, the latest market price of the solar is almost at par with any new thermal/ hydro generating stations.

- c) Pole indexing should be done as quickly as possible.**

Petitioner Reply:

Pole indexing will be done as the part of R-APDRP Part A scheme and 100% numbering will be done before 31st March 2016.

Commission View:

The Commission directs the Petitioner to furnish the status report by 30th September 2016.

8: Institution of Engineers (India) Goa State Centre:

- a) While huge Capital Expenditure is proposed, there are concerns of increase in power tariff, reducing quality of power and standards of performance.**

Petitioner Reply:

The existing system of ED-Goa is very old and most of the investment is for strengthening and augmentation of the system. The purpose of investment for most of the schemes is already stated in the Business Plan Petition and the work wise

investment for the remaining schemes will be informed to the Commission subsequently.

Commission View:

The Commission has reviewed all the schemes and approved/disallowed the proposed capital expenditure and capitalization along with justifications. The Commission has given due consideration to the fact that the most of the schemes considered for approval by the Commission has the approval of State Government/CEA and other competent authorities.

b) The schemes proposed by the Petitioner have technical lacunae.

Petitioner Reply:

The work started by the Institute of Engineers was initially envisaged very earlier and has not been taken up till date, instead priority had been accorded for underground cabling of other major 33 KV feeders emanating from 110 KV s/s so that U/G cabling link is provided to the 33/11 KV substations so as to ensure reliability in power supply. It is also submitted that the subject work is not proposed to be taken up in the near future. Moreover a new 220/110/33 KV s/s at Verna (New) has been proposed to cater the demand, which is also reflected in the business Plan Petition.

Commission View:

The Commission advises the Petitioner to revisit the schemes in light of present network conditions, wherever required. The Commission has reviewed all the schemes and approved/disallowed the proposed capital expenditure and capitalization along with justifications. The Commission has given due consideration to the fact that the most of the schemes considered for approval by the Commission has the approval of State Government/CEA and other competent authorities.

c) There is need for effective planning and load flow study.

Petitioner Reply:

The department is serious about strengthening the sub transmission and distribution network. In line with these objectives, huge investments in this sector have been envisaged by taking up major task of over-hauling of the existing system as well as augmenting by addition of transformation capacities such as new lines, transformers etc. All these works are proposed to be taken up under R-APDRP Part-B (IPDS/DDUGJY). DPR for the schemes of huge investments have been prepared by

appointing consultants who have gone about the work by conducting a systematic analysis of the system and forecasting has been done by proper load flow study.

Commission View:

The Commission has noted the submission of the Petitioner. The Commission has reviewed all the schemes and approved/disallowed the proposed capital expenditure and capitalization along with justifications. The Commission has given due consideration to the fact that the most of the schemes considered for approval by the Commission has the approval of State Government/CEA and other competent authorities.

d) No scientific study done for new schemes.

Petitioner Reply:

In respect of new works, the costing is on tentative estimates. However, before taking up the work, the department will approach the commission for the approval with detailed cost estimates.

Commission View:

The Commission has noted the submission of the Petitioner. The Commission have approved those schemes for which Government of Goa/CEA and other competent authorities has accorded its consent and also detailed the reasons for non-approval of schemes, wherever applicable. The Commission has also directed the Petitioner to submit cost estimates when they are approved by the Commission.

e) Distributed Energy Resources at Load Centers

Petitioner Reply:

ED-Goa's peak demand is 550 MW and considering Environmental Clearances for setting up of power plant, Economies of Scales etc. it is practically and financially not feasible to set up a power plant of any scale in the license area. Keeping the interests of the public of Goa into consideration, the agreements are made only with CGS based on central allocations and the average power purchase cost is only Rs 3 per unit. However, the investment of Rs. 4223 Crores is for augmentation and strengthening of Transmission and Distribution network.

Commission View:

The Commission has noted the submission of the Petitioner. The Commission would like to emphasize that presently there is requirement of strengthening and

augmenting the network. The mere installation of new localized power plants will not diminish the requirement of proposed expenditure.

f) ED-Goa may be directed to bring down the AT&C losses to below 10%

Petitioner Reply:

The AT&C losses are the combination of Technical Losses, Commercial Losses and collection efficiency. Since, there is no proper metering at feeder and boundary level, the exact amount of Technical losses are not known. However, the collection efficiency is un-controllable factor; ED-Goa is taking serious steps to increase the collection efficiency. The current T&D losses of ED-Goa are around 15% and it is on the lower side of the country and it leaves a very limited scope for improvement. ED-Goa has also identified areas of improvement and has recognized the non-working meters and also planning to replace them with new electronic meters.

Commission View:

The Commission has noted the submission of the Petitioner. The Commission has already notified the target of AT&C losses to the Petitioner in this order considering the approved T&D losses and Collection Efficiency.

9& 10: Travel and Tourism Association Goa and Goa Chamber of Commerce

- a) **Power Sector in Goa: ED-Goa was a profitable organization without any regulatory asset till year 2012-13. The ED-Goa may be directed to compile their financial statements as per commercial principles by carrying over cumulative profits from FY 2002-03.**

Petitioner Reply:

Department was having historic profits, but it eventually slipped down to losses because of increase in uncontrollable Power Purchase Cost, Operating expenses, high inflation rate and eventually resulting in increase in cost of supply, but at the same time the tariff and the billing rate in proportion to the increase in cost has not been increased resulting in losses.

Regarding the status of preparation of financial statements, the draft Financial statements for FY 2011-12 is ready and is put for CAG audit, the draft for FS for FY 2012-13 is in process. The profit and loss figures as mentioned by TTAG have some corrections and the audited actual Profit/(Loss) for FY 2009-10 is (8.28 Crores) – Loss; FY 2010-11 is (101 Crores) - Loss; FY 2011-12 (Un-Audited) is (381 Crores), the Profit/(Loss) for FY 2012-13 and FY 2013-14 will be disclosed once the figures

are available. As per the un-audited/Draft FS for FY 2011-12 the revenue reserve for the Electricity Department – Goa is 367.28 Crores. However, the actual picture of financial condition of the department will be known only after the availability of audit reports till date.

Commission View:

The Commission has noted the submission of the stakeholder and the Petitioner. The Commission is of view that there are numerous factors, both internal and external which can lead to operational profits or losses. While the external factors are beyond the control of the utility, the Commission, after prudence check, ensures that that losses due to inefficiencies of the Petitioner are not passed on to the consumers.

b) Funding Sources of Capital Expenditure.

Petitioner Reply:

The Debt: Equity ratio of 70:30 is indicated and regulated by the Commission only in order to limit/decrease the overall cost of capital, as the RoE is generally high than Cost of Debt. In the case of ED-Goa, the RoE is only 3% nominal and by more equity component than debt in the capital structure will help in reduction of Cost of Capital. And it is humbly submitted that, it is in favour of consumers and not harm to the consumers and there is no scope of Manipulation of Assets.

Commission View:

While the Commission has approved the funding of various schemes as proposed by the Petitioner, the RoE and Interest on Loan shall be allowed strictly as per the provisions of the MYT Regulations, 2014.

c) Goa continues to be a globally well-known tourist center and the demand for hotel rooms are increasing. There will be a definite increase in hotel assets and hence growth will occur in H.T. industries and Hotel.

Petitioner Reply:

The forecasting of Sales is done based on the Historic data and we didn't find any significant growth in the HT categories based on 4 year CAGR. However, 5% growth rate is considered for HT industries (based on 6 year CAGR). The total sales and consumer figures are also projected based on the historic data.

Commission View:

The Commission has appropriately factored in various parameters while projecting sales, number of consumers and connected load for the MYT Control Period.

d) **Petitioner may be asked to restrict AT&C losses to 10%.**

Petitioner Reply:

T&D losses cannot be directly compared to Puducherry, as there is a lot of difference in the topography and geography of Goa and Puducherry. Though the ratio of HT and LT sales are high in case of Goa, the distribution of Load is sparse and hence the losses are high as compared to the peers (other UTs). However, the proposal of additional 400KV/200KV S/S in South Goa by CTU is put before MoP, GoI and is in the stage of deliberations with Standing Committee for Power System of Western Region.

Commission View:

The Commission has appropriately reviewed and approved the T&D loss trajectory and detailed same in the subsequent sections.

e) **Cost of Solar Power has globally considerably become cheaper and the PPA with costly power suppliers should be scrapped.**

Petitioner Reply:

Though the cost of Solar Power has decreased considerably globally, the agreement with NVVN has been inked considering the best available price at that time. However, the agreement with NVVN will not allow us to scrap the existing PPAs with a mere reason that the solar power prices has reduced. It is also submitted that, the geographical and topographical conditions of Goa is not suitable for setting up of Power Plants. However, few attempts were made to harness the Hydel Potential of the state and even Public sector entity (NHPC) was appointed for the purpose, but couldn't move forward because of practical issues.

Commission View:

The Commission has noted the submissions of the stakeholder and the Petitioner. The Commission would like to emphasize that the cost of power purchase from various sources is dependent on prevailing market conditions and term and conditions of the PPA.

The Commission advises the Petitioner to purchase power prudently from the available options following the principles of merit order.

- f) The total capital expenditure may be capped to prevent extra ordinary rise of tariff over the coming years by according priority to schemes which will benefit**

Petitioner Reply:

The Capital Investments are made primarily for improving quality of supply and interruptions; provide adequate transmission and distribution network to meet the growing demand; Loss reduction and proactive distribution planning. Out of these, the scheme of IPDS is mainly proposed to improve the system and there by improve the interruptions scenario. However, the quantum of improvement is not yet assessed and the assessment will be done as the part of Cost Benefit Analysis and will be submitted to the Commission while taking up the scheme.

The index for quality and reliability of Power (Wires Availability – SAIDI) is mentioned in the Business Plan for the all divisions and not only for Panjim and the data stated is relevant in all the cases. We request the party not to compare the investment of Puducherry and Goa, as the geographical and topographical conditions of Goa are quite different. The area of Puducherry is only 492 Sq. Meters and the area of Goa is 3702 Sq. Meters. This state that the consumers of Puducherry are concentrated in one place but the Goa load is sparsely distributed in the different terrains throughout the Goa, making the requirement of Capital investment more than Puducherry. The investment required in to strengthen the Transmission, sub transmission and distribution network in order to cater the consumers of the state.

It is also submitted that the works are proposed carefully after due deliberations with the concerned parties. Any proposal for Capital investment will be made only after the following process

1. Network survey and data collection from fields
2. Analysis of network by using software tools
3. Preparation of reports and proposals based on the results for strengthening the network and improving the reliability.

Commission View:

The Commission has noted the submission of the Petitioner. The Commission has reviewed all the schemes and approved/disallowed the proposed capital expenditure and capitalization along with justifications. The Commission has given due consideration to the fact that the most of the schemes considered for approval by the Commission has the approval of State Government/CEA and other competent authorities.

g) Skill development in maintaining and managing network is needed.

Petitioner Reply:

Skilling and Re-skilling of Man Power is one of the key agendas of ED-Goa, and proper training is given to the staff for proper maintenance of S/S. Setting up of SLDC is in the process and SLDC will be made available very soon.

A preliminary Network Analysis is done and it is found that 20% of Power Transformers and 11% of feeders are over loaded at 33KV and 27% of Distribution Transformers are over loaded at 11KV. It is also assessed that 60% transformers and 36% lines will be over loaded at 33KV in the next 5 years and 51% Distribution Transformers and 18% feeders will be overloaded at 11KV in the next 5 years.

Commission View:

The Commission has noted the submission of the Petitioner and directs the Petitioner to expedite the setting up of SLDC in Goa.

h) The tariff needs to be contained as the manufacturing Industry has to compete with the rest of the world globally, as no raw material is available in Goa and also there is no market for finished goods within Goa.

Petitioner Reply:

Industry competition is of the prime motive of ED-Goa and providing quality, adequate and reliable power are the key factors to ensure competitiveness of the industry. So, in order to provide quality, reliable and adequate power supply, and necessary capital investment should be made and necessary tie ups for the power supply should be made, which may or may not result in Tariff hikes.

Commission View:

The Commission has prudently approved the Capital Expenditure so as to enable Petitioner to maintain quality, reliable and adequate power supply at affordable rates to the consumers.

11: Goa Fish Farmers Association

a) Encouraging of Pisciculture and consideration of same in LT Agriculture.

Petitioner Reply:

We will consider the request of the Association and the necessary action will be taken after due consultations with the Govt. of Goa and will be intimated through.

Commission View:

The Commission advises the stakeholder to make representation of category change at the time of processing of the MYT Petition and also directs the Petitioner to submit a proposal for change in category and financial implication thereof for review of the Commission along with filing of the MYT Petition.

b) **Power Purchase Portfolio- RPO.**

Petitioner Reply:

Though globally, the cost of Solar Power has decreased considerably, the agreement with NVVN has been signed considering the best available price at that time. However, the agreement with NVVN will not allow us to scrap the existing PPAs with a mere reason that the solar power prices has reduced. GEDA in consultation with ED-Goa is formulating Solar Policy and we are expecting the solar power prices to come down.

Commission View:

The Commission has noted the submissions of the stakeholder and the Petitioner. The Commission would like to emphasize that the cost of power purchase from various sources is dependent on prevailing market conditions and term and conditions of the PPA.

The Commission advises the Petitioner to purchase power prudently from the available options following the principles of merit order.

c) **ED-Goa may please be asked to provide in business plan Petition, the provision for O&M and related works, the Budget allocation and actual funds availability, otherwise the norms will remain a mere paper exercise.**

Petitioner Reply:

ED-Goa regrets for the issues faced by the party and we request the Association to approach the department to get the problem resolved.

Commission View:

The Commission directs the Petitioner to resolve the issues faced by the stakeholders on priority and further ensures that such incidents like communication of non-availability of adequate material/manpower/contractor do not happen in future.

- d) The said Capitalization Scheme also indicates Rs 1693.61 Cr of equity will be infused to Electricity Department. To raise such high amount of equity, the Government of Goa has to increase taxes.**

Petitioner Reply:

Out of Rs. 4223 Crores, not all the amount will be reflected in the ARR, as a portion of 705 Crores will be funded through Electricity Duty Fund. The remaining amount is spread along 25 years, which will not be a burden as envisaged by the party.

Commission View:

The Commission has noted the submission of the Petitioner. The Commission has reviewed all the schemes and approved/disallowed the proposed capital expenditure and capitalization along with justifications. The Commission has given due consideration to the fact that the most of the schemes considered for approval by the Commission has the approval of State Government/CEA and other competent authorities

12: Transelectric

- a) **The Human Resources Management in Para 2.6 of the ED-Goa Business Plan Petition does not have any capacity building provision for designing and implementing the schemes costing Rs 4223.95/ Cr.**

Petitioner Reply:

ED-Goa has not prepared any estimates for Capacity building for training man power for the designing and implementing of Capital expenditure. Hence No provision was made.

Commission View:

The Commission is of view that as this work pertains to the planning department and no separate training is required and that training requirements should be covered by the normal training programs of the utility.

- b) **In respect of the Scheduled Tribe Scheme, the names and location of key beneficiaries of the Works which are undertaken and proposed under the scheme have not been disclosed.**

Petitioner Reply:

The Capital Investment under Scheduled Tribe development scheme is intended for developing and strengthening the system to benefit the areas, which has large concentration of Scheduled Tribes. The network is also intended for the regular use of ED-Goa indirectly.

Commission View:

The Commission has approved the scheme considering social benefit of such schemes being promoted by the Government/utility.

- c) **In respect of the funding through the Electricity Duty Fund, the expected measurable outcome on completion of these works, such as increased capacity, increase in reliability and reduction in losses has not been spelled out.**

Petitioner Reply:

It is submitted that, the schemes which are planned out of Electricity Fund are intended for improving the reliability of lines between 110KV S/S and 33KV S/S, However the quantification of benefits will be discussed along with the Cost Benefit Analysis to be submitted to the Commission for approval of works costing more than Rs. 10 crores.

Commission View:

The Commission has examined the proposed ongoing capital works of ED-Goa, which are financed through the Electricity Duty Fund and duly approved by the competent authority and accordingly approves the same.

The Commission would like to emphasis that these schemes are funded through grant and shall have no financial implications on the consumers.

- d) **There is absolutely no data on the works proposed under the scheme of underground cabling.**

Petitioner Reply:

The Petitioner has submitted the details during the TVS.

Commission View:

The Commission has appropriately reviewed and reduced the scheme provision after the prudence check as detailed in subsequent sections.

- e) **R-APDRP Part B scheme envisages a single line merely stating the requirement as Rs 1600/ Crore without any data.**

Petitioner Reply:

The R-APDRP Part B is now named as IPDS and DDUGJY and the DPR for the project is submitted to the Commission during Technical Validation Session.

Commission View:

The Commission has appropriately reviewed and modified the scheme provision after the prudence check as detailed in subsequent sections.

- f) An amount of Rs 800 Crores is shown as lump sum without any details against the EHV New Transmission/Sub-Station/Capacitor scheme.**

Petitioner Reply:

The Petitioner has submitted the details during the TVS.

Commission View:

The Commission has appropriately reviewed and modified the proposed capital expenditure and capitalization after the prudence check as detailed in subsequent sections.

- g) Separation of Wheeling and Retail Business: Para 5.2.1 to 5.2.12 of the Petition talks about bifurcation on an assumed percentage basis. Such allocation will be arbitrary. The assets may be clearly identified and then bifurcated if such bifurcation is necessary.**

Petitioner Reply:

It is submitted that, the basis and methodology of allocation of Wheeling and Supply business is already mentioned in the Business Plan Petition and at the time of actual separation (if at all happens), the assets will be accounted and separated properly based on the Commission's directions.

Commission View:

The Commission shall take up this matter at the time of issuance of the MYT Order.

5. Capital Investment Plan for the MYT Control Period FY 2016-17 to FY 2018-19

5.1. Details of Capital Expenditure

The Petitioner plans to carry out the capital expenditure during the control period for augmentation and expansion of its capacity and to reduce the transmission and distribution loss in the system.

The Petitioner has submitted that the majority of the capital expenditure is diverted towards establishment of new substations and system strengthening. Also significant amount of capital expenditure is directed towards renovation and modernization / augmentation of system capacity under IPDS / DDUGJY (R-APDRP Part B subsumed into these schemes). New EHV schemes have also been planned for having a robust transmission network.

The Petitioner has submitted that the proposed capital expenditure will definitely be helpful to achieve the loss targets set by the Petitioner in its distribution loss trajectory and to meet any additional load surge due to increase in demand.

The Petitioner has planned on funding the majority of its capital expenditure through the internal reserves/ equity contribution from Government of Goa or from the Electricity Duty fund. However for R-APDRP schemes there is a loan being facilitated by Power Finance Corporation (PFC) which will later on get converted to grant upon timely completion of projects and as per the terms and conditions laid down in the agreement.

The Petitioner has elaborated the benefits/ need for undertaking the major types of capital expenditure schemes, however regarding the cost benefit analysis as directed by the Commission, the Petitioner submitted that, it is not maintaining any monetary appraisal systems such as the cost benefit analysis for the capital expenditure in the licensed area for improving the system in terms of performance and reliability. However, as per the directive of the Commission via letter dated 6th July 2015 (Ref: 50/43/2013-JERC/1607) the Petitioner is planning to undertake and adopt a systematic approach in evaluating the capital investment proposals with the help of cost benefit analysis.

The works to be carried out with an intention to maintain a reliable and efficient system are as follows:

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Table 5.1: Capital Expenditure proposed by the Petitioner (Rs. Crores)

Sl. No.	Particulars	Total Capex	Actual FY 15	Proposed FY 16	Revised FY 16	Proposed FY 17	Proposed FY 18	Proposed FY 19
1	Scheduled castes development scheme(P)	1.57	-	-	0.07	0.50	0.50	0.50
2	Schedule Tribe Development Scheme (P)	263.58	128.58	30.00	45.00	30.00	30.00	30.00
3	Machinery and Equipment's (Plan) Motor Vehicles	0.83	0.83					
4	Infrastructure development through Electricity Duty (Plan)	705.00	-	130.00	130.00	140.00	150.00	150.00
5	Erection and Augmentation of 33/11 KV S/S line (Plan)	26.00	20.00	3.00	3.00	1.00	1.00	1.00
6	Normal Development Schemes (Plan)	95.82	32.68	16.00	16.00	18.00	20.00	20.00
7	System Improvement Schemes (Plan)	15.21	5.21	1.00	4.00	2.00	2.00	2.00
8	Construction of staff quarters and office buildings (Plan)	9.89	2.73	2.00	2.00	2.00	2.00	2.00
9	Erection of 220/33 KV 1X50 MVA Sub- Station at Cuncolim	72.74	59.74	1.00	13.00	-	-	-
10	Erection of 220 KV line from Xeldem to Cuncolim	15.87	9.87	6.00	6.00	-	-	-
11	Strengthening of 220 KV Transmission Network	11.85	9.85	1.00	1.00	1.00	-	-
12	Erection of 220/33KV, 1x50 MVA Sub-Station Xeldem	0.14	0.14	-	-	-	-	-
13	Accelerated Power Development Reforms Program	0.06	0.06	-	-	-	-	-
14	Erection of 2nd 100 MVA transformer at Xeldem 220/110 KV S/S	0.28		-	0.28	-	-	
15	Erection of 220/110/33/11 KV Sub-Station at Verna (New)	90.00	-	20.00	9.00	40.00	30.00	11.00
16	Erection of 220 KV line from Ponda-Verna-Xeldem	40.00		10.00	4.00	20.00	10.00	6.00
17	APDRP(State Schemes)	86.00	82.00	6.00	4.00	-	-	-
18	Restructured Accelerated Power Development and Reforms Program Part A	136.73	2.16	70.00	100.00	34.57	-	-
19	Research training and human research development	0.07	0.07	-	-	-	-	
20	Underground Cabling	247.63	19.63	70.00	38.00	40.00	50.00	100.00
21	Public Lighting Scheme	4.68	0.68	1.00	1.00	1.00	1.00	1.00
22	R-APDRP Part B / IPDS	1,600.00	-	300.00	200.00	400.00	500.00	400.00
23	EHV new Transmission / Sub-Station / Capacitor banks schemes	800.00	-	150.00	50.00	200.00	250.00	300.00
24	Total	4,223.95	374.23	817.00	626.35	930.07	1,046.50	1,023.50

The scheme-wise details are as below:

A. Scheduled castes development scheme(P)

Petitioner Submission:

This scheme is basically for execution of works for the benefit of the Scheduled Caste population. A nominal capital expenditure of Rs 1.57 Crores has been sought during the MYT Control Period.

Commission View:

The Commission has taken note of the expenditure proposed under the Scheduled Castes development scheme (P). The Commission is of the view that the schemes specially meant for social upliftment of the Scheduled Castes needs to be promoted. It is seen that only a nominal amount of Rs. 1.57 Crores has been proposed for the Control Period, which the Commission considers reasonable and accordingly approves the capital expenditure and capitalization as proposed by the Petitioner.

Table 5.2: Capital Expenditure and Capitalization as proposed by the Petitioner and approved by the Commission (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
Scheduled castes development scheme(P)	Capital Expenditure	0.5	0.5	0.5	0.5	0.5	0.5
	Capitalization	0	1	0.5	0	1	0.5

The Commission also approves the funding of this scheme through the equity contribution by ED Goa/Government of Goa as proposed by Petitioner.

B. Scheduled Tribes development scheme(P)

Petitioner Submission:

This scheme is basically for execution of works for the benefit of the Scheduled Tribe population. Works in the areas predominantly inhabited by tribal population are carried out under this scheme. Conversion of O/H HT network to underground cabling in Loutolim constituency, Conversion of O/H LT network to underground cabling in Raia, Loutolim; Conversion of O/H LT network to underground cabling in Nuvem, Verna etc., which are under execution, will be completed. Similarly the conversion of the HT network in Canacona constituency taken up for execution during last year will also be completed in the control period. New works will also be taken up.

The expenditure for the scheme is not planned as of now as they had requested the divisions to send proposals regarding the need of the new infrastructure to be constructed in their respective areas by studying at ground level and that they have received few

proposals. The Petitioner will intimate the same to the Commission, once they are ready with the finalized proposals and their respective cost estimates.

This scheme shall facilitate better power services for those areas where the tribal population accounts for 40% and above of the total population of that area. This will facilitate the development of the area which in turn will ensure the reliability of power supply to consumers of that area. The scheme is also mandatory in accordance with Government of India/ Planning Commission directives.

Commission View:

The Commission has taken note of the expenditure proposed under the said scheme and sought scheme wise details of the proposed expenditure, against which the Petitioner has provided following details:

Table 5.3: Work wise cost breakup of Scheduled Tribe development scheme (Rs. Crores)

Sr No.	Name of work	Cost (Crores)	Administrative approval accorded or not	Expenditure up to March'15
1	Conversion of existing 11 KV overhead HT network to 11 KV underground cable in Loutolim constituency	32.70	Approval accorded	37.54
2	Conversion of LT overhead lines to underground network in the Scheduled tribe areas of Loutolim V.P Raia V.P, and Nuvem V.P.	77.25	Approval accorded	58.32
3	Conversion of 11 KV overhead line emanating from 33/11 KV Canacona & Poinguinim S/S to U/G network in Canacona Constituency.	60.91	Approval accorded	29.13
4	SETC of underground cables for existing overhead HT & LT line n/w in the Municipal garden & Market areas in Quepem	4.84	Approval accorded	3.15
5	Erection of 100 KVA DTC, RMU and LV Switch board along with laying and erection of LT overhead line for electrification of Nadquem Village in Canacona.	0.93	Approval accorded	0.44
6	Work of conversion of overhead lines to Underground network, erection of DTC and erection of street light at various locations in St. Andre Constituency.	3.77	Approval accorded	-
7	New proposed works (Estimates not prepared)	83.18	Estimates not forwarded to Government	-
	TOTAL	263.58		128.58

The Petitioner has estimated cost of Rs 263.58 Crores for the entire scheme out of which Rs 90 Crores is proposed to be spent during the MYT Control period of FY 2016-17 to FY

2018-19. Further, an amount of Rs 128.58 Crores has already been spend till FY 2014-15 and another Rs 45.00 Crores is estimated to be expended in the FY 2015-16.

The works amounting to Rs 83.18 Crores have not yet been approved by the Government as the estimates for same has not yet been prepared by the Petitioner. Based on the deliberations with Petitioner during the technical validation session, the Commission is of the view that the identification of schemes, finalization of the estimates and subsequent approval by the Government shall take almost a year. Accordingly, the Commission envisages nil/minimal expenditure in the FY 2016-17 on the said scheme.

The Commission has, therefore, decided to defer the proposed Capital Expenditure of Rs 30 Crores from FY 2016-17 to FY 2017-18 and FY 2018-19. Also, as the Petitioner has not proposed full capitalization of scheme in the control period, the Commission approves the capitalization schedule as proposed by the Petitioner.

Table 5.4: Capital Expenditure and Capitalization as proposed by the Petitioner and approved by the Commission (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
Schedule Tribe	Capital Expenditure	30	30	30	0	45	45
Development Scheme (P)	Capitalization	10	30	30	10	30	30

The Commission also approves the funding of this scheme through the equity contribution by ED Goa/Government of Goa as proposed by Petitioner.

The Commission directs the Petitioner to submit the details of schemes duly approved by the Government in respect of the remaining schemes of Rs 83.18 Crores, for its consideration.

C. Machinery and Equipments (Plan) Motor Vehicles

Petitioner Submission:

The Petitioner has not proposed any capital expenditure in the control period under this head.

Commission View:

The Commission has taken note of the submission of the Petitioner.

D. Erection and Augmentation of 33/11 KV S/S line (Plan)

Petitioner Submission:

This scheme is basically for establishment of new 33/11 KV Sub-Stations in the load areas along with the 33 KV lines linking this Sub-Station, and augmentation of capacities at the

existing Sub-Stations. The new Substation at IT Park Dona Paula, under execution, will be completed. Other works such as renovation of the Sub-Stations at various places will also be completed. Initially, the power supply to the consumers in above areas was fed from other sub-stations & lines which were far away. The length of the feeders was too long resulting into increase in losses and frequent interruptions. This capital expenditure would reduce the interruptions and would ensure better reliability of power.

Commission View:

The Commission has taken note of the expenditure proposed under the said scheme. The total estimated cost for the said scheme was Rs 26.00 Crores out of which Rs 20.00 Crores has already been spend till FY 2014-15 and another Rs 3.00 Crores is estimated to be done in FY 2015-16. The Petitioner has projected an amount of Rs 3 Crore to be under the said scheme during the control period of FY 2016-17 to FY 2018-19.

The Commission observes that these schemes are mainly meant for bifurcation of feeder length, thereby ensuring reduction in interruptions, improvement in reliability, better voltage profile and loss reduction. The Commission considers it reasonable and accordingly approves the same and directs the Petitioner to spend the same judiciously.

Table 5.5: Capital Expenditure and Capitalization approved by the Commission for Erection and Augmentation of 33/11 KV S/S line (P) (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
Erection and Augmentation of 33/11 KV S/S line (P)	Capital Expenditure	1	1	1	1	1	1
	Capitalization	2.5	1	1	2.5	1	1

The Commission also approves funding of this scheme through the equity contribution by ED Goa/Government of Goa as proposed by Petitioner.

E. Normal Development Schemes

Petitioner Submission:

This scheme is for extending the HT and LT network and providing distribution transformer and releasing of service connections to all categories of consumers. The laying of underground cable for releasing connection to major consumers are also taken up. Electrification of upcoming hamlets is also being taken up. The works are summarized as follows:

- Extension of 33 KV, 11 KV and LT lines for arranging power supply to individual and group of consumers;
- Erection of Transformer centers, metering structure, equipment for releasing of power supply to the intending consumers;

- Releasing of power supply and providing of metering to the intending consumers at different voltage levels.

Commission View:

The Commission has taken note of the expenditure proposed under the on-going Normal Development Schemes. The Petitioner has projected an amount of Rs 58 Crores to be spent under the Normal Development Schemes during the MYT Control Period of FY 2016-17 to FY 2018-19. The total estimated cost for the said scheme was Rs 95.82 Crores out of which Rs 32.68 Crores has already been spend till FY 2014-15 and another Rs 16.00 Crores is estimated to be spent in the FY 2015-16. The Commission is of the view that the execution of said scheme will enable the ED-Goa to modernize and strengthen the lines and increase customer satisfaction etc. in order to meet the future load growth in the State of Goa as well as undertaking smooth operations. The Commission considers it reasonable and accordingly approves the same and directs the Petitioner to spend the same judiciously.

Table 5.6: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
Normal Development Scheme (Plan)	Capital Expenditure	18	20	20	18	20	20
	Capitalization	18	20	20	18	20	20

The Commission also approves the funding of this scheme through the equity contribution by ED Goa/Government of Goa as proposed by Petitioner.

F. System Improvement Schemes

Petitioner Submission:

The System improvement scheme / Renovation and improvement Scheme is basically for the change of conductors, cross arms, insulators, metal parts & stay sets, etc. The conversion of LT line from 1 phase to 3 phase is also carried out under this scheme for improving the voltage profile, also enhancing the capacities of the distribution transformer and providing new transformer centers at load center is taken up under this scheme. In Goa, much of the conductors/poles etc. have put in more than 25-30 years of service in the system and thus have become prone to interruptions due to overloading and corrosion of the metal parts. Renovation of the old lines is essential to be carried out in the State to ensure reliability of power supply to the end consumers and avoid electrical accidents and meet the Standard of Performance in terms of Reliability of Power Supply.

Commission View:

The Commission has taken note of the expenditure proposed under the on-going Renovation & Improvement Schemes. The Petitioner has projected Rs 6 Crores to be spent under the Renovation & Improvement Schemes during the control period of FY 2016-17 to FY 2018-19. The total estimated cost for the said scheme was Rs 15.21 Crores out of which Rs 5.21 Crores has already been spent till the FY 2014-15 and another Rs 4.00 Crores is estimated to be spent in the FY 2015-16. The Commission is of the view that the said scheme will assist ED-Goa to maintain the distribution network so that breakdowns are avoided and more reliable /uninterrupted services/ supply are available to the consumers. The Commission considers it reasonable and accordingly approves the same.

Table 5.7: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
System Improvement Schemes	Capital Expenditure	2	2	2	2	2	2
	Capitalization	1	2	1	1	2	1

The Commission also approves the funding of this scheme through the equity contribution by ED Goa/Government of Goa as proposed by Petitioner.

G. Construction of Staff Quarters and Office Buildings etc

Petitioner Submission:

The construction of new office buildings/ extensions to existing buildings at various places and construction of staff quarters and repairs to existing quarters involving capital expenditure, taking up a number of works for enhancing the facilities at the quarters etc. are carried out by the Civil Division No. XV attached to the Electricity Department. The construction of new office building at Bicholim will be taken up and completed to facilitate different offices of a Division to be housed in a single building which otherwise would often be housed in other rented places. Construction of Staff Quarters and Office Buildings is to facilitate the availability of staff within premises of the Head Quarters for immediate reporting to duty in case of emergencies. Often such offices/quarters are constructed near the Sub-stations.

Commission View:

The Commission has taken note of the expenditure proposed under the said scheme. The Petitioner has projected an amount of Rs 6 Crore to be spent under the said scheme during the control period of FY 2016-17 to FY 2018-19. The total estimated cost for the said

scheme was Rs 9.89 Crores out of which Rs 2.73 Crores has already been spend till FY 2014-15 and another Rs 2.00 Crores is estimated to be done in FY 2015-16. The Commission is of the view that the due to expansion of consumer base over the years, clubbed with periodic depreciation of the buildings, the expenditure proposed is justified. The Commission considers it reasonable and accordingly approves the same and directs the Petitioner to spend the same judiciously.

Table 5.8: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
Construction of Staff Quarters and Office Buildings etc	Capital Expenditure	2	2	2	2	2	2
	Capitalization	2	2.5	1	2	2.5	1

The Commission also approves the funding of this scheme through the equity contribution by ED Goa/Government of Goa as proposed by Petitioner.

H. Erection of 220/33 KV 1X50 MVA Sub- Station at Cuncolim

Petitioner Submission:

The Xeldem 220/110/33 kV Sub-Station was feeding Salcette, Quepem, Sanguem & Canacona talukas and there was tremendous demand of Power in the surrounding areas including Cuncolim Industrial Estate. Hence the Department had undertaken the execution of the above said sub-station at Cuncolim at an estimated cost of Rs. 67.03 Crores (out of which Rs 57.74 Crores has been capitalized), along with 220KV link line from Xeldem to Cuncolim for an estimated cost of Rs. 8.68 Crores out of which 5.87 Crores has been capitalized and only the balance payments have to be effected.

Commission View:

The Commission has taken note of the fact that the Petitioner has proposed nil expenditure under the said scheme during the control period of FY 2016-17 to FY 2018-19 as the said scheme is estimated to be completed in FY 2016 itself. As the said scheme is mainly meant for reliability of power supply, alternate power supply to Margao town, better voltage profile and feasibility of trading of power etc, the Commission considers it reasonable and accordingly approves the same and directs the Petitioner to spend the same judiciously.

I. Erection of 220 KV line from Xeldem to Cuncolim

Petitioner Submission:

The Petitioner has proposed nil expenditure against this scheme in the control period as the said scheme has already been commissioned in FY 2015-16 itself.

Commission View:

The Commission has noted the submission of the Petitioner.

J. Strengthening of 220 KV Transmission Network

Petitioner Submission:

Capital expenditure of remaining Rs 1 Crore has been proposed in the FY 2016-17 against the total scheme cost of Rs 11.85 Crores.

Commission View:

The Commission has noted the submission of the Petitioner and considers the proposed remaining expenditure of Rs 1 Crore as reasonable and approves the same as projected by the Petitioner.

Table 5.9: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
Strengthening of 220 KV Transmission Network	Capital Expenditure	1	0	0	1	0	0
	Capitalization	1	0	0	1	0	0

The Commission also approves the funding of this scheme through the equity contribution by ED Goa/Government of Goa as proposed by Petitioner.

K. Erection of 220/33KV. 1x50 MVA Sub-Station Xeldem

Petitioner Submission:

Nil expenditure against this scheme in the control period has been proposed as the said scheme has already been commissioned in FY 2014-15 itself.

Commission View:

The Commission has noted the submission of the Petitioner.

L. Accelerated Power Development Reforms Programme

Petitioner Submission:

Nil expenditure against this scheme in the control period has been proposed as the said scheme has already been commissioned in FY 2014-15 itself.

Commission View:

The Commission has noted the submission of the Petitioner.

M. Erection of 2nd 100 MVA transformer at Xeldem 220/110 KV S/S

Petitioner Submission:

Nil expenditure against this scheme in the control period as the said scheme has already been commissioned in FY 2015-16 itself.

Commission View:

The Commission has noted the submission of the Petitioner.

N. Erection of 220/110/33/11 KV Sub-Station at Verna

Petitioner Submission:

A capital expenditure of Rs 90 Crores has been proposed against this scheme from FY 2015-16 to FY 2018-19.

Commission View:

The Petitioner has submitted that they have got the administrative approval of the scheme vide approval no. TS/36/27/2013-14/CEE/Tech/438 dated 07/06/2013 and has accordingly proposed to incur the capital expenditure from FY 2015-16 onwards, which is expected to be commissioned/capitalized from the FY 2017-18 onwards. The Commission is of view that this scheme is necessary keeping in view the load growth in the Verna area. The Commission has noted the submission of the Petitioner and considers the proposed capital expenditure as reasonable and approves the same as projected by the Petitioner and directs the Petitioner to spend the same judiciously.

Table 5.10: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
Erection of 220/110/33/11 KV Sub-Station at Verna	Capital Expenditure	40	30	11	40	30	11
	Capitalization	0	79	11	0	79	11

The Commission also approves the funding of this scheme through the equity contribution by ED Goa/Government of Goa as proposed by Petitioner.

O. Erection of 220 KV line from Ponda-Verna-Xeldem

Petitioner Submission:

A capital expenditure of Rs 40 Crores is proposed against this scheme from FY 2015-16 to FY 2018-19.

Commission View:

The administrative approval of the scheme was accorded vide approval no. TS/36/35/2013-14/CEE/Tech/58 and accordingly the start of capital expenditure has been proposed from FY 2015-16 onwards, which is expected to be commissioned/capitalized from the FY 2017-18 onwards. The Commission is of view that this scheme is necessary keeping in view the load growth in the area. The Commission has noted the submission of the Petitioner and considers the proposed capital expenditure as reasonable and approves the same as projected by the Petitioner and directs the Petitioner to spend the same judiciously.

Table 5.11: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
Erection of 220 KV line from Ponda-Verna-Xeldem	Capital Expenditure	20	10	6	20	10	6
	Capitalization	0	34	6	0	34	6

The Commission also approves the funding of this scheme through the equity contribution by ED Goa/Government of Goa as proposed by Petitioner.

P. APDRP(State Schemes)

Petitioner Submission:

Nil expenditure has been proposed in the control period as the said scheme has already been commissioned in the FY 2015-16 itself.

Commission View:

The Commission has noted the submission of the Petitioner.

Q. R-APDRP Part A

Petitioner Submission:

The Ministry of Power/ Government of India, in its 11th five year plan had launched the Restructured APDRP scheme. The objective of the Restructured APDRP Scheme is to provide quality and reliable power supply to the consumers and to bring down the AT&C losses. It is a centrally sponsored scheme. Under the program, the Government of India has sanctioned projects that aim at establishment of reliable and automated systems for sustained collection of accurate base line data and the adoption of information technology in the area of energy accounting. The Power Finance Corporation has been nominated as the nodal agency to make the above program operational. The project is being carried out in two parts:

PART A: will cover preparation of base-line data for the project area covering consumer indexing, GIS mapping, metering of distribution transformers and feeders and automatic data logging for all distribution transformers and feeders. It will also include adoption of IT applications for meter reading, billing and collection, energy accounting and auditing.

Status of ED Goa on Part A: ED Goa has entrusted Tata Power Delhi Distribution Limited to carry out the processes and accordingly THE RFP for system integrator has been floated for prospective bidders. The minimum standards fixed for System Integrator is at par with the Industry standards. In this regard a pre bid conference has been done on 25thAugust2015.

The project on pilot basis in Panjim division is expected to roll out by end of 2015. The project is planned to roll out latest by 31stMarch2016 in all the 4 major towns of Goa.

Commission View:

The Commission has taken note of the expenditure proposed under the said scheme. The Petitioner has projected an amount of Rs 34.57 Crores to be spent under the said scheme during the control period of FY 2016-17 to FY 2018-19. The total estimated cost for the

said scheme was Rs 136.73 Crores out of which Rs 102.16 Crores is estimated to be expended up to FY 2015-16.

Table 5.12: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crore)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
R-APDRP Part A	Capital Expenditure	34.57	0	0	34.57	0	0
	Capitalization	30	0	0	34.57	0	0

The Commission observed that the Petitioner had considered capitalization more than the capital expenditure proposed up to FY 2015-16 which is creating an anomaly which the Commission has corrected while approving capitalization for the MYT Control Period.

The Commission notes that the funding for the R-APDRP schemes may be converted into grants if operational targets are achieved. The Commission, for the purposes of the business plan has considered the progress of the R-APDRP scheme and expects the Petitioner to submit quarterly reports as regards the achievement of the operational targets. The same would be converted into grant on achievement of the operational targets by the Petitioner during the review/true-up of the respective year after submission of relevant data. The relevant Regulation of the JERC (Multiyear Distribution Tariff) Regulations, 2014 in this regard is as below:

Regulation 24 (g) (ii)

“The Distribution Licensee shall enable tracking of the loans converted into grants under schemes like APDRP by providing information and data regularly to the Commission and for ensuring that the interest on these loans which has been passed on to the consumers inappropriately in the earlier years shall be recovered from the Distribution Licensee.”

The Petitioner is expected to adhere to the above Regulation and enable tracking of loans into grants under the R-APDRP scheme.

R. Underground cabling scheme

Petitioner Submission:

The State of Goa being a coastal area with abundant vegetation (both forest & Agricultural) is prone to repeated interruptions in the power supply due to uprooting of trees, falling of trees branches, and coconut tree leaves etc. on the lines causing tripping, breakdowns and electrical accidents. The aesthetic beauty of the city is also disturbed with overhead lines dangling everywhere. To overcome such a problem, ED – Goa had initiated laying of underground system. Initially underground cabling was taken up in the major cities viz

Panaji, Madgaon, & some of the coastal belt areas wherein ED – Goa has also laid down 11 kV and LT U/G system and also some 33 KV feeders. Under the present underground cabling scheme, conversion of the overhead network to underground cabling has been proposed initially in the cities and coastal areas and then in the hinterland. Accordingly conversion of network has been taken up in the areas of Bogda, Sada, Baina in Mormugao constituency and the same will be completed during the control period. New sanctioned works in the balance portion of Margao, and the areas of Navelim will be taken up and completed.

Commission View:

The Commission has taken note that the Petitioner has projected an amount of Rs 190.00 Crores to be spent under the said scheme during the control period of FY 2016-17 to FY 2018-19. The total estimated cost for the said scheme was Rs 247.63 Crores out of which Rs 19.63 Crores has already been spend till FY 2014-15 and another Rs 38.00 Crores is estimated to be spent in the FY 2015-16.

The Commission sought the details of the schemes proposed under this head, against which the Petitioner submitted the following details:

Table 5.13: Work wise breakup of Underground cabling scheme

Sr No.	Name of work	Cost (Crores)	Administrative approval accorded or not	Expenditure up to March'15
1	Work of conversion of HT/LT overhead lines to underground network in Sada, Bogda, Baina area of Mormugao Taluka.	62.82	Approval accorded	20.34
2	Conversion of 11 KV HT o/h line to u/g network in the areas of Navelim, Mandopa, Davorlim, Dicarpale, Rawanfond & Aquem-Baixo in Navelim constituency	47.60	Approval accorded earlier under this Scheme but now sought under Electricity Duty Fund	-
3	Conversion of 11 KV & LT o/h lines to u/g network in the balance parts of Margao Municipal area under jurisdiction of Div-IV Margao & bifurcation of the existing U/g feeders for enhancing reliability of power supply	28.17	Approval accorded earlier under this Scheme but now sought under Electricity Duty Fund	-
4	New proposed works (Estimates not prepared)	109.04	Estimates not forwarded to Government	-
	TOTAL	247.63		20.34

The Commission observes that the Petitioner has already considered funding of Rs 75.77 Crores of schemes through Electricity Duty fund instead of the proposed equity from ED Goa, Government of Goa. The Commission accordingly decides to consider these schemes,

for the purpose of approval of capital expenditure, under the head Electricity Duty fund as now proposed by the Petitioner.

The Petitioner has also submitted that the works amounting to Rs 109.04 Crores has not yet been approved by the Government as the estimates for same has not yet been prepared by the Petitioner. The Commission is of the view that the identification of schemes, finalization of the estimates and subsequent approval by the Government will take almost a year. Accordingly, the Commission envisages nil/minimal expenditure in the FY 2016-17 under the said scheme.

Further, there is discrepancy in the amount spent till FY 2014-15 as per Petition and in response to the data gaps raised by the Commission, i.e. Rs 19.63 Crores vs. Rs 20.34 Crores. The Commission has considered the amount of Rs 20.34 Crores, which shall be trued up based on the audited accounts. The Commission acknowledges the said scheme and approves an amount of Rs 171.86 Crores against the proposed amount of Rs.247.63 crores. The Commission retains the capital expenditure and capitalization as proposed for FY 2015-16 to compute the remaining capital expenditure and capitalization for the control period.

Table 5.14: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
Underground cabling scheme	Capital Expenditure	40	50	100	4.48	9.04	100
	Capitalization	40	50	50	4.48	9.04	50

The Commission also approves the funding of this scheme through the equity contribution by ED Goa/Government of Goa as proposed by Petitioner.

S. Public Lighting Scheme

Petitioner Submission:

A nominal capital expenditure of Rs 1 Crore every year has been proposed against this scheme for the FY 2016-17 to FY 2018-19.

Commission View:

The Petitioner has proposed following works to be undertaken in this scheme:

- Extension of 1 phase 3 wire LT street light line and providing 128 numbers 1 x40 watts tube light fixtures in the area of Penha –de-Franca, Salvador do-Mund and Socorro in Porvorim under Public Lighting Scheme.
- Providing 51 no's of street light fixtures at Amdai Sanguem, Valkini Colony Dhangarwada & Various areas of Banshi & Addem of Sanguem constituency.
- Providing 20 no's of street light fixtures in the areas of Sanguem Constituency covering Desaiwado Mangal, Gaonkarwado Mangal & V.P Caurem Pirla area.

The administrative approvals are already in place for these works. The Commission thus approves the capital expenditure and capitalization as proposed by the Petitioner.

Table 5.15: Capital Expenditure and Capitalization approved by the Commission for Public Lighting Scheme (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
Public Lighting Scheme	Capital Expenditure	1	1	1	1	1	1
	Capitalization	1	1	1	1	1	1

The Commission also approves the funding of this scheme through the equity contribution by ED Goa/Government of Goa as proposed by Petitioner.

T. R-APDRP Part B / IPDS/DDUGIY

Petitioner Submission:

The Ministry of Power/ Government of India, in its 11th five year plan had launched the Restructured APDRP scheme. The objective of the Restructured APDRP Scheme is to provide quality and reliable power supply to the consumers and to bring down the AT&C losses. It is a centrally sponsored scheme. Under the program, the Government of India has sanctioned projects that aim at establishment of reliable and automated systems for sustained collection of accurate base line data and the adoption of information technology in the area of energy accounting. The Power Finance Corporation has been nominated as the nodal agency to make the above program operational.

PART B: covers renovation, modernization and strengthening of 11kV Sub Station and distribution systems.

The scope of works under R-APDRP Part B covers renovation, modernization and strengthening of 11 kV level Substations, Transformers/Transformer Centers, Re-conducting of lines at 11 kV level and below, Load Bifurcation, feeder separation, load Balancing, HVDS (11 kV), Aerial Bunched Conducting in dense areas, replacement of electromagnetic energy meters with tamper proof electronic meters, installation of

capacitor banks and mobile service centers etc. In exceptional cases, where sub-transmission system is weak, strengthening at 33 kV or 66 kV levels is also considered.

The Part-B of R-APDRP has been subsumed into IPDS/ DDUGJY, the new schemes that have been launched by the Government of India. The Government of Goa is intent on undertaking the works under the IPDS / DDUGJY since IPDS covers the above said scope of works of Part-B and in addition some other works and the funding is to the extent of 75% grants. The works under the IPDS are to be completed within a period of 2 years. The Government is desirous of availing the benefits of this Central Government scheme so as to upgrade the sub-transmission and distribution network in the State on a massive scale. The rural electrification works such as bifurcation and dedicated feeders etc. can be taken up under DDUGJY.

Goa has serious issues about reliability of supply due to breakdowns on account of various reasons such as corrosion of cross-arms, poles etc. due to saline conditions, under size conductors installed around 20 to 30 years back, and therefore has serious plans to focus on renovating, modernizing, strengthening distribution network for improving operational and commercial efficiency, aesthetics, reliability and above all making network ready for Smart initiatives in the future. The State is endeavoring to become a Model State in the country as regards the Power sector.

Commission View:

The Commission has taken note of the expenditure proposed under the said scheme. The Petitioner has projected an amount of Rs 1300.00 Crores to be spent under the said scheme during the control period from FY 2016-17 to FY 2018-19. The total estimated cost of the said scheme was Rs 1600.00 Crores out of which Rs 200.00 Crores is estimated to be done in FY 2015-16.

The Commission sought details of expenses proposed under various parts of the said scheme. In reply, the Petitioner submitted the Detailed Project Reports prepared for these schemes as follows:

Table 5.16: DPR Value of various schemes (Rs. Crores)

Scheme Name	DPR Amount
IPDS _ South Goa	439.32
IPDS _ North Goa	516.76
DDUGJY _ South Goa	124.91
DDUGJY _ North Goa	195.08
Total	1276.06

The Commission observes that cumulative anticipated scheme value as submitted by the Petitioner now has been stated to be Rs. 1276.06 Crores against an amount of Rs 1600

Crores submitted earlier by the Petitioner. The Petitioner further submitted the present status as follows:

Quote

It is submitted to the Hon'ble Commission that the IPDS scheme was approved by Government of India and sanctioned Rs. 32.07 Crores as grant. The DDUGJY scheme has been approved by the Government of Goa and is put up for the approval of Government of India. Earlier in Business Plan, it is envisaged that 960 Crores will be funded through Grants and Capital Subsidy, the funding pattern for the scheme may be changed in this regard. The final funding source(s) of the project will be intimated to the Hon'ble Commission after obtaining financial closure.

Unquote

The Commission is of the view that the said scheme will enable ED-Goa in two ways:

- Analysis based investment plan for strengthening of network, for which new sub-stations / lines / interconnectors / re-conductoring, transformer augmentation / addition, revamping of Sub-Stations, High voltage distribution system, load balancing/feeder segregation, HT/LT Aerial bunched cables, capacitor banks/reactors at 11 KV and 33 KV, Laying of Under Ground cables in densely populated areas, have been planned;
- Quantum jump in reliability, for which plans are afoot to have Grid Sub-Station automation and integration with SCADA, Strategic distribution RMU, FPI and Integration with DMS, Outage management system and integration with GIS and CRM, provisioning compatibility with SMART technologies etc.

The Commission approves the total scheme value as Rs. 1276.06 Crores. The Commission is of view that in absence of approval of balance scheme by PFC/REC as on date for IPDS/DDUGJY, along with the fact that only 4 months are remaining in FY 2015-16, the Petitioner won't be in position to spend more than Rs 32.07 Crores in FY 2015-16 as already approved/released by PFC.

Further, the Commission, in the interest of stakeholders, has approved the capital expenditure of Rs. 300 Crores for FY 2016-17 considering the fact that loan tie-ups with external funding agencies will take some time and the Petitioner will not be able to take-up full capital expenditure of Rs 400 Crores as proposed for the FY 2016-17.

Table 5.17: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY17	FY 18	FY 19
R-APDRP Part B / IPDS/DDUGJY	Capital Expenditure	400	500	400	300	500	443.99
	Capitalization	300	500	500	0	0	0

The Commission also approves the funding of capital expenditure of Rs 32.07 Crores already sanctioned by PFC as grant (as submitted by the Petitioner); however, as the Petitioner is still not clear about the fund tie-up details of remaining capital expenditure, the Commission has decided not to consider the capitalization for the FY 2016-17 for the purpose of tariff determination for FY 2016-17 and will consider actual capitalization at the time of true-up of FY 2016-17.

Also, as the Petitioner is not clear on the mode of funding of the remaining capital expenditure, the Commission has decided not to approve the funding for the purpose of Business Plan and will revisit same once the Petitioner submits the details of fund tie-up to the Commission.

U. EHV new Transmission / Sub-Station / Capacitor banks schemes

Petitioner Submission:

Goa receives power from the central sector allocation from Western region and Southern region. The allocation of power from Western region is to the tune of 380MW and from Southern region is to the tune of 100MW. Goa's peak demand is to the tune of 540MW. The short fall in demand is to the tune of 60MW which is met from over drawl depending upon permissible grid frequency under deviation settlement mechanism and also from open market.

Goa receives power from 400/220KV substation Colvale from WR region and also from 220KV Tillari and Kolhapur lines. From SR region it receives from 220KV Ambewadi lines from Karnataka. Goa also receives power from small captive power plants in Goa to the tune of 20MW.

The allocation on SR region drops considerably depending on the availability of coal and plant efficiency. The allocation on SR region is not sufficient enough to cater the demands of South Goa therefore the WR supply is availed through Ponda substation.

The lines from WR region travels from quite a long distance and reaches to the tail end substation at Cuncolim due to which the voltage profile drops as well is prone to break downs for technical reasons.

In the event of failure of SR Supply the south Goa reels under severe power crisis and the allocation on WR is limited to 75 to 80 MW on diversion of SR allocation forcing the Industrial and few domestic and Hotel industries under forced load restrictions till SR supply is normalized. Also, higher losses plus wheeling charges on re-routing SR power via WR grid. The SR supply is also unstable due to its aging network and passing through dense forest.

Commission View:

The Commission has taken note of the expenditure proposed under the said scheme. The Petitioner has estimated cost of Rs 800.00 Crores for the entire scheme out of which Rs 750 Crores is to be spent during the MYT Control period of FY 2016-17 to FY 2018-19. In FY 2015-16 alone an amount of Rs 50 Crores is estimated to be spent under the said scheme.

The Commission has sought details for works proposed to be undertaken under this scheme. In reply, the Petitioner submitted the works as follows:

Table 5.18: Work wise cost breakup of EHV new Transmission / Sub-Station / Capacitor banks scheme (Rs. Crores)

Sr No.	Name of work	Cost (Crores)	Administrative approval accorded or not	Expenditure up to March'15
1	Change of conductor with high ampacity conductor along with optical ground wire (OPGW) and communication system on the Tivim-Ponda and Palsarem-Kadamba 110 KV line	62	Approval accorded	Taken up in 2015-16
2	New proposed works (Estimates not prepared)			
a	220 KV D/C line from Colvale to Kadamba to Verna and Verna to Cuncolim	95	Estimates not forwarded to Government	
b	220/110 KV GIS Sub-Station at Kadamba	90	----do----	
c	110 KV D/C line from Verna to Sancoale	9.5	----do----	
d	110/33 KV Sub-Station at Sancoale	65	----do----	
e	110 KV D/C lines from MSL S/S to 110/33 KV S/S at Margao & renovation of 110 KV S/C line from Curtorim to MSL and converting to D/C line.	13.5	----do----	
f	110/33 KV GIS Sub-Station at Margao	65	----do----	
g	110 KV D/C line from Tivim Sub-Station to Saligao	53	----do----	
h	110/33 KV GIS Sub-Station at Saligao	65	----do----	
i	110 KV D/C line from Palsare to Kundaim	8	----do----	
j	110/33 KV GIS Sub-Station at Kundaim Industrial estate	45	----do----	
k	Renovation of existing 220/110/33 KV Sub-Station at Ponda	200	----do----	
l	New Proposals	29	----do----	
	TOTAL	800		

The Petitioner has also submitted that the works amounting to Rs 738 Crores has not yet been approved by the Government as the estimates for same has not yet been prepared by the Petitioner. The Commission is of the view that the identification of schemes, finalization

of the estimates and subsequent approval by the Government will take almost 1 year. Accordingly, the Commission envisages no/minimal expenditure in FY 2016-17 in the said scheme and defers same for FY 2017-18.

The Commission directs the Petitioner to submit the details of schemes once they receive approval of the Government. The Commission thus approves capital expenditure and capitalization as follows.

Table 5.19: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
EHV new Transmission / Sub-Station / Capacitor banks scheme	Capital Expenditure	200	250	300	12	438	300
	Capitalization	0	300	450	12	300	438

The Commission also approves the funding of this scheme through the equity contribution by ED Goa/Government of Goa as proposed by Petitioner.

V. Infrastructure development through Electricity Duty (Plan)

Petitioner Submission:

The Government of Goa has issued notification on 28th May 2008 for collection of Electricity Duty from various consumer categories at various notified rates. The notification also provides that the duty amount such collected shall be transferred to separate reserve/ fund account for creation of required transmission & distribution infrastructure development for the State of Goa. There are various works being carried out under this scheme upon recommendation and approval of the Technical Advisory Committee. Since the assets are created from the ED Fund, the costs such as Depreciation, Interest on Loan and Return on Equity are not claimed in APR and MYT. More emphasis was laid for linking major 33 KV Sub-Stations from 110 KV Sub-Stations with 33 KV underground cable link which ensures reliability in power supply. Augmentation of Sub-Station capacities were also undertaken under the said scheme.

Commission View:

The Commission has taken note of the expenditure proposed under the said scheme. The Petitioner has projected an amount of Rs 440.00 Crores to be spent under the said scheme during the control period of FY 2016-17 to FY 2018-19. The total estimated cost for the said scheme was Rs 705.31 Crores out of which Rs 130.00 Crores is estimated to be done in the FY 2015-16.

Keeping in view the discussions in previous sections, the Commission approves the additional amount of Rs 75.77 Crores for underground cabling schemes now funded by Electricity Duty fund to be incurred and capitalized in FY 2018-19.

These schemes are mainly meant for reliability in power supply based on recommendation of Technical Advisory Committee and funded through electricity duty as per Government of Goa notification dated 28th May 2008 for collection of Electricity Duty from various consumer categories at various notified rates for creation of required transmission & distribution infrastructure development for the State of Goa. As the assets are created from the ED Fund, the costs such as Depreciation, Interest on Loan and Return on Equity shall not be a pass through in the ARR, the Commission considers it reasonable and accordingly approves the same.

As the Petitioner has not proposed full capex and capitalization of this scheme in the control period, the Commission thus approves same capital expenditure and capitalization as follows:

Table 5.20: Capital Expenditure and Capitalization as Proposed by the Petitioner and approved by the Commission (Rs. Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
Infrastructure development through Electricity Duty (Plan)	Capital Expenditure	140	150	150	140	150	225.77
	Capitalization	96	100	50	96	100	125.77

The Commission also approves the funding of this scheme through the Electricity Duty Fund (Grant) as proposed by Petitioner.

Based on the above analysis, the capital expenditure approved for the control period FY 2016-17 to FY 2018-19 is as below:

Table 5.21: Total Capital Expenditure and Capitalization as Proposed by the Commission and approved by the Commission (Rs Crores)

Name of scheme	Particulars	Proposed			Approved		
		FY 17	FY 18	FY 19	FY 17	FY 18	FY 19
Grand Total	Capital Expenditure	930.07	1046.50	1023.50	576.55	1208.54	1158.26
	Capitalization	501.50	1120.50	1121.50	182.55	579.54	685.27

The Commission directs the Petitioner to submit scheme wise actual progress with annual tariff filings for the FY 2017-18 and FY 2018-19 and the Commission will accordingly revisit the requirement of capital expenditure and capitalization for the ensuing years.

5.2. Funding Plan

Petitioner Submission

ED-GOA plans on funding majority of its capital expenditure through the Government and from the Electricity Duty fund of Government of Goa. The works carried out under R-APDRP (Part A) and IPDS / DDUGJY are funded by Ministry of Power, Government of India through Power Finance Corporation (PFC) / Rural Electrification Corporation (REC).

The disbursement from PFC has been availed against the scheme under R-APDRP Part A. As per the Central Government scheme the same may be converted into grant if the operational targets are achieved. In case of non-achievement of those operational targets the same disbursements will be considered as loan which may have an interest rate of 12% - 13%. Therefore this is an early stage at present to consider the PFC disbursement as loan or grant.

For IPDS / DDUGJY works, the Petitioner seeks to avail loan from PFC / REC and also to link some of the works with IPDS scheme to avail the loans from Central Government. The Integrated Power Development Scheme (IPDS) which is being funded to the extent of 75% by Ministry of Power, Government of India has been proposed to be taken up (at present considered 60% in MYT). The 25% funding for this scheme is proposed to be arranged from the State's own resources.

The EHV new Transmission / Sub-Station / Capacitor banks schemes have also been proposed to be taken up by availing loans from financial Institutions like REC/PFC. Loan repayment is proposed to be arranged through State's own resources.

The funding pattern of ED-Goa for its proposed capital expenditure is as follows:

Table 5.22: Funding of Capital Expenditure proposed by the Petitioner for control period

Name of scheme	Funding Proposed by Petitioner					Total Funding
	Estimated Cost (Rs.Crs)	Equity component		Capital Subsidies / grants	Loan	
		Electricity Duty Fund	Equity infusion - EDG/GoG			
Scheduled castes development scheme(P)	1.57	0	1.57	0	0	1.57
Schedule Tribe Development Scheme (P)	263.58	0	263.58	0	0	263.58
Machinery and Equipments (Plan) Motor Vehicles	0.83	0	0.83	0	0	0.83
Infrastructure development through Electricity Duty (Plan)	705.00	705	0	0	0	705.00
Erection and Augmentation of 33/11 KV S/S line (Plan)	26.00	0	26	0	0	26.00
Normal Development Schemes (Plan)	95.82	0	95.82	0	0	95.82
System Improvement Schemes (Plan)	15.21	0	15.21	0	0	15.21
Construction of staff quarters and office buildings (Plan)	9.89	0	9.89	0	0	9.89

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Name of scheme	Funding Proposed by Petitioner					
	Estimated Cost (Rs.Crs)	Equity component		Capital Subsidies / grants	Loan	Total Funding
		Electricity Duty Fund	Equity infusion - EDG/GoG			
Erection of 220/33 KV 1X50 MVA Sub- Station at Cuncolim	72.74	0	0	0	72.74	72.74
Erection of 220 KV line from Xeldem to Cuncolim	15.87	0	0	0	15.87	15.87
Strengthening of 220 KV Transmission Network	11.85	0	11.85	0	0	11.85
Erection of 220/33KV, 1x50 MVA Sub-Station Xeldem	0.14	0	0.14	0	0	0.14
Accelerated Power Development Reforms Programme	0.06	0	0.06	0	0	0.06
Erection of 2nd 100 MVA transformer at Xeldem 220/110 KV S/S	0.28	0	0.28	0	0	0.28
Erection of 220/110/33/11 KV Sub-Station at Verna (New)	90.00	0	90	0	0	90.00
Erection of 220 KV line from Ponda-Verna-Xeldem	40.00	0	40	0	0	40.00
APDRP(State Schemes)	86.00	0	86	0	0	86.00
Restructured Accelerated Power Development and Reforms Programme Part A	136.73	0	0	136.73	0	136.73
Research training and human research development	0.07	0	0.07	0	0	0.07
Underground Cabling	247.63	0	247.63	0	0	247.63
Public Lighting Scheme	4.68	0	4.68	0	0	4.68
R-APDRP Part B / IPDS	1,600.00	0	0	960	640	1,600.00
EHV new Transmission / Sub-Station / Capacitor banks schemes	800.00	0	800	0	0	800.00
Total	4,223.95	705.00	1,693.61	1,096.73	728.61	4,223.95

Commission Analysis

The Commission has considered the scheme-wise funding details as submitted by the Petitioner. Based on the approved capital expenditure, and the reasons detailed in previous sections, the scheme-wise approval is as below:

Table 5.23: Scheme-wise funding approved by the Commission (Rs Crores)

Name of scheme	Funding Approved by the Commission				
	Estimated Cost (Rs.Crs)	Equity infusion - EDG/GoG	Capital Subsidies / grants/ ED Fund	Loan	Total Funding
Scheduled castes development scheme(P)	1.57	1.57	-	-	1.57
Schedule Tribe Development Scheme (P)	263.58	263.58	-	-	263.58
Machinery and Equipments (Plan) Motor Vehicles	0.83	0.83	-	-	0.83
Infrastructure development through Electricity	780.77	-	780.77	-	780.77

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Name of scheme	Funding Approved by the Commission				
	Estimated Cost (Rs.Crs)	Equity infusion - EDG/GoG	Capital Subsidies / grants/ ED Fund	Loan	Total Funding
Duty (Plan)					
Erection and Augmentation of 33/11 KV S/S line (Plan)	26.00	26.00	-	-	26.00
Normal Development Schemes (Plan)	95.82	95.82	-	-	95.82
System Improvement Schemes (Plan)	15.21	15.21	-	-	15.21
Construction of staff quarters and office buildings (Plan)	9.89	9.89	-	-	9.89
Erection of 220/33 KV 1X50 MVA Sub- Station at Cuncolim	72.74	-	-	72.74	72.74
Erection of 220 KV line from Xeldem to Cuncolim	15.87	-	-	15.87	15.87
Strengthening of 220 KV Transmission Network	11.85	11.85	-	-	11.85
Erection of 220/33KV, 1x50 MVA Sub-Station Xeldem	0.14	0.14	-	-	0.14
Accelerated Power Development Reforms Programme	0.06	0.06	-	-	0.06
Erection of 2nd 100 MVA transformer at Xeldem 220/110 KV S/S	0.28	0.28	-	-	0.28
Erection of 220/110/33/11 KV Sub-Station at Verna (New)	90.00	90.00	-	-	90.00
Erection of 220 KV line from Ponda-Verna-Xeldem	40.00	40.00	-	-	40.00
APDRP(State Schemes)	86.00	86.00	-	-	86.00
Restructured Accelerated Power Development and Reforms Programme Part A	136.73	-	-	136.73*	136.73
Research training and human research development	0.07	0.07	-	-	0.07
Underground Cabling	171.86	171.86	-	-	171.86
Public Lighting Scheme	4.68	4.68	-	-	4.68
R-APDRP Part B / IPDS	1,276.06	-	32.07	-	32.07**
EHV new Transmission / Sub-Station / Capacitor banks schemes	800.00	800.00	-	-	800.00
Total	3,900.01	1,617.84	812.84	225.34	2,656.02

*Note: * - PFC funding to be treated as 'loan' (Debt) initially by the Commission; only when PFC allows it as 'grant' based on the fulfillment of conditions by ED-Goa, the Commission shall treat it as 'grant'.*

*** Also, as the Petitioner is not clear on the mode of funding of the remaining capital expenditure, the Commission has decided not to approve the funding for the purpose of Business Plan at this stage and shall revisit same once the Petitioner submits the details of fund tie-up to the Commission.*

The Commission, notes that the funding for the R-APDRP schemes may be converted into grants if operational targets are achieved. The Commission for the purposes of the business plan has considered the R-APDRP funding as loan (debt). However, the

Commission would regularly monitor the progress of the R-APDRP scheme and expects the Petitioner to submit quarterly reports as regards the achievement of the operational targets. The same would be converted into grant on achievement of the operational targets by the Petitioner during the review/true-up of the respective year after submission of relevant data. The relevant provision of the Multiyear Distribution Tariff Regulations 2014 in this regard is as below:

Regulation 24 (g) (ii) states as under:

"The Distribution Licensee shall enable tracking of the loans converted into grants under schemes like APDRP by providing information and data regularly to the Commission and for ensuring that the interest on these loans which has been passed on to the consumers inappropriately in the earlier years shall be recovered from the Distribution Licensee."

The Petitioner is expected to adhere to the above provision and enable tracking of loans into grants under the R-APDRP scheme.

Also, while the Petitioner has submitted that most of the schemes shall be funded by 100% equity contribution by ED Goa/ Government of Goa, the Commission will approve the funding and eligible return on equity strictly as the per the provisions of the MYT Regulations, 2014.

6. Approval of the various ARR components for the MYT Control Period FY 2016-17 to FY 2018-19

The Petitioner has submitted energy sales and load growth projections, power procurement plan, T&D losses trajectory and energy balance and manpower planning for the control period. The following sub-sections of this Chapter provide details of the submissions made by the Petitioner and approval of the Commission for the above ARR components.

6.1. Category-wise Energy Sales for the MYT Control Period FY 2016-17 to FY 2018-19

Petitioner Submission

The Petitioner has submitted the category-wise sales during the last six (6) years (FY 2009-10 to FY 2014-15) based on the actual un-audited data and projected the sales for the control period. Category-wise energy sales during the last six (6) years as furnished by the Petitioner is shown in the Table below:

Table 6.1: Category-wise energy sales FY 2009-10 to FY 2014-15 (MUs)

Consumer Category	Actual					
	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
LTD/Domestic and Non - Commercial	655.15	694.85	696.00	831.22	790.36	763.45
LTD/Low Income Group	5.74	6.09	4.00	9.24	7.36	5.16
LTD/Domestic Mixed	1.39	1.47	1.51	4.10	6.64	10.14
LTC/Commercial	281.70	304.66	305.00	266.81	287.13	267.73
LTI/Industries	73.82	84.59	94.00	85.35	113.44	114.45
LTP/Mixed (Hotel Industries)	4.52	5.19	6.00	5.21	9.36	3.63
LTAG/Agriculture	10.77	12.27	10.00	18.47	20.51	23.86
LTPL/Public Lighting	31.33	32.74	31.00	16.21	28.85	36.95
LT Sub Total (A)	1064.42	1141.46	1147.51	1236.62	1263.64	1225.37
(LT) Temporary Sub Total (B)	13.00	15.00	14.00	14.98	14.84	22.08
HTI/Industrial	791.31	849.52	1013.81	1056.45	1084.44	1271.26
HT Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/Steel Rolling)	636.14	687.03	527.00	611.62	582.55	540.50
HTAG/Agriculture	4.79	5.46	4.00	7.73	5.88	6.08
H.T. MES/Defense Establishments	27.13	28.76	40.00	34.89	25.95	26.89
HT Sub Total (C)	1459.37	1570.77	1584.81	1710.68	1698.82	1844.73
Total Sales (A+B+C)	2536.79	2727.63	2746.32	2962.29	2977.29	3092.18

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

The Petitioner has submitted that it has plotted Compounded Annual Growth Rate (CAGR) for the last four, five and six years (FY 2014-15 and beyond) and then assumed an escalation which synchronizes with these plotted CAGR's for better perception of growth in a particular category. This growth rate assumed for each category is applied on the sales that are estimated as per escalation on 2014-15 actual sales figures for FY 2015-16; for estimating sales of FY 2016-17 to FY 2018-19. The Petitioner has provided justification for considering a particular growth rate for all consumer categories showing negligible, negative or abnormal growth in the past years.

The Petitioner also submitted that certain categories has been revised vide Tariff Order dated 6th April 2015 for which no historical analysis is possible at present and may result in incorrect picture therefore, it has considered sales, consumers and connected load CAGR based on old categories.

Further, the audited figures are available till FY 2010-11 and preparation of audited books for FY 2011-12 onwards is in progress. Therefore, the Petitioner submitted that the figures from FY 2011-12 to FY 2014-15 are yet to be audited and hence are provisional actual. In order to deal with such a situation, Petitioner has considered three scenarios before considering a growth rate for entire control period. The Petitioner has calculated CAGR for past three, four and five years starting from FY 2014-15 and then considered a growth rate for projections of control period so that audited numbers of FY 2009-10 and FY 2010-11 also form part of this exercise.

The Petitioner has submitted that the actual audited sales for FY 2009-10 and FY 2010-11 and provisional actual sales for FY 2011-12 to FY 2014-15 has been considered for projecting sales for control period. The sales for FY 2015-16 are estimated as per escalation on 2014-15 actual sales figures. The Petitioner has considered the CAGR method for projecting sales for the control period from FY 2016-17 to FY 2018-19

Consumer category-wise projected energy sales as submitted by the Petitioner for the control period is given below:

Table 6.2: Category-wise energy sales projected by the Petitioner for the MYT Control Period FY 2016-17 to FY 2018-19 (MU)

Sr. No	Consumer Category	Projections		
		FY 17	FY 18	FY 19
	LT Supply	1,388	1,455	1,525
1(a)	Tariff LTD/Domestic and Non-Comm.	802	842	884
1(b)	Tariff LTD/Low Income Group	5	5	5
1(c)	Tariff LTD/Domestic Mixed	9	10	11
2	Tariff-LTC/Commercial	295	310	325
3	Tariff LTI/Industry	211	221	232
6	Tariff-LTP/Mixed (Hotel Industries)	6	6	7
7	Tariff-LTAG/Agriculture	24	24	24

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Sr. No	Consumer Category	Projections		
		FY 17	FY 18	FY 19
8	Tariff-LTPL/Public Lighting	37	37	37
	Temporary Supply	22	22	22
9	Tariff-LT/Temporary	22	22	22
10	Tariff-HT/Temporary	-	-	-
11	Hoarding/Signboard	0	0	0
	HT Supply	1,946	2,029	2,120
12	HTI/Industrial	1,325	1,397	1,476
13	H.T. Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive)	588	599	611
14	Tariff-HTAG/Agriculture	6	6	6
15	H.T. MES/Defense Establishments	27	27	27
	Total Sales	3,356	3,507	3,667

Commission View

The Petitioner has projected sales, based on the last four, five and six year CAGR and also on estimate basis wherever any particular consumer category is indicating an abnormal growth pattern. The Commission, in Regulation 15 and 16 of MYT Regulations, 2014 has specified the methodology for projecting the metered and un-metered sales. The relevant extract of the MYT Regulations, 2014 is as follows:

“15.1 Forecasting Methodology

Metered sales shall be treated as an uncontrollable parameter:

Provided that open access transactions shall not form part of the sales:

Provided further that sales forecast shall be based on past trends in each of the slabs of consumer categories. The compounded annual growth rate (CAGR) of past 2 to 3 years of sales within each of the slabs of a consumer category as per audited books of account shall be used to forecast up to short and medium (5 years) time range.

Provided also that in cases where slab-wise sales to each consumer category are not available in audited books of accounts and only consolidated sales are available, the Distribution Licensee shall include the slab-wise sales in Annexure to its Annual Report from next year onwards:

Provided also that if Audited books of accounts are not available, the Distribution Licensee shall get the accounts audited within a year of roll out of these tariff regulations so as to ensure that audited sales figures, by slab by consumer category, for last three preceding years are available for sales estimation from next year onwards

16 Un-metered Sales Forecast

Methodology for determination of un-metered sales

16.2 The Central Electricity Authority issued CEA (installation and operation of meters), Regulations 2006. However in some utilities under the jurisdiction of JERC 100% metering has not yet taken place. Till such time 100% metering is achieved, the energy sales to unmetered consumers shall be considered on normative and it will be a controllable parameter."

It is very clear from the above provisions of the MYT Regulations, 2014 that the CAGR of past 2 to 3 years of sales within each of the slabs of a consumer category as per audited books of account shall be used to forecast up to short and medium (5 years) time range.

The Commission has adopted the same methodology for calculation of the CAGR and applied the CAGR of 2-3 year whichever is higher. The Commission has pointed out various aberrations in the Petition by way of a deficiency note, which were further discussed in detail during the Technical Validation Session (TVS) with the Petitioner. The Petitioner has submitted that the information contained in the Petition is based on the provisional accounts and is subject to the change once the accounts are finalized and audited. In absence of the audited information from FY 2011-12 onwards, the Commission, for the purpose of the Business Plan, has considered the provisional figures as submitted by the Petitioner and shall revisit same once the audited figures are available.

The Commission has also pointed out a number of discrepancies in the projections considered by the Petitioner during the TVS, for example, while the Petitioner had projected the number of consumers and connected load for the consumer category - Hoardings and Sign boards, it has not projected any corresponding sales in this category. Also, the figures in the write-up/justification are not co-relating with the submissions in the summary tables. Further, the Petitioner has considered old consumer categories for projection purposes and has not provided details of sales, consumers and connected load for new categories as approved in latest tariff order. The Petitioner submitted that separate projections for HT Commercial and HT Domestic consumer category have not been made because of non-availability of historical data as these two categories are created newly as per latest tariff Order. The Petitioner also submitted that the projections for HT Domestic and HT Commercial consumer category shall be submitted after compilation of H1 (First half year) data of the FY 2015-16 along with the MYT Petition for the Control Period.

The Commission accepts the submission of the Petitioner and directs them to submit the information based on actual for the newly created categories along with MYT Petition. The Commission shall appropriately consider same at the time of MYT Petition. Further, if there is any kind of aberration i.e. a high decline or an increase in the growth rates of CAGR, the Commission has allowed a nominal or zero percent increase in the consumer category.

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Table 6.3: Category-wise growth rate for energy sales as considered by the Commission

Sr. No.	Category of Consumer	CAGR					
		3 Years FY 12 to FY 15	2 Years FY 13 to FY 15	3 Years FY 11 to FY 14	2 Years FY 12 to FY 14	Proposed	Approved
A	Low Tension Supply						
1(a)	LTD/Domestic and Non - Commercial	3.13%	-4.16%	4.39%	6.56%	5.00%	6.56%
1(b)	LTD/Low Income Group	8.89%	-25.22%	6.50%	35.62%	0.00%	Normative
1(c)	LTD/Domestic Mixed	88.65%	57.15%	65.29%	109.67%	10.00%	10.00%
2	LTC/Commercial	-4.25%	0.17%	-1.96%	-2.97%	5.00%	5.00%
3	LTI/Industries	6.78%	15.80%	10.28%	9.85%		
	Motive Power	3.35%	15.93%	5.40%	2.67%	5.00%	5.00%
	Ice Manufacturing	0.00%	2.85%	0.00%	0.00%	0.00%	0.00%
	Public Water Works	36.08%	46.25%	54.98%	80.98%	5.00%	5.00%
4	LTP/Mixed (Hotel Industries)	-15.44%	-16.57%	21.70%	24.87%	10.00%	10.00%
5	LTAG/Agriculture	33.63%	13.66%	18.68%	43.21%	0.00%	0.00%
6	LTPL/Public Lighting	6.02%	50.96%	-4.13%	-3.54%	0.00%	0.00%
7	LTH Hoarding / Sign Board	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
8	LT/Temporary	16.40%	25.05%	-0.50%	2.73%	0.00%	0.00%
B	High Tension Supply						
9	HTI/Industrial						
	HT Mixed	14.38%	1.35%	0.89%	-11.59%	2.14%	2.14%
	HTI Industrial	0.09%	1.63%	5.08%	-2.39%	5.08%	5.08%
	HTI Hotel Industries	0.00%	61.26%	0.00%	0.00%	5.00%	5.00%
	HT Industries (IT High-tech)	64.81%	76.17%	154.70%	88.04%	0.00%	0.00%
	HT Public Water and Sewerage	5.77%	10.75%	5.21%	9.32%	5.21%	5.21%
	HT Ice Manufacturing	13.17%	63.25%	0.00%	0.00%	0.00%	0.00%
	EHTI Industrial	2.02%	26.08%	-0.39%	-8.15%	0.00%	0.00%
10	HT Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/Steel Rolling)						
	Ferro Metallurgical/ Steel Melting/ Power Intensive	0.29%	-6.52%	-1.06%	4.91%	2.00%	2.00%
	Steel Rolling	6.16%	-1.07%	-27.36%	7.42%	1.00%	1.00%
11	HTC/Commercial	0.00%	0.00%	0.00%	0.00%		
12	HTAG/Agriculture	14.99%	-11.28%	2.50%	21.24%	0.00%	0.00%
13	HTD/Domestic	0.00%	0.00%	0.00%	0.00%		
14	H.T. MES/Defense Establishments	-12.40%	-12.22%	-3.37%	-19.45%	0.00%	0.00%
15	HTTS/Temporary	0.00%	-100.00%	0.00%	0.00%	0.00%	0.00%

The sales for LT Domestic Mixed category has shown a sudden increase from FY 2013-14 and onwards. The Petitioner clarified that previously most of the consumers of LT Domestic Mixed were being billed under the LT Domestic category which was rectified in FY 2013-14 and therefore there is a boost in sales.

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

The Petitioner also submitted that after cessation / termination of Reliance IPP Power Purchase Agreement, the consumers earlier fed by Reliance IPP are now fed through ED-Goa's network effective from 14th August 2014. There are ~ 22 LTP Motive power consumers with connected load of ~ 900 HP and 33 HTI Industry Consumers with demand of ~ 41000 kVA are now part of the Petitioner's network. Due to increase in the industrial consumer base, the sales of HT industrial and LTP motive power is expected to increase in the control period.

Keeping in view the above submissions made by the Petitioner, the Commission approves the sales for the MYT Control Period as follows:

Table 6.4: Category-wise Energy Sales as approved by the Commission for MYT Control Period (In MU)

Sr. No.	Category of Consumer	CAGR	FY 16	FY 17	FY 18	FY 19
		Approved	Base Year	MYT Control Period		
A	Low Tension Supply					
1(a)	LTD/Domestic and Non - Commercial	6.56%	813.56	866.96	923.87	984.51
1(b)	LTD/Low Income Group	Normative	1.10	1.10	1.10	1.10
1(c)	LTD/Domestic Mixed	10.00%	11.15	12.27	13.49	14.84
2	LTC/Commercial	5.00%	281.11	295.17	309.93	325.42
3	LTI/Industries		119.78	125.38	131.26	137.42
	Motive Power	5.00%	106.63	111.96	117.56	123.43
	Ice Manufacturing	0.00%	7.87	7.87	7.87	7.87
	Public Water Works	5.00%	5.29	5.56	5.83	6.13
4	LTP/Mixed (Hotel Industries)	10.00%	3.99	4.39	4.83	5.31
5	LTAG/Agriculture	0.00%	23.86	23.86	23.86	23.86
6	LTPL/Public Lighting	0.00%	36.95	36.95	36.95	36.95
7	LTH Hoarding / Sign Board	0.00%	0.00	0.00	0.00	0.00
8	LT/Temporary	0.00%	22.08	22.08	22.08	22.08
Sub Total LT			1313.59	1388.15	1467.36	1551.50
B	High Tension Supply					
9	HTI/Industrial		1319.23	1369.50	1422.19	1477.42
	HT Mixed	2.14%	221.79	226.54	231.40	236.36
	HTI Industrial	5.08%	607.78	638.66	671.11	705.21
	HTI Hotel Industries	5.00%	140.94	147.99	155.39	163.16
	HT Industries (IT High-tech)	0.00%	22.38	22.38	22.38	22.38
	HT Public Water and Sewerage	5.21%	145.66	153.24	161.22	169.61
	HT Ice Manufacturing	0.00%	1.23	1.23	1.23	1.23
	EHTI Industrial	0.00%	179.45	179.45	179.45	179.45
10	HT Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/Steel Rolling)		550.75	561.19	571.84	582.70
	Ferro Metallurgical/ Steel Melting/ Power Intensive	2.00%	493.94	503.82	513.90	524.18
	Steel Rolling	1.00%	56.80	57.37	57.94	58.52
11	HTC/Commercial		0.00	0.00	0.00	0.00
12	HTAG/Agriculture	0.00%	6.08	6.08	6.08	6.08
13	HTD/Domestic		0.00	0.00	0.00	0.00

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Sr. No.	Category of Consumer	CAGR	FY 16	FY 17	FY 18	FY 19
		Approved	Base Year	MYT Control Period		
14	H.T. MES/Defense Establishments	0.00%	26.89	26.89	26.89	26.89
15	HTTS/Temporary	0.00%	0.00	0.00	0.00	0.00
Sub Total HT			1902.94	1963.66	2027.00	2093.08
Total Sales			3216.53	3351.81	3494.36	3644.58

The Commission directs the Petitioner to submit the Projections based on the figures submitted to the CAG for Audit purposes for the FY 2011-12 and FY 2012-13, actual figures for the newly created and other consumer categories in the MYT Petition based on which, the Commission shall revisit the projections for MYT Control Period during the finalization of MYT Tariff Order.

6.2. Consumer profile

Petitioner Submission

The Petitioner has submitted the category-wise number of consumers and CAGR growth rates for the past six (6) years, as shown below:

Table 6.5: Category-wise number of consumers FY 2009-10 to FY 2014-15

Consumer Category	Actual					
	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
LTD/Domestic and Non - Commercial	411399	436331	440198	441189	457131	458897
LTD/Low Income Group	16485	17483	14200	14232	11387	3049
LTD/Domestic Mixed	46	48	50	50	853	4399
LTC/Commercial	84253	91119	94259	94471	85275	85797
LTI/Industries	7455	8509	10046	10116	6899	6219
LTP/Mixed (Hotel Industries)			0	124	139	192
LTAG/Agriculture	9711	11060	11000	11025	10882	10821
LTPL/Public Lighting	7400	8000	9000	9020	6450	2740
LTH Hoarding / Sign Board						104
LT Sub Total (A)	536749	572550	578753	580227	579016	572218
(LT)Temporary Sub Total (B)	360	389	408	4195	3477	2581
HTI/Industrial	576	642	659	660	703	744
HT Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/Steel Rolling)	34	10	39	39	37	37
HTAG/Agriculture	40	45	42	42	40	41
H.T. MES/Defense Establishments	10	10	12	12	12	12
HT Sub Total (C)	660	707	752	754	792	834
Total Consumers (A+B+C)	537769	573646	579913	585176	583285	575633

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Based on the growth rates of number of consumer, the Petitioner has projected category-wise consumers for the FY 2015-16 by applying the growth rate on the number of category-wise consumers of FY 2014-15. The Petitioner used the same methodology and growth rates of number of consumers to project the category-wise number of consumers for the control period FY 2016-17 to FY 2018-19. Consumer category-wise projected number of consumers as submitted by the Petitioner for the control period is given below:

Table 6.6: Category-wise number of projected consumers for the control period FY 2016-17 to FY 2018-19 (No.)

Sr. No	Consumer Category	Projections		
		FY 17	FY 18	FY 19
	LT Supply	5,94,261	6,05,668	6,17,303
1(a)	Tariff LTD/Domestic and Non-Commercial	4,77,436	4,86,985	4,96,725
1(b)	Tariff LTD/Low Income Group	3,049	3,049	3,049
1(c)	Tariff LTD/Domestic Mixed	4,399	4,399	4,399
2	Tariff-LTC/Commercial	89,263	91,048	92,869
3	LTI/Industry	6,341	6,403	6,466
4	Tariff-LTP/Mixed (Hotel Industries)	212	222	233
5	Tariff-LTAG/Agriculture	10,821	10,821	10,821
6	Tariff-LTPL/Public Lighting	2,740	2,740	2,740
	Temporary Supply	2,600	2,600	2,600
7	Tariff-LT/Temporary	2,581	2,581	2,581
8	Tariff-HT/Temporary	-	-	-
9	Hoarding/Signboard	19	19	19
	HT Supply	835	842	850
10	Tariff HTI/Industrial	758	765	772
11	H.T.Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive)	24	24	24
12	Tariff-HTAG/Agriculture	41	42	42
13	H.T. MES/Defense Establishments	12	12	12
14	H.T. Industrial (Steel Rolling)	-	-	-
	Total Number of Consumers	5,97,697	6,09,111	6,20,753

Commission View

The Commission has considered same approach and methodology for approval of number of consumers as considered for approval of energy sales above.

Table 6.7: Category-wise growth rate for number of consumers as considered by the Commission

Sr. No.	Category of Consumer	CAGR				Proposed	Approved
		3 Years FY 12 to FY 15	2 Years FY 13 to FY 15	3 Years FY 11 to FY 14	2 Years FY 12 to FY 14		
A	Low Tension Supply						
1(a)	LTD/Domestic and Non - Commercial	1.40%	1.99%	1.56%	1.91%	2.00%	2.00%
1(b)	LTD/Low Income Group	-40.12%	-53.71%	-13.32%	-10.45%	0.00%	0.00%
1(c)	LTD/Domestic Mixed	344.76%	836.92%	160.96%	313.04%	0.00%	0.00%
2	LTC/Commercial	-3.09%	-4.70%	-2.19%	-4.88%	2.00%	2.00%
3	LTI/Industries	-14.77%	-21.59%	-6.75%	-17.13%		
	Motive Power	-15.22%	-22.02%	-7.18%	-18.10%	1.00%	1.00%
	Ice Manufacturing	0.00%	9.16%	0.00%	0.00%	5.00%	5.00%
	Public Water Works	-11.93%	-17.44%	-5.05%	-7.81%	0.00%	0.00%
4	LTP/Mixed (Hotel Industries)	0.00%	24.43%	0.00%	0.00%	5.00%	5.00%
5	LTAG/Agriculture	-0.55%	-0.93%	-0.54%	-0.54%	0.00%	0.00%
6	LTPL/Public Lighting	-32.73%	-44.89%	-6.93%	-15.34%	0.00%	0.00%
7	LTH Hoarding / Sign Board	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
8	LT/Temporary	84.95%	-21.56%	107.53%	191.93%	0.00%	0.00%
B	High Tension Supply						
9	HTI/Industrial						
	HT Mixed	-5.06%	-7.60%	-4.70%	-10.50%	0.00%	0.00%
	HTI Industrial	-0.73%	4.94%	0.09%	-3.07%	1.00%	1.00%
	HTI Hotel Industries	0.00%	55.64%	56.25%	0.00%	1.00%	1.00%
	HT Industries (IT High-tech)	11.20%	17.13%	16.26%	17.26%	5.00%	5.00%
	HT Public Water and Sewerage	4.13%	6.14%	2.11%	3.18%	2.11%	2.11%
	HT Ice Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	EHTI Industrial	14.47%	22.34%	7.72%	11.80%	0.00%	0.00%
10	HT Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/Steel Rolling)						0.00%
	Ferro Metallurgical/ Steel Melting/ Power Intensive	-2.63%	-4.03%	0.00%	-3.92%	0.00%	0.00%
	Steel Rolling	0.00%	-0.11%	9.14%	0.00%	0.00%	0.00%
11	HTC/Commercial	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
12	HTAG/Agriculture	-0.80%	-1.31%	-3.85%	-2.41%	0.00%	0.00%
13	HTD/Domestic	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
14	H.T. MES/Defense Establishments	0.00%	-0.11%	6.27%	0.00%	0.00%	0.00%
15	HTTS/Temporary	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Keeping in view the above submissions made by the Petitioner, the Commission approves the number of consumers for the MYT Control Period as follows:

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Table 6.8: Category-wise number of consumers as approved by the Commission for MYT Control Period

Sr. No.	Category of Consumer	CAGR	FY 16	FY 17	FY 18	FY 19
		Approved	Base Year	MYT Control Period		
A	Low Tension Supply					
1(a)	LTD/Domestic and Non - Commercial	2.00%	468075	477436	486985	496725
1(b)	LTD/Low Income Group	0.00%	3049	3049	3049	3049
1(c)	LTD/Domestic Mixed	0.00%	4399	4399	4399	4399
2	LTC/Commercial	2.00%	87513	89263	91048	92869
3	LTI/Industries		6280	6341	6403	6466
	Motive Power	1.00%	5848	5906	5965	6025
	Ice Manufacturing	5.00%	59	62	65	68
	Public Water Works	0.00%	373	373	373	373
4	LTP/Mixed (Hotel Industries)	5.00%	202	212	222	233
5	LTAG/Agriculture	0.00%	10821	10821	10821	10821
6	LTPL/Public Lighting	0.00%	2740	2740	2740	2740
7	LTH Hoarding / Sign Board	0.00%	104	104	104	104
8	LT/Temporary	0.00%	2581	2581	2581	2581
Sub Total LT			585763	596946	608353	619988
B	High Tension Supply					
9	HTI/Industrial		750	757	764	770
	HT Mixed	0.00%	172	172	172	172
	HTI Industrial	1.00%	408	412	416	420
	HTI Hotel Industries	1.00%	115	116	117	119
	HT Industries (IT High-tech)	5.00%	12	12	13	13
	HT Public Water and Sewerage	2.11%	36	36	37	38
	HT Ice Manufacturing	0.00%	2	2	2	2
	EHTI Industrial	0.00%	6	6	6	6
10	HT Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/Steel Rolling)	0.00%	37	37	37	37
	Ferro Metallurgical/ Steel Melting/ Power Intensive	0.00%	24	24	24	24
	Steel Rolling	0.00%	13	13	13	13
11	HTC/Commercial	0.00%	0	0	0	0
12	HTAG/Agriculture	0.00%	41	41	41	41
13	HTD/Domestic	0.00%	0	0	0	0
14	H.T. MES/Defense Establishments	0.00%	12	12	12	12
15	HTTS/Temporary	0.00%	0	0	0	0
Sub Total HT			840	847	854	860
Total Number of Consumers			586604	597793	609207	620848

The Commission directs the Petitioner to submit the Projections based on the figures submitted to the CAG for Audit purposes for the FY 2011-12 and FY 2012-13, actual figures for the newly created and other consumer categories in the MYT Petition based on which,

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

the Commission shall revisit the projections for MYT Control Period during the finalization of MYT Tariff Order.

6.3. Connected Load Growth

The Petitioner has submitted the consumer category-wise connected load and CAGR growth rates for the past six (6) years, as shown below:

Table 6.9: Consumer category-wise connected load from FY 2009-10 to FY 2014-15 (kW/HP/kVA)

Consumer Category	Actual					
	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
LTD/Domestic and Non - Commercial	629652	667738	681797	1033122	1072773	1151187
LTD/Low Income Group	5170	5480	4550	1241	1820	338
LTD/Domestic Mixed	8	82	84	2074	2412	13044
LTC/Commercial	220080	238010	256810	275155	284983	277352
LTI/Industries	241720	276420	344820	167381	178122	115580
LTP/Mixed (Hotel Industries)			0	3363	3223	4285
LTAG/Agriculture	42060	47900	66250	62134	66992	34481
LTPL/Public Lighting	9011	9410	12670	8450	11087	9598
LT Sub Total (A)	1147701	1245040	1366981	1552919	1621411	1605865
Temporary Sub Total (B)	2480	2680	2620	16847	9811	1098
HTI/Industrial	381847	404588	396111	506153	429142	459980
HT Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/Steel Rolling)	133824	144518	119200	112450	110850	114756
HTAG/Agriculture	9165	10435	8450	8200	8070	8378
H.T. MES/Defense Establishments	7918	7918	6675	6810	7080	7080
HT Sub Total (C)	532753	567459	530436	633613	555142	590194
Total (A+B+C)	1682934	1815179	1900037	2203380	2186364	2197156

Based on the growth rates of the connected load, the Petitioner has projected category-wise connected load for FY 2015-16 by applying the growth rate on the consumer category-wise connected load of FY 2014-15. The Petitioner used the same methodology and growth rates of connected load to project the category-wise connected load for the Control period FY 2016-17 to FY 2018-19. Consumer category-wise projected connected load as submitted by the Petitioner for the Control period is given below:

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Table 6.10: Category-wise projected connected load for the Control Period FY 2016-17 to FY 2018-19 (kW/kVA/HP)

Sr. No	Consumer Category	Projections		
		FY 17	FY 18	FY 19
1(a)	Tariff LTD/Domestic and Non-Comm.	11,62,728	11,68,541	11,74,384
1(b)	Tariff LTD/Low Income Group	338	338	338
1(c)	Tariff LTD/Domestic Mixed	13,044	13,044	13,044
2	Tariff-LTC/Commercial	2,80,133	2,81,533	2,82,941
3 (a)	Tariff-LTP/Motive Power	1,09,269	1,09,269	1,09,269
3 (b)	Tariff-LTP/ Ice Manufacturing	2,433	2,433	2,433
3(a)	Tariff-LTP/Mixed (Hotel Industries)	4,285	4,285	4,285
4	Tariff-LTAG/Agriculture	34,481	34,481	34,481
5	Tariff-LTPL/Public Lighting	9,598	9,598	9,598
6	Tariff-LT PWW/Public Water Works	3,877	3,877	3,877
	Total LT Category	16,20,186	16,27,400	16,34,650
7	Tariff HT-Mixed	75,073	75,073	75,073
8(a)	Tariff HTI/Industrial	2,49,086	2,49,086	2,49,086
8(b)	Tariff HTI/Hotel Industries	44,402	44,402	44,402
8(c)	Tariff HTI/Ice Manufacturing	364	364	364
9	H.T. Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive)	94,416	94,416	94,416
10	Tariff-HTAG/Agriculture	8,378	8,378	8,378
11	EHTI/Industrial	53,166	53,166	53,166
12	H.T. PW/Public Water Supply & Sewage	30,885	30,885	30,885
13	H.T. MES/Defense Establishments	7,080	7,080	7,080
14	H.T. Industrial (Steel Rolling)	20,340	20,340	20,340
15	Tariff HT-Industries (IT High Tech).	7,004	7,004	7,004
	Total HT Category	5,90,194	5,90,194	5,90,194
C	Temporary Supply	1,098	1,098	1,098
16	<i>Tariff-LT/Temporary</i>	1,098	1,098	1,098
17	<i>Tariff-HT/Temporary</i>	-	-	-
	<i>Hoarding / Sign Board</i>	35	35	35
	Total Connected Load	22,11,477	22,18,692	22,25,942

Commission View

The Commission has considered same approach and methodology for approval of connected load as considered for approval of energy sales and number of consumers above.

Table 6.11: Category-wise growth rate for connected load as considered by the Commission

Sr. No.	Category of Consumer	CAGR				Proposed	Approved
		3 Years FY 12 to FY 15	2 Years FY 13 to FY 15	3 Years FY 11 to FY 14	2 Years FY 12 to FY 14		
A	Low Tension Supply						
1(a)	LTD/Domestic and Non - Commercial	19.08%	5.56%	17.12%	25.44%	0.50%	5.56%
1(b)	LTD/Low Income Group	-57.96%	-47.81%	-30.75%	-36.76%	0.00%	0.00%
1(c)	LTD/Domestic Mixed	437.50%	150.80%	208.70%	435.88%	0.00%	0.00%
2	LTC/Commercial	2.60%	0.40%	6.19%	5.34%	0.50%	0.50%
3	LTI/Industries	-30.54%	-16.90%	-13.63%	-28.13%		
	Motive Power	-30.99%	-12.93%	-16.68%	-32.21%	0.00%	0.00%
	Ice Manufacturing	0.00%	12.46%	0.00%	0.00%	0.00%	0.00%
	Public Water Works	-32.04%	-57.35%	22.10%	34.21%	0.00%	0.00%
4	LTP/Mixed (Hotel Industries)	0.00%	12.88%	0.00%	0.00%	0.00%	0.00%
5	LTAG/Agriculture	-19.56%	-25.50%	11.83%	0.56%	0.00%	0.00%
6	LTPL/Public Lighting	-8.84%	6.58%	5.62%	-6.46%	0.00%	0.00%
7	LTH Hoarding / Sign Board	0.00%	0.00%	0.00%	0.00%		
8	LT/Temporary	-25.17%	-74.28%	54.12%	93.51%		
B	High Tension Supply						
9	HTI/Industrial						
	HT Mixed	1.03%	9.15%	3.83%	-3.34%	0.00%	0.00%
	HTI Industrial	2.30%	4.35%	0.77%	1.84%	0.00%	0.00%
	HTI Hotel Industries	0.00%	-38.82%	0.00%	0.00%	0.00%	0.00%
	HT Industries (IT High-tech)	30.00%	15.73%	17.97%	35.94%	0.00%	0.00%
	HT Public Water and Sewerage	4.48%	10.26%	-6.08%	5.23%	0.00%	0.00%
	HT Ice Manufacturing	-3.09%	34.91%	0.00%	-4.61%	0.00%	0.00%
	EHTI Industrial	-3.95%	-9.50%	-13.28%	-13.88%	0.00%	0.00%
10	HT Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/Steel Rolling)						
	Ferro Metallurgical/ Steel Melting/ Power Intensive	-1.63%	0.65%	-9.02%	-3.07%	0.00%	0.00%
	Steel Rolling	0.56%	2.79%	-5.27%	-6.06%	0.00%	0.00%
11	HTC/Commercial	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
12	HTAG/Agriculture	-0.28%	1.08%	-8.21%	-2.27%	0.00%	0.00%
13	HTD/Domestic	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
14	H.T. MES/Defense Establishments	1.98%	1.96%	-3.66%	2.99%	0.00%	0.00%
15	HTTS/Temporary	0.00%	-100.00%	0.00%	0.00%	0.00%	0.00%

Keeping in view the above submissions made by the Petitioner, the Commission approves the connected load for the MYT Control Period as follows:

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Table 6.12: Category-wise connected load as approved by the Commission for MYT Control Period (in kW/kVA/HP)

Sr. No.	Category of Consumer	CAGR	FY 16	FY 17	FY 18	FY 19
		Approved	Base Year	MYT Control Period		
A	Low Tension Supply					
1(a)	LTD/Domestic and Non - Commercial	5.56%	1215186	1282744	1354057	1429336
1(b)	LTD/Low Income Group	0.00%	338	338	338	338
1(c)	LTD/Domestic Mixed	0.00%	13044	13044	13044	13044
2	LTC/Commercial	0.50%	278739	280133	281533	282941
3	LTI/Industries		115580	115580	115580	115580
	Motive Power	0.00%	109269	109269	109269	109269
	Ice Manufacturing	0.00%	2433	2433	2433	2433
	Public Water Works	0.00%	3877	3877	3877	3877
4	LTP/Mixed (Hotel Industries)	0.00%	4285	4285	4285	4285
5	LTAG/Agriculture	0.00%	34481	34481	34481	34481
6	LTPL/Public Lighting	0.00%	9598	9598	9598	9598
7	LTH Hoarding / Sign Board		0	0	0	0
8	LT/Temporary		1098	1098	1098	1098
Sub Total LT			1672349	1741300	1814014	1890700
B	High Tension Supply					
9	HTI/Industrial		459980	459980	459980	459980
	HT Mixed	0.00%	75073	75073	75073	75073
	HTI Industrial	0.00%	249086	249086	249086	249086
	HTI Hotel Industries	0.00%	44402	44402	44402	44402
	HT Industries (IT High-tech)	0.00%	7004	7004	7004	7004
	HT Public Water and Sewerage	0.00%	30885	30885	30885	30885
	HT Ice Manufacturing	0.00%	364	364	364	364
	EHTI Industrial	0.00%	53166	53166	53166	53166
10	HT Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/Steel Rolling)		114756	114756	114756	114756
	Ferro Metallurgical/ Steel Melting/ Power Intensive	0.00%	94416	94416	94416	94416
	Steel Rolling	0.00%	20340	20340	20340	20340
11	HTC/Commercial	0.00%	0	0	0	0
12	HTAG/Agriculture	0.00%	8378	8378	8378	8378
13	HTD/Domestic	0.00%	0	0	0	0
14	H.T. MES/Defense Establishments	0.00%	7080	7080	7080	7080
15	HTTS/Temporary	0.00%	0	0	0	0
Sub Total HT			590194	590194	590194	590194
Total Connected Load			2262543	2331494	2404208	2480894

The Commission directs the Petitioner to submit the Projections based on the figures submitted to the CAG for Audit purposes for the FY 2011-12 and FY 2012-13, actual figures for the newly created and other consumer categories in the MYT Petition based on which,

the Commission shall revisit the sales projections for MYT Control Period during the finalization of MYT Tariff Order.

6.4. Transmission and Distribution (T&D) Losses

Petitioner Submission

The Petitioner has proposed a T&D loss level of 14%, 13.75% and 13.5% respectively for the FY 2016-17 to FY 2018-19. The Petitioner has further submitted that considering the optimal distribution loss levels of ED-Goa, it finds it technically difficult to further reduce the T&D loss. Efforts are being taken to reduce these losses further and in line with that a 0.25% reduction in losses every year is considered for the control period.

Commission Analysis

The Commission has approved the T&D losses of 11.50% for the FY 2014-15 & FY 2015-16 as per the Tariff Order dated 06thApril2015. The Commission, while approving the loss for the FY 2015-16 in its Tariff Order dated 06th April2015 has noted:

‘The Commission observed that the proposed T&D loss by ED-Goa for FY 2015-16 is at higher level than that of FY 2014-15 (11.50%). The Petitioner has not provided adequate basis for consideration of such increased loss levels. The Petitioner has envisaged high levels of capital investment which include system improvement schemes. The Commission therefore does not find any merit in the plea of the Petitioner for approving higher level of losses projected.’

In the absence of conduct of energy audit as specified in Regulation 15 of the JERC (Terms and Conditions for determination of Tariff) Regulations, 2009, the Commission for the purpose of determination of ARR for FY 2015-16 in the Order dated 06thApril 2015, had approved the T&D loss level at 11.50%each for FY 2014-15 &FY2015-16 respectively.

The Commission has taken note of the difficulties expressed by the Petitioner and considered a reduction of 0.25% for the T&D loss trajectory for the control period to be reasonable. The Commission expects that with such huge capex being undertaken, the Petitioner shall be able to achieve the T&D loss trajectory as set out in this Business Plan Order for the Control period FY 2016-17 to FY 2018-19.

In view of the above, the Commission approves the below mentioned T&D loss trajectory for the Control Period:

Table 6.13: T&D Loss Trajectory as proposed by the Petitioner and approved by the Commission

Particulars	FY 17		FY 18		FY 19	
	Submitted	Approved	Submitted	Approved	Submitted	Approved
T&D Loss	14.00%	11.25%	13.75%	11.00%	13.50%	10.75%

The gain/loss arising out the T&D loss achievements shall be computed as per the approved trajectory of the T&D losses in accordance with the Regulation 10 and 11 of the MYT Regulations 2014.

6.5. Aggregate Technical & Commercial (AT&C) Losses

Petitioner Submission

The Petitioner has not submitted the AT&C losses for previous years as well as the MYT Control Period.

Commission Analysis

The Commission is extremely concerned about the accuracy of the data being maintained. The Commission expects the Petitioner to achieve 100% collection efficiency by the end of the control period i.e. FY 2018-19.

Based on the approved T&D loss levels as above and taking into consideration, the collection efficiency of 98%, 99% and 100% respectively for the FY 2016-17 to FY 2018-19, the Commission approves the AT&C loss of 13.03%, 11.89% and 10.75% for the FY 2016-17, FY 2017-18 and FY 2018-19.

The Petitioner is expected to initiate efforts to improve the collection efficiency and submit the quarterly status report before the Commission.

Table 6.14: AT&C Losses approved by the Commission for the control period

S. No.	Particulars	FY 17		FY 18		FY 19	
		Proposed	Approved	Proposed	Approved	Proposed	Approved
1	T&D Losses	14.00%	11.25%	13.75%	11.00%	13.50%	10.75%
2	Collection Efficiency	-	98%	-	99%	-	100%
3	AT&C Losses	-	13.03%	-	11.89%	-	10.75%

6.6. Energy Efficiency

Petitioner Submission

The Petitioner has submitted that it is implementing DSM based Efficient Lighting Program (DELP) under the demand side management program in the State of Goa along with Energy Efficiency Services Limited (EESL). The Petitioner has considered energy savings of 66.60 MU annually to accrue under the DELP scheme.

Commission Analysis

The Commission has noted the submissions of the Petitioner, which appears reasonable. Accordingly, the Commission approves the energy savings of 66.60 MU annually for the

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

Control period which has also been considered for arriving at the energy requirements at the periphery of the ED-Goa.

Table 6.15: Energy savings under DELP scheme approved by the Commission (MU)

Particulars	FY 17		FY 18		FY 19	
	Proposed	Approved	Proposed	Approved	Proposed	Approved
Energy savings under DELP	66.60	66.60	66.60	66.60	66.60	66.60

6.7. Energy Requirement

Petitioner Submission

The Petitioner has submitted the projection of demand by grossing up the consumption projections with the proposed distribution loss trajectory.

Commission Analysis

The Commission has observed that there are variations in the sales figures submitted by the Petitioner while projecting sales under the energy requirements and as projected in consumer category-wise sales for the Control period FY 2016-17 to FY 2018-19. The Petitioner has also not considered the energy savings under the DELP for projecting the energy requirements for the Control period from FY 2016-17 to FY 2018-19. Based on the approved sales, T&D losses and energy savings approved by the Commission, energy requirements approved by the Commission are as below:

Table 6.16: Energy requirement for the Control Period approved by the Commission (MU)

S. No.	Particulars	FY 17		FY 18		FY 19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Sales within State (MU)	3356.00	3351.81	3507.00	3494.36	3667.00	3644.58
2	Savings under DELP (MU)	-	66.60	-	66.60	-	66.60
3	Total Sales	3356.00	3285.21	3507.00	3427.76	3667.00	3577.98
4	Loss (%)	14.00%	11.25%	13.75%	11.00%	13.50%	10.75%
	Loss (MU)	546.33	416.44	559.09	423.66	572.31	430.96
5	Sales to common pool consumers/UI	-	-	-	-	-	-
6	Energy Requirement at periphery (MU)	3902.33	3701.65	4066.09	3851.41	4239.31	4008.94

6.8. Power Procurement Plan

Petitioner Submission

The Petitioner has submitted the estimates of the power purchase quantum and cost for the control period based on the merit order principles and latest allocation as available at the time of filing of the business plan Petition from different sources i.e. Central Generating Sources, State Generating Sources and Short Term etc. as mentioned below:

Table 6.17: Sources of Power proposed by the Petitioner

Sr. No.	Source	Capacity (MW)	Firm allocation to Licensee	
			%	MW
1	2	3	4	
	Central Sector Power Stations			
I	NTPC	24,034		535.41
	KSTPS	2,100	10.03%	210.55
	KSTPS-III	500	0.95%	4.76
	VSTPS - I	1,260	2.82%	35.50
	VSTPS - II	1,000	1.24%	12.37
	VSTPS -III	1,000	1.04%	10.37
	VSTPS-IV	1,000	1.17%	11.72
	KGPP	656	1.89%	12.37
	GGPP	657	1.92%	12.63
	SIPAT- I	1,980	1.06%	21.04
	RSTPS	2,100	4.76%	100.00
	SIPAT- II	1,000	1.04%	10.36
	Mouda	1,000	1.17%	11.72
	Vindhyachal V	500	1.20%	6.00
	Mouda II	1,320	1.14%	15.00
	Solapur	1,320	1.59%	21.00
	Lara I & II	4,000	0.58%	23.00
	Gadarwara I	2,640	0.64%	17.00
II	NVVNL Hydro	-		10.00
	Kameng HEP	600	0.33%	2.00
III	NPCIL	2,920		42.28
	KAPS	440	3.44%	15.14
	TAPS	1,080	1.06%	11.46
	KAPS Unit 3 and 4	1,400	1.12%	15.68
	Total	26,954		587.69

Commission Analysis

As per the Regulation 9.1 of the MYT Regulations, 2014, power purchase is an uncontrollable parameter and has to be revisited every year by the Commission based on the audited accounts and latest allocation available at the prevailing rates. The

Commission, therefore, finds it appropriate to review and approve the power purchase quantum and cost at the time of finalization of MYT Order/APR Orders.

Accordingly, the Commission, for the purposes of the business plan has considered approving the sources of power purchase for the utility. The Commission shall determine the exact quantum and thereby the power purchase cost based on the following at the time of finalization of MYT Order:

1. Merit Order Principles
2. Latest Allocation Orders
3. Audited Accounts
4. Latest Orders issued by CERC
5. Latest Variable Costs
6. Interstate Transmission Losses

The sources of power approved by the Commission are as follows:

Table 6.18: Sources of Power Approved by the Commission

Sr. No.	Source	Capacity (MW)
1	2	3
	Central Sector Power Stations	
I	NTPC	24,034
	KSTPS	2,100
	KSTPS-III	500
	VSTPS - I	1,260
	VSTPS - II	1,000
	VSTPS -III	1,000
	VSTPS-IV	1,000
	KGPP	656
	GGPP	657
	SIPAT- I	1,980
	RSTPS	2,100
	SIPAT- II	1,000
	Mouda	1,000
	Vindhyachal V	500
	Mouda II	1,320
	Solapur	1,320
	Lara I & II	4,000
	Gadarwara I	2,640
II	NVVNL Hydro	-
	Kameng HEP	600
III	NPCIL	2,920
	KAPS	440
	TAPS	1,080
	KAPS Unit 3 and 4	1,400
	Total	26,954

The Commission has observed that the Petitioner is relying primarily on the allocations of the Central Government, which are at higher cost and therefore, advises it to undertake efforts to procure power at cheaper rates through the competitive bidding route.

6.9. Renewable Purchase Obligation (RPO)

Petitioner Submission

The Petitioner has submitted the RPO for the Control period based on the JERC (Procurement of Renewable Energy) First Amendment Regulations, 2014. The Petitioner has submitted that the department would be opting for all the options available to meet the RPO by way of procuring power from renewable sources, tying up with the renewable generators or buying REC. In order to meet the targets set by MNRE of 100GW solar by the year 2022, there is much emphasis given on roof top solar. The Hon'ble Commission has issued Solar Regulations 2015 in order to promote rooftop solar. In this regards only 7 interested private and Govt. solar developers have sent proposals, in which only 2 have quoted the price of Rs. 8.51 per kWh which is very high. Department is currently studying the proposals and soon, an action plan will be formulated to actively carry on solar rooftop activity. ED-Goa would be procuring Renewable Energy Certificates/ Non-solar power for meeting the RPO during MYT control period whichever is cheapest and available.

Commission Analysis

The Commission has taken note of the submissions of the Petitioner and appreciates the efforts being made/envisaged to be made by the Petitioner to meet the RPO. Actual compliance in respect of the pending RPO shall be reviewed at the time of true-up of the respective years and all the pending RPOs up to FY 2014-15 (based on actual compliance) must be accounted for by the FY 2015-16. Supporting details such as purchase of RECs, Invoices from solar/non-solar plants for the respective years must be submitted alongside during the MYT filing.

The Commission approves the RPO for each year of the Control period based on the mandate as per the JERC (Procurement of Renewable Energy) First Amendment Regulations, 2014 as below: The Commission directs that all pending RPO up to the FY 2015-16 must be fulfilled by the Petitioner by 31st March 2016 and no backlog shall be allowed to be carried forward to the Control period FY 2016-17 to FY 2018-19. The Commission expects that the Petitioner would give priority to obtaining physical solar and non-solar power.

Table 6.19: RPO obligation for each year approved by the Commission for the control period

S. No.	Particulars	FY 17		FY 18		FY 19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Sales (MU)	3356.00	3351.81	3507.00	3494.36	3667.00	3644.58
2	Percentage (%)	3.95%	3.95%	4.30%	4.30%	4.65%	4.65%

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

S. No.	Particulars	FY 17		FY 18		FY 19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
	Solar	1.15%	1.15%	1.50%	1.50%	1.85%	1.85%
	Non-Solar	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%
3	Million Units (MU)	132.56	132.40	150.80	150.26	170.52	169.47
	Solar	38.59	38.55	52.61	52.42	67.84	67.42
	Non-solar	93.97	93.85	98.20	97.84	102.68	102.05

6.10. Norms for O&M

The Petitioner has submitted that the Operation and Maintenance (O&M) Expenses comprising of Employee Expenses, Administration & General (A&G) Expenses and Repairs & Maintenance (R&M) Expenses are linked to certain parameters provided in MYT Regulations 2014. The Petitioner proposes norms in this Business Plan and request that the Hon'ble Commission may approve norms in such a manner that the O&M expenses for future years should not be less than that of actual of previous year plus arrears plus pay revisions if any and pension/ gratuity etc.

6.11. Norms for Employee Costs

Petitioner Submission

The Petitioner has submitted the norms for the employee expenses based on the Regulations to be determined based on number of personnel per 1000 consumers and number of personnel per substation. The following table shows the number of personnel per 1000 consumers, number of personnel per substation and employee expenses per personnel for the last six years.

Table 6.20: Employee Expense Parameters for last six years submitted by Petitioner

Sr. No.	Particulars	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
1	Number of employees at the end of the year	5873	5940	6157	6506	6326	6583
2	Number of consumers ('000)	538	574	580	585	583	576
3	No. of employees per '000 consumers	11	11	11	12	11	12
4	No. of employees per sub-station	120	119	123	130	127	124

The historical data of employee expenses (at actual) as submitted by the Petitioner is as below:

Table 6.21: Historical Employee Expenses (Rs. Crores)

S. No.	Particulars	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
		Actual (audited)	Actual (audited)	Provisional	Provisional	Provisional	Provisional
1	Total Employee Expenses	124.29	123.51	125.89	143.16	168.41	193.72

Commission Analysis

As per Regulation 21(b) of the MYT Regulations 2014, norms for the Employee Expenses shall be defined in terms of combination of number of personnel per 1000 consumers and number of personnel per substation along with annual expenses per personnel.

The Commission has observed that the audited accounts for the FY 2009-10 and FY 2010-11 have not been provided: the unaudited accounts for FY 2011-12 and FY 2012-13 are in process of being finalized and beings sent to CAG; and from FY 2013-14 onwards the accounts of ED-Goa are still at the compilation stage. This indicates that none of the figure submitted by ED-Goa can be taken as authentic figure for the purpose of computation of O&M Norms which shall go a long way in fixing their targets and approval of their ARR Components.

The Commission has also compared the information submitted by ED-Goa viz a viz the information provided by other Union Territories. The Commission has observed that while ED-Puducherry and ED Chandigarh have managed with almost 5~6 employees per 1000 consumers, ED-Daman and Diu with 4~5 employees per 1000 consumers, ED-DNH with 1~2 employees per 1000 consumers, ED-Goa has submitted almost double manpower requirement per 1000 consumers which is not comparable.

Similarly, while number of employees per substations ranges from 1 in case of ED-Chandigarh to almost 30 in case of ED- Daman and Diu, ED-Goa has submitted almost four times the manpower requirement per substation, which again is not comparable,

Further, the Commission, in the last tariff order, has directed the Petitioner the following:

“The Commission has noted that GED has not done much in context of manpower rationalization. Its manpower costs are on a relatively higher side. Hence, JERC directs that GED will undertake a systemic manpower study report to identify areas where there is excess and work out a systemic plan to reduce the same.”

The compliance of the said directive is awaited.

The Commission is of the view that Goa being the biggest State in its jurisdiction, norms still needs to be formulated for the Control Period even in absence of authentic information and justification. Accordingly, the Commission, while setting up the norm of employee expenses has considered the expenses as submitted by the Petitioner in the above table.

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

The Regulation specifies the employee expenses norms to be determined based on number of personnel per 1000 consumers and number of personnel per substation. However, the Regulations are silent on the weightage to be given for linking the no. of employees with consumers and substations respectively; hence, 40:60 weightage is taken for the purpose of calculation of the norms as projected by the Petitioner as reasonable. The number of employees per '000 consumers as analyzed is as below:

Table 6.22: Employee Expense Parameters for last six years considered by Commission

S. No.	Particulars	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	Average last 5 years
		Actual	Actual	Prov.	Prov.	Prov.	Prov.	
1	No. of employees (in Nos.)	5,873	5,940	6,157	6,506	6,326	6,583	
2	Number of consumers (in '000)	538	574	580	585	583	576	
3	No. of employees per '000 consumers	10.92	10.35	10.62	11.12	10.85	11.44	10.87
4	<i>For Linking 40% to consumers</i>	4.37	4.14	4.25	4.45	4.34	4.57	4.35
5	No. of Substations (in Nos.)	49	50	50	50	50	53	
6	No. of Employees per substation	119.86	118.80	123.14	130.12	126.52	124.21	124.56
7	<i>For Linking 60% to Sub-station</i>	71.91	71.28	73.88	78.07	75.91	74.52	74.73
8	Annual Expenses per employee (in Lakhs)	2.12	2.08	2.04	2.20	2.66	2.94	2.80*

** Last 2 years average*

The Commission has noted the submission of the Petitioner and provisionally approves the norms as follows:

- | | |
|--|---------------|
| 1. Cost per employee | Rs 2.80 Lakhs |
| 2. No. of employees per 1000 consumers | 4.35 |
| 3. No. of employees per substation | 74.73 |

The Commission considers the employee expense of Rs 2.80 Lakhs per personnel as reasonable for the Control period FY 2016-17 to FY 2018-19 and approves the same provisionally. The same shall be considered as the base employee expense as at the end of the FY 2014-15 suitably escalated by the Wholesale Price Index (WPI) for immediately preceding three years, as per the Regulation 21.1 of the MYT Regulations 2014 to arrive at the employee expenses for the Control period.

The Commission understand that the accounts of the Petitioner for the FY 2011-12 to FY 2014-15 are still being finalized/compiled/ in process of auditing, and hence the norms are being approved provisionally based on the information submitted by the Petitioner, the Commission shall revisit the norms at the time of filing of the MYT Petition for the Control period based on the then finalized accounts.

The Commission directs the Petitioner to submit the norms again along with audited accounts of FY 2009-10 and FY 2010-11; provisional accounts for FY 2011-12 and FY 2012-13 and compiled accounts from the FY 2013-14 and FY 2014-15 along with the MYT Petition.

The treatment of the employee expenses during the true-up would be in accordance with the provisions of Regulation 9.2, 10 and 11 of the MYT Regulations 2014.

6.12. Norms for Administration & General (A&G) Expenses

Petitioner Submission

The Petitioner has considered the historical trend of the A&G expenses for the last 6 years from FY 2009-10 to FY 2014-15. The Petitioner has submitted that the A&G expenses as per the Regulations are to determined based on combination of A&G expense per personnel and A&G expense per 1000 consumers. However, the regulations are silent on the weightage to be given for linking the A&G expenses with consumers and employees respectively; hence, an assumption of 50:50 weightage is taken for the purpose of calculation of the norms. The historical A&G expenses as submitted by the Petitioner are as below:

Table 6.23: Historical A&G Expenses (Rs. Crores)

S. No.	Particulars	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
		Actual (audited)	Actual (audited)	Provisional	Provisional	Provisional	Provisional
1	Total A&G expenses	20.18	17.84	19.31	6.20	7.85	9.97

Table 6.24: A&G Expense Parameters for last five years submitted by Petitioner

Computation of A&G Norms							
Particulars	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	5 year Average
A&G Expenses (Rs Lakh/ 1000 Consumer)	3.75	3.11	3.33	1.06	1.35	1.73	2.52
<i>For Linking 50% to consumers</i>	1.88	1.55	1.66	0.53	0.67	0.87	1.26
A&G Expenses (Rs Lakh/ per personnel)	0.34	0.30	0.31	0.10	0.12	0.15	0.24
<i>For Linking 50% to Employees</i>	0.17	0.15	0.16	0.05	0.06	0.08	0.12

Commission Analysis

As per Regulation 21 (b) of the MYT Regulations 2014, norms for A&G Expenses shall be defined in terms of combination of A&G expense per personnel and A&G expense per 1000 consumers.

For purposes of arriving at the A&G expenses trajectory, the Commission has computed the A&G expenses per personnel and A&G expenses per 1000 consumers based on the average employee expenses of last three years. Based on the average employee expenses so arrived, the Commission has worked out the A&G expenses per employee of Rs. 0.06 lakhs and A&G

Business Plan Order MYT Control Period (FY 2016-17 to FY 2018-19)

expense per '000 consumers of Rs. 0.69 lakhs, which are considered reasonable for the Control period and approved provisionally by the Commission.

The Commission has also compared the information submitted by ED-Goa viz a viz the information provided by other Union Territories. The Commission has observed that A&G Expenses per 1000 consumers and per person is comparable with information submitted by other utilities.

Table 6.25: A&G Expenses Norms considered by the Commission (Rs. Crores)

Computation of A&G Norms						
Particulars	FY 11	FY 12	FY 13	FY 14	FY 15	3 year Average
A&G Expenses (Rs Lakh/ 1000 Consumer)	3.11	3.33	1.06	1.35	1.73	1.38
<i>For Linking 50% to consumers</i>	1.55	1.66	0.53	0.67	0.87	0.69
A&G Expenses(Rs Lakh/ per personnel)	0.30	0.31	0.10	0.12	0.15	0.12
<i>For Linking 50% to Employees</i>	0.15	0.16	0.05	0.06	0.08	0.06

The Commission understand that the accounts of the Petitioner for the FY 2011-12 to FY 2014-15 are still being finalized/compiled/ in process of auditing, and hence the norms are being approved provisionally based on the information submitted by the Petitioner, the Commission shall revisit the norms at the time of filing of the MYT Petition for the Control period based on the then finalized accounts.

The Commission directs the Petitioner to submit the norms again along with audited accounts of FY 2009-10 and FY 2010-11; provisional accounts for FY 2011-12 and FY 2012-13 and compiled accounts from FY 2013-14 and FY 2014-15 along with the MYT Petition.

The A&G expenses for the control period would be determined in accordance with Regulation 21.3 of the MYT Regulations 2014. The treatment of the A&G expenses during the true-up would be in accordance with the provisions of Regulation 9.2, 10 and 11 of the MYT Regulations 2014.

6.13. Norms for Repair & Maintenance (R&M) Expenses

Petitioner Submission

The Petitioner has submitted that the Regulations specify R&M expenses norms to be determined as a percentage of Gross Fixed Assets (GFA). The following table shows the R&M expenses and GFA for last five years. The actual opening value of GFA as per the asset register prepared by the department till FY 2012-13 has been considered. ED-Goa has come under the regulatory regime since FY 2010-11 and further the Regulations also remain silent on the number of years to be considered for norms calculation. Hence the calculation of the norms has been considered on the basis of last 5 year average as follows:

Table 6.26: Norms for R&M proposed by the Petitioner.

Computation of R&M Norms -(% of GFA)						
Particulars	FY 10	FY 11	FY 12	FY 13	FY 14	5 year Average
Total R&M Expenses (Rs. Crs)	16.69	16.55	17.03	18.94	25.57	18.96
Total GFA Opening (Rs.Crs)	420.64	499.57	595.50	693.69	816.84	605.25
R&M expenses (% of GFA)	4.0%	3.3%	2.9%	2.7%	3.1%	3.1%

Commission Analysis

As per the Regulation 21(b) and 21.2 of the MYT Regulations 2014, norms for R&M Expenses shall be defined in terms of percentage of opening gross fixed assets for estimation of R&M expenses. Accordingly, the Commission has analyzed the figures of the R&M expenses and the opening GFA submitted by the Petitioner from FY 2009-10 to FY 2013-14 and observes that the Petitioner has not furnished the details of GFA for FY 2014-15.

Table 6.27: R&M Expenses considered by the Commission

Computation of R&M Norms -(% of GFA)						
Particulars	FY 10	FY 11	FY 12	FY 13	FY 14	3 year Average
R&M Expenses (Rs. Crores)	16.69	16.55	17.03	18.94	25.57	20.51
Opening GFA (Rs. Crores)	420.64	499.57	595.50	693.69	816.84	702.01
R&M expense as %of GFA	3.97%	3.31%	2.86%	2.73%	3.13%	2.92%

The Commission has, therefore, considered the normalized trend of the historical expenses for the last 3 years, excluding the FY 2014-15 and arrived at the K-factor of 2.92% instead of 3.1% as proposed by the Petitioner based on the five years average.,

The Commission considers the approves the K-factor of 2.92% as reasonable and approves the same provisionally for the Control period FY 2016-17 to FY 2018-19 to enable the Petitioner to have sufficient corpus of R&M funds available for the regular up-keep and maintenance of the network during the control period.

The Commission has also compared the information submitted by ED-Goa viz a viz the information provided by other Union Territories and has observed that the R&M Expenses of other Union Territories are in a range from 1.63% to 2.67% of the GFA, which is lower than the K factor proposed by the Petitioner and even as approved by the Commission.

The Commission understand that the accounts of the Petitioner for the FY 2011-12 to FY 2014-15 are still being finalized/compiled/ in process of auditing, and hence the norms are being approved provisionally based on the information submitted by the Petitioner, the Commission shall revisit the norms at the time of filing of the MYT Petition for the Control period based on the then finalized accounts.

The Commission directs the Petitioner to submit the norms again along with audited accounts of FY 2009-10 and FY 2010-11; provisional accounts for FY 2011-12 and FY 2012-13 and compiled accounts from FY 2013-14 and FY 2014-15 along with the MYT Petition.

The Commission expects that post regular maintenance work undertaken by the Department, the consumer grievances would come down as has been highlighted during the public hearing that *“no proper maintenance of the network is being undertaken, resulting into frequent outages and also higher T&D losses”*. The Commission expects that the R&M work in respect of the under-ground cables would be taken up on priority. Quarterly Status Report regarding various R&M activities being carried out by the department need to be reported to the Commission.

The treatment of the R&M expenses during the true-up would be in accordance with the provisions of Regulation 9.2, 10 and 11 of the MYT Regulations 2014.

6.14. Normative levels of Availability for Wires and Supply Business

Petitioner Submission

The Petitioner has submitted the wires availability as 97.86% based on the last three financial year average data and the supply availability as 99% for the control period from FY 2016-17 to FY 2018-19 for the State of Goa.

Commission Analysis

The Commission has reviewed the submissions made by the Petitioner and observes that while the reliability indices of all the divisions are at commendable level, the Petitioner needs to work upon improving the reliability in the O&M divisions VII, X & XIV, which presently stands at 88.89%, 96.84% and 96.29% respectively. The Commission expects the reliability to further improve in view of the capital expenditure approved by the Commission for the MYT Control Period. The Commission thus approves the wires availability as 97.86%, 98% and 99% for FY 2016-17, FY 2017-18 and FY 2018-19.

The Commission is of the view that the supply availability as 99% as projected by the Petitioner for the Control Period from FY 2016-17 to FY 2018-19 is at optimum level and accordingly approves it. The same would be revisited once the actual figures are submitted as the time of filing of the true up Petition.

7. Directives based on the Business Plan Analysis

The Commission has, herein below list out the directives based on the analysis of the business plan. The Compliance to the directives issued in the previous Tariff Orders be submitted to the Commission along with the MYT Petition for the FY 2016-17 to FY 2018-19.

7.1. Audit Accounts from FY 2011-12 to FY 2014-15

The Commission directs the Petitioner that the finalisation of the audited accounts from the FY 2011-12 to FY 2014-15 be expedited and the true-up Petition be submitted along with the MYT Petition for the control period from the FY 2016-17 to FY 2018-19.

7.2. Submission of Status Reports

The Commission directs the Petitioner to submit the month-wise details of accidents related to electrical network and also number of fatalities for past 2 years by 31st January 2015 after which the Commission shall take appropriate action.

The Commission also directs the Petitioner to submit the status report of physical progress of the R-APDRP Part A scheme by 30th September 2016.

7.3. Billing and Collection Efficiency

The Commission directs the Petitioner to submit the quarterly progress report on the status of the collection of arrears along with an action plan for liquidating the arrears, if any. The Commission advises the Petitioner to install prepaid meters at all locations wherein it is facing either the billing or collection issues.

7.4. Renewable Purchase Obligation (RPO)

The Commission appreciates efforts being made by the Petitioner to fulfil the RPO obligation. The Commission expects that the Petitioner would give priority to obtaining the physical solar and non-solar power. The actual RPO compliance would be reviewed at the time of true-up of the respective years and all pending RPOs up-to FY 2014-15 (based on actual) must be accounted for by the FY 2015-16. Supporting details such as purchase of RECs, Invoices from solar/non-solar plants for the respective years be also submitted along with the MYT Petition filing.

The Commission directs the Petitioner that all pending RPOs up-to FY 2015-16 must be fulfilled by 31st March 2016 and no backlog would be allowed to be carried forward to the control period FY 2016-17 to FY 2018-19.

7.5. Capital Expenditure

The Commission directs the Petitioner to submit the details of the following schemes duly approved by the Government for its consideration:

- (i) The remaining part amounting to Rs 83.18 Crores of the Schedule Tribe Development Scheme
- (ii) The details of the EHV new Transmission / Sub-Station / Capacitor banks schemes.

The Commission also directs the Petitioner to submit scheme wise actual progress of capital expenditure and capitalization with the annual tariff filings and the Commission will accordingly revisit the requirements of capital expenditure and capitalization for the ensuing years.

The Commission also directs the Petitioner to submit the details of capital expenditure schemes of Rs 10 Crores and more for prior approval of the Commission in line with the Regulation 22 (b) of the MYT Regulations 2014.

7.6. Sales, Number of Consumers and Connected Load

The Commission directs the Petitioner to submit the Projections based on the figures submitted to the CAG for Audit purposes for the FY 2011-12 and FY 2012-13, actual figures for the newly created and other consumer categories in the MYT Petition based on which, the Commission shall revisit the projections for MYT Control Period during the finalization of MYT Order.

7.7. Norms for O&M Expenses

The Commission directs the Petitioner to submit and propose the O&M norms duly justified based on the audited accounts of FY 2009-10 and FY 2010-11 and provisional accounts for FY 2011-12 and FY 2012-13 along with the MYT Petition.

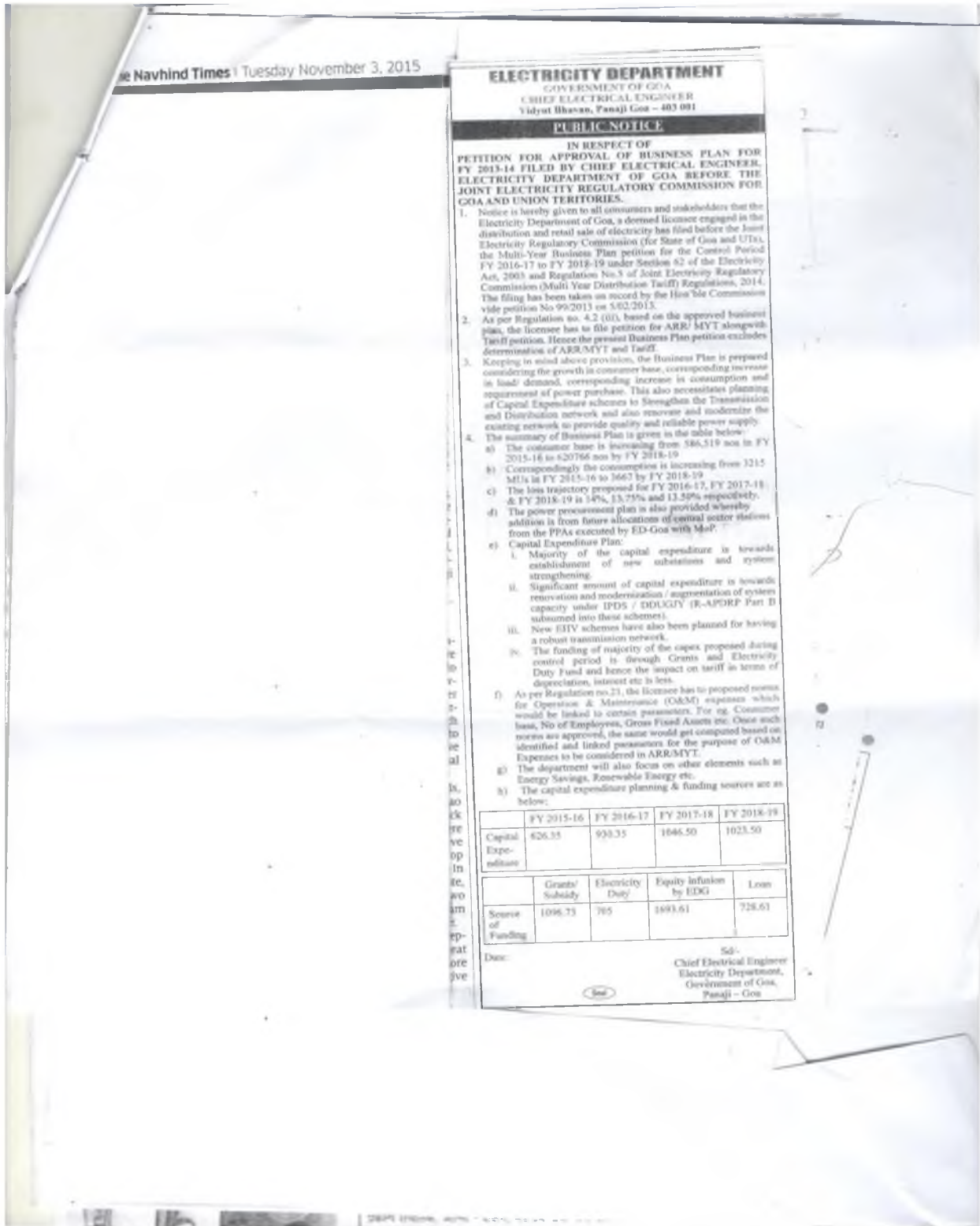
7.8. Unbundling and Corporatisation

As part of the Power Sector reforms as envisaged by the Electricity Act, 2003, the transmission and distribution activities are to be separated and independent corporations are to be formed. The transmission companies and the distribution companies thus formed under the Companies Act will have a distinct legal identity, apart from providing the

management with better financial autonomy and more delegation of powers. Further, the new management structure ensures financial accountability and better consumer satisfaction.

The steps taken by the department in this regard are noted. However, the Petitioner is directed to speed-up its efforts in this regard and submit quarterly progress report in this regard before the Commission.

Annexure 1: Public Notices published by the Petitioner



ELECTRICITY DEPARTMENT
 GOVERNMENT OF GOA
 CHIEF ELECTRICAL ENGINEER
 Vidrut Bhasan, Panaji Goa - 403 001

PUBLIC NOTICE

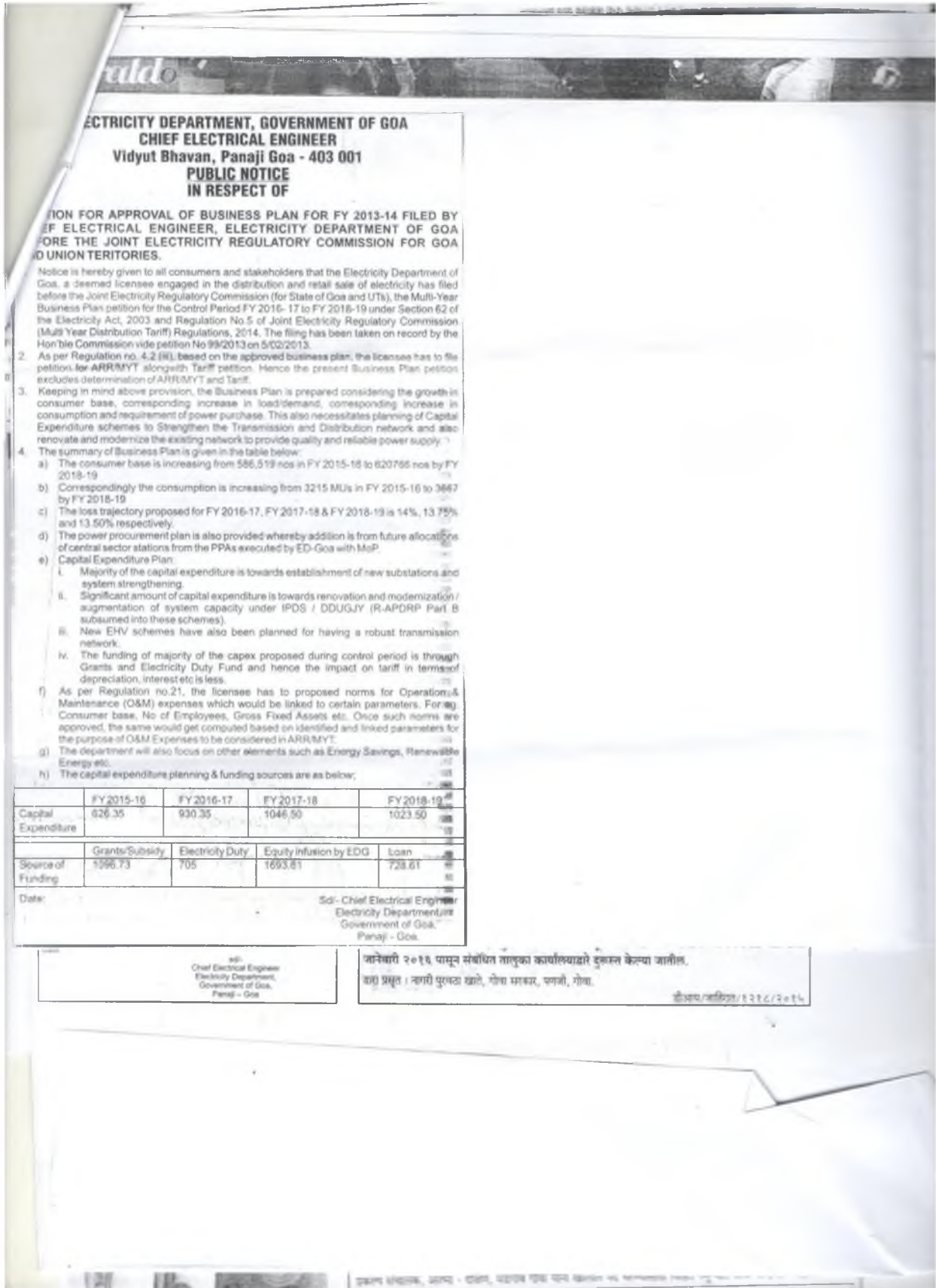
IN RESPECT OF
 PETITION FOR APPROVAL OF BUSINESS PLAN FOR
 FY 2015-14 FILED BY CHIEF ELECTRICAL ENGINEER,
 ELECTRICITY DEPARTMENT OF GOA BEFORE THE
 JOINT ELECTRICITY REGULATORY COMMISSION FOR
 GOA AND UNION TERRITORIES.

1. Notice is hereby given to all consumers and stakeholders that the Electricity Department of Goa, a deemed licensee engaged in the distribution and retail sale of electricity has filed before the Joint Electricity Regulatory Commission (for State of Goa and UTs), the Multi-Year Business Plan petition for the Control Period FY 2016-17 to FY 2018-19 under Section 52 of the Electricity Act, 2003 and Regulation No.3 of Joint Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014. The filing has been taken on record by the Hon'ble Commission vide petition No-99/2013 on 5/02/2013.
2. As per Regulation no. 4.2 (iii), based on the approved business plan, the licensee has to file petition for ARR/ MYT alongwith Tariff petition. Hence the present Business Plan petition excludes determination of ARR/MYT and Tariff.
3. Keeping in mind above provision, the Business Plan is prepared considering the growth in consumer base, corresponding increase in load/ demand, corresponding increase in consumption and requirement of power purchase. This also necessitates planning of Capital Expenditure schemes to Strengthen the Transmission and Distribution network and also improve and modernize the existing network to provide quality and reliable power supply.
4. The summary of Business Plan is given in the table below:
 - a) The consumer base is increasing from 586,519 nos in FY 2015-16 to 620766 nos by FY 2018-19
 - b) Correspondingly the consumption is increasing from 3215 MUx in FY 2015-16 to 3667 by FY 2018-19
 - c) The loss trajectory proposed for FY 2016-17, FY 2017-18 & FY 2018-19 is 34%, 33.75% and 33.50% respectively.
 - d) The power procurement plan is also provided whereby addition is from future allocations of central sector schemes from the PPAs executed by ED-Goa with MoP.
 - e) Capital Expenditure Plan:
 - i. Majority of the capital expenditure is towards establishment of new substations and system strengthening.
 - ii. Significant amount of capital expenditure is towards renovation and modernization / augmentation of systems capacity under IPDS / DDUGJIV (R-APDRP Part B subsumed into these schemes).
 - iii. New EHV schemes have also been planned for having a robust transmission network.
 - iv. The funding of majority of the capex proposed during control period is through Grants and Electricity Duty Fund and hence the impact on tariff in terms of depreciation, interest etc is less.
 - f) As per Regulation no.21, the licensee has to proposed norms for Operation & Maintenance (O&M) expenses which would be linked to certain parameters. For eg. Consumer base, No of Employees, Gross Fixed Assets etc. Once such norms are approved, the same would get computed based on identified and linked parameters for the purpose of O&M Expenses to be considered in ARR/MYT.
 - g) The department will also focus on other elements such as Energy Savings, Renewable Energy etc.
 - h) The capital expenditure planning & funding sources are as below:

	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Capital Expenditure	426.35	930.35	1646.50	1023.50

	Grants/ Subsidy	Electricity Duty	Equity infusion by EDG	Loans
Source of Funding	1096.73	765	1693.61	728.61

Date: _____
 Sd/-
 Chief Electrical Engineer
 Electricity Department,
 Government of Goa,
 Panaji - Goa



ELECTRICITY DEPARTMENT, GOVERNMENT OF GOA
CHIEF ELECTRICAL ENGINEER
Vidyut Bhavan, Panaji Goa - 403 001
PUBLIC NOTICE
IN RESPECT OF

PETITION FOR APPROVAL OF BUSINESS PLAN FOR FY 2013-14 FILED BY CHIEF ELECTRICAL ENGINEER, ELECTRICITY DEPARTMENT OF GOA BEFORE THE JOINT ELECTRICITY REGULATORY COMMISSION FOR GOA AND UNION TERRITORIES.

Notice is hereby given to all consumers and stakeholders that the Electricity Department of Goa, a deemed licensee engaged in the distribution and retail sale of electricity has filed before the Joint Electricity Regulatory Commission (for State of Goa and UTs), the Multi-Year Business Plan petition for the Control Period FY 2016-17 to FY 2018-19 under Section 62 of the Electricity Act, 2003 and Regulation No.5 of Joint Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014. The filing has been taken on record by the Hon'ble Commission vide petition No 99/2013 on 5/02/2013.

2. As per Regulation no. 4.2 (iii), based on the approved business plan, the licensee has to file petition for ARR/MYT alongwith Tariff petition. Hence the present Business Plan petition excludes determination of ARR/MYT and Tariff.
3. Keeping in mind above provision, the Business Plan is prepared considering the growth in consumer base, corresponding increase in load/demand, corresponding increase in consumption and requirement of power purchase. This also necessitates planning of Capital Expenditure schemes to Strengthen the Transmission and Distribution network and also renovate and modernize the existing network to provide quality and reliable power supply.
4. The summary of Business Plan is given in the table below:
 - a) The consumer base is increasing from 586,519 nos in FY 2015-16 to 620796 nos by FY 2018-19
 - b) Correspondingly the consumption is increasing from 3215 MUs in FY 2015-16 to 3667 by FY 2018-19
 - c) The loss trajectory proposed for FY 2016-17, FY 2017-18 & FY 2018-19 is 14%, 13.75% and 13.50% respectively.
 - d) The power procurement plan is also provided whereby addition is from future allocations of central sector stations from the PPAs executed by ED-Goa with MoP.
 - e) Capital Expenditure Plan
 - i. Majority of the capital expenditure is towards establishment of new substations and system strengthening.
 - ii. Significant amount of capital expenditure is towards renovation and modernization / augmentation of system capacity under IPDS / DDUGJY (R-APDRP Part B subsumed into these schemes).
 - iii. New EHV schemes have also been planned for having a robust transmission network.
 - iv. The funding of majority of the capex proposed during control period is through Grants and Electricity Duty Fund and hence the impact on tariff in terms of depreciation, interest etc is less.
 - f) As per Regulation no.21, the licensee has to proposed norms for Operation & Maintenance (O&M) expenses which would be linked to certain parameters. For eg. Consumer base, No of Employees, Gross Fixed Assets etc. Once such norms are approved, the same would get computed based on identified and linked parameters for the purpose of O&M Expenses to be considered in ARR/MYT.
 - g) The department will also focus on other elements such as Energy Savings, Renewable Energy etc.
 - h) The capital expenditure planning & funding sources are as below;

	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Capital Expenditure	826.35	930.35	1046.50	1023.50

	Grants/Subsidy	Electricity Duty	Equity infusion by EDG	Loan
Source of Funding	1396.73	705	1693.81	728.61

Date: _____
 Sd/- Chief Electrical Engineer
 Electricity Department,
 Government of Goa,
 Panaji - Goa.

Sd/-
 Chief Electrical Engineer
 Electricity Department,
 Government of Goa,
 Panaji - Goa

जानेवारी २०१८, पासून संबोधित तालुका कार्यालयाद्वारे दुकान केल्या जातील.
 कार्यालय : नगरी मुख्यालय, गोवा मंत्रालय, पणजी, गोवा.
 संपर्क/वहकिल: १३१८/२०१८

शेयाई हॉकी स्पर्धेसाठी हरजित सिंग भारताचा कर्णधार

१ - गुणवान अर्थशास्त्रक हरजित सिंग यांची आठव्या कुमार आशियाई हॉकी स्पर्धेसाठी भारतीय संघाच्या कर्णधारपदी निवड करण्यात आली. १४ ते २२ नोव्हेंबर दरम्यान मलेशियात कुआंतन येथे चार पडणार आहे. विपश्चान तिकी संघाचा उपकर्णधार असेल. स्पर्धेसाठी भारताचा कर्णधार जेसन होल्डर याच्यावर एक सामन्याची बंदी आली आहे, आयसीसीने मंगळवारी हे स्पष्ट केले. पहिल्या एकादिकसंग सामन्यात विंडीज संघाचा बंदी वगळता दोनने कमी पडला होता. या निर्णयामुळे आत होल्डर श्रीलंकेविरुद्ध दुसऱ्या एकादिकसंग सामन्यात खेळू शकणार नाही. त्यात ४० टक्के दंडदेखील करण्यात आला आहे. संघातील अन्य खेळाडूंना २० टक्के दंड करण्यात आला.

गोमन्तक

पंचांग, उपधार,
४ नोव्हेंबर २०१५

९

धून सीओओ रामन 'आउट' होल्डरवर एका सामन्याची बंदी

ठ अध्यक्षशांच्या आदेशानुसार पदाचा राजीनामा

सर्वोच्च न्यायालयाने त्यांची चौकशी करण्याचा आदेश दिला. त्या वेळीच त्यांनी राजीनामा द्यायला हवा होता. अर्थात, हा निर्णय वैयक्तिक असतो. उणिवा का होईना हे घडले आहे, हेच चांगले.

- न्यायाधीश मुद्गल.

अर्थात, काही दिवसांपूर्वी रामन यांनी वृत्तपत्रांना आपण या आठवड्यात राजीनामा देणार असल्याचे सांगितले होते.

डिसेंबरअखेर अहवाल

लोहा समिती बीबीसीआयच्या प्रशासकीय बटकाबाबतचा अहवाल डिसेंबरअखेरचे देण्याची शक्यता आहे. याबाबतचा अहवाल देतानाच लोहा समिती जायरागळबाबत काही व्यक्तींवर कारवाई करणार असल्याचे मुरांवे मत आहे. त्यांच्या या अहवालावर बरेच काही अडकलेले असल्यामुळे बीबीसीआय व्हकदारी वेत असल्याचे मानले जात आहे.

या प्रकरणात त्यांची अखेरचा दिवस असेल. आयपीएलमधील प्रघात्याची चौकशी सुरू झाल्यामुळे मगोहा यांनी रामन यांच्या बंडाबाबतचा आक्षेप घेतला होता. तरीदेखील हा सर्व विरोध पंचांग रामन आपल्या पदावर कायम होते. ते पद सोडण्यास तयार नव्हते. मात्र, मुद्गल समितीने आपल्या अहवालात थक्क ठेवलेल्या बारा जणांमध्ये रामन यांच्यावर येत आरोप केले होते. तेव्हाचमुन त्यांना असलेला विरोध वाढला होता. मगोहा पुन्हा अध्यक्ष झाल्यावर हा निर्णय

आयपीएलमधील प्रघात्याची चौकशी सुरू झाल्यामुळे मगोहा यांनी रामन यांच्या बंडाबाबतचा आक्षेप घेतला होता. तरीदेखील हा सर्व विरोध पंचांग रामन आपल्या पदावर कायम होते. ते पद सोडण्यास तयार नव्हते. मात्र, मुद्गल समितीने आपल्या अहवालात थक्क ठेवलेल्या बारा जणांमध्ये रामन यांच्यावर येत आरोप केले होते. तेव्हाचमुन त्यांना असलेला विरोध वाढला होता. मगोहा पुन्हा अध्यक्ष झाल्यावर हा निर्णय

कोल्ंबो, ता. ३ : बटकांचा वेग कमी राखण्याबाबत सलग दुसऱ्यांदा विंडीज संघ दोषी आढळल्यावर कर्णधार जेसन होल्डर याच्यावर एका सामन्याची बंदी आली आहे, आयसीसीने मंगळवारी हे स्पष्ट केले. पहिल्या एकादिकसंग सामन्यात विंडीज संघाचा बंदी वगळता दोनने कमी पडला होता. या निर्णयामुळे आत होल्डर श्रीलंकेविरुद्ध दुसऱ्या एकादिकसंग सामन्यात खेळू शकणार नाही. त्यात ४० टक्के दंडदेखील करण्यात आला आहे. संघातील अन्य खेळाडूंना २० टक्के दंड करण्यात आला.

OFFICE OF THE CHIEF ELECTRICAL ENGINEER ELECTRICITY DEPARTMENT GOVERNMENT OF GOA VIDYUT BHAVAN, 3RD FLOOR PANAJI - GOA

Contact No. 0832 - 2224680 / 2222354 (D), 2426966 (FAX)
No. 120/3/JERC/MYT/CEE/Tech/1332 Dated: 03/11/2015

CORRIGENDUM

Sub : Press release in the matter of the petition of Business Plan for the control of FY 2016-17 to FY 2018-19 of the Electricity Department, Government of Goa.
Ref : 1) No. 120/3/JERC/MYT/CEE/Tech/1327 Dated : 02-11-2015
2) Press notice issued on Daily Gomantak dated 03-11-2015.

The following corrigendum may please be read with reference to above.

- Under the Heading "Petition for Approval of Business Plan For FY 2013-14" may please be read as "Petition for Approval of Business Plan for FY 2016-17 to 2018-19"
- Under Serial No. (1) "Notice is hereby given to all consumers and stakeholders that the Electricity Department of Goa, a deemed licensee engaged in the distribution and retail sale of electricity has filed before the Joint Electricity Regulatory Commission (for state of Goa and UTs), the Multi-Year Business Plan Petition for the Control Period FY 2016-17 to FY 2018-19 under Section 62 of the Electricity Act, 2003 and Regulation No. 5 of Joint Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulation 2014. The filing has been taken on record by the Hon'ble Commission vide petition No. 99/2013 on 05/02/2013" may please be read as "Notice is hereby given to all consumers and stakeholders that the Electricity Department of Goa, a deemed licensee engaged in the distribution and retail sale of electricity has filed before the Joint Electricity Regulatory Commission (for state of Goa and UTs), the Multi-Year Business Plan petition (for Control period FY 2016-17 to FY 2018-19 and Regulation No. 5 of Joint Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulation 2014. The filing has been taken on record by the Hon'ble Commission vide petition No. 186/2015 on 20/10/2015."

Yours faithfully,

(Dipak Bhajekar)
Chief Electrical Engineer

SEAL

फुटबॉल स्पर्धेत विजयी

पुणे सहज पराभव
ह्या वेळीच सध्या २०
समय उपभोग्येचा
१० ह्यावर देण्यात
रव अखेर विजय

नाईक, पंच श्रीकांत शेट वेंकर, रमेश नाईक, चेतन नाईक, अतुल वेंकर यांच्या उपस्थितीत झाले. मुंबईचा लाल-नेलन नाईक यांनी केले. तर अतुल वेंकर यांनी आधार मानले. स्पर्धा सावईरिचे वेळीच पात वेदनावर चार पडली.



जोशना चिन्प्या उपांत्यपूर्व फेरीत

बोहा (कातर), ता. ३ : भारताच्या जोशना चिन्प्याने कातर क्वासिक स्पर्धेत उपांत्यपूर्व फेरी गाठली. तिने इतिहासाचा यात्रेचे अंदाज दिले १६-१४, ११-८, ११-८ असे हलकिले. हा सामना ३० मिनिटे चालला. त्यात बरोच घुस झाली. यात्रेबने यापूर्वी दोपिका फ्लोरिडल शिवा हरविले होते.

गोवा सरकार		
कृषी तंत्रज्ञान व्यवस्थापन यंत्रणा - दक्षिण (आत्मा-दक्षिण)		
४ वा मजला, दुर्गा किल्ला(पिबरी) बसपॉलिस इमारत, मडगांव - गोवा		
नेमणुका		
प्रकल्प धनदातक, उदरच - दक्षिण, मडगांव गोवा यांनी खालील पदे भरण्यासाठी विहित नमुन्यात अर्ज पाठविले आहेत.		
१ पदनाम	ब्यौक टेक्नीकी मॅनजर	असिस्टंट टेक्नीकी मॅनजर
२ पदासंख्या	६	१२
३ वेळी (उपभोग्येचा)	सालान - ५, इतर सवलतीबाबत - १	सालान - ८, इतर सवलतीबाबत - ३, अनु उभारी - १
४ वेळीसंबंधी	एकत्रित - २०.१५.२०१५	

Annexure 2: Public Notices published by the Commission for intimation of Public Hearing

Take on the opener

one of the six matches played.

"We have been training hard since July and are confident of putting up a good show. We will look to take it one match at a time and our first and foremost objective will be to qualify for the final leg," remarked the Salgaocar FC U-18 coach, Anthony Pereira after a light training session on the eve of the opener.

Striker Liston Colaco is a doubtful starter for tomorrow's game with a swollen ankle but the rest of the squad is available for selection.

HERALD PIC



ing a light training session at the DYSA against SAL.

VARCA PANCHAYAT CUP

In the first half, Pilerne SC attacked through Reagan Pereira in the 23rd minute but the latter's powerful shot was saved by goalkeeper of Navelim Villagers Union.

Subsequently, Navelim Villagers Union had a go in the 24th minute but Stanley Colaco's grounder was parried away to safety by the Pilerne SC goalkeeper.

In the 46th minute of the second half, Bhavesh Candolkar of Pilerne SC saw his effort saved by rival custodian Cleton

SCORE

PILERNE SC -1
NAVELIM VU -0

Goalkeeper - Krupesh Bandolkar of Pilerne Sports Club was adjudged Man-of-the-match.

GOVERNMENT OF GOA
Directorate of Sports and Youth Affairs
Campal, Panaji-Goa

Fax: (0832) 2464787 Phone: (0832) 2463212
E-Mail: dir.sports@nic.in

No.DSYA/ACCTS/PUR/Tender/SPORTS-Equipment/2015-2016/2822
dated: 16.10.2015

TENDER NOTICE
(E-Tendering Mode Only)

Directorate of Sports & Youth Affairs Panaji invites the Short tender for the supply of Sports Equipment to Directorate of Sports & Youth Affairs Panaji.

Estimate cost of the Sports Equipment is Rs. 10.00 to 15.00 lakhs.

Last date for online submission of duly filled Tender documents is **04.11.2015 at 3.00 p.m.** Dated of opening of Tender is **06.11.2015 at 3.30 p.m.**

For detailed tender notice and participation please visit the Tender website www.tendewizard.com/GOA

For details please contact the Director, Directorate of Sports and Youth Affairs, Campal, Panaji.

For assistance on e Tender please contact Mr. Dilip Pal - 08888636107 or Mr. Rajesh - 08554878758 Email: goatender@gmail.com

The Director of Sports and Youth Affairs reserves the right to accept or reject any or all the tenders in part or full without assigning any reasons whatsoever.

D/Adw/1165/2015

JOINT ELECTRICITY REGULATORY COMMISSION
(For the state of Goa and Union territories)
2nd Floor, HSIIDC Office Complex, Vaniya Nikunj Complex,
Udyog Vihar, Phase V, Gurgaon (Haryana)
Ph: 0124-2342651, 2342852 Fax: 0124-2342853
Email: secy-jerc@nic.in Website: www.jerc.org

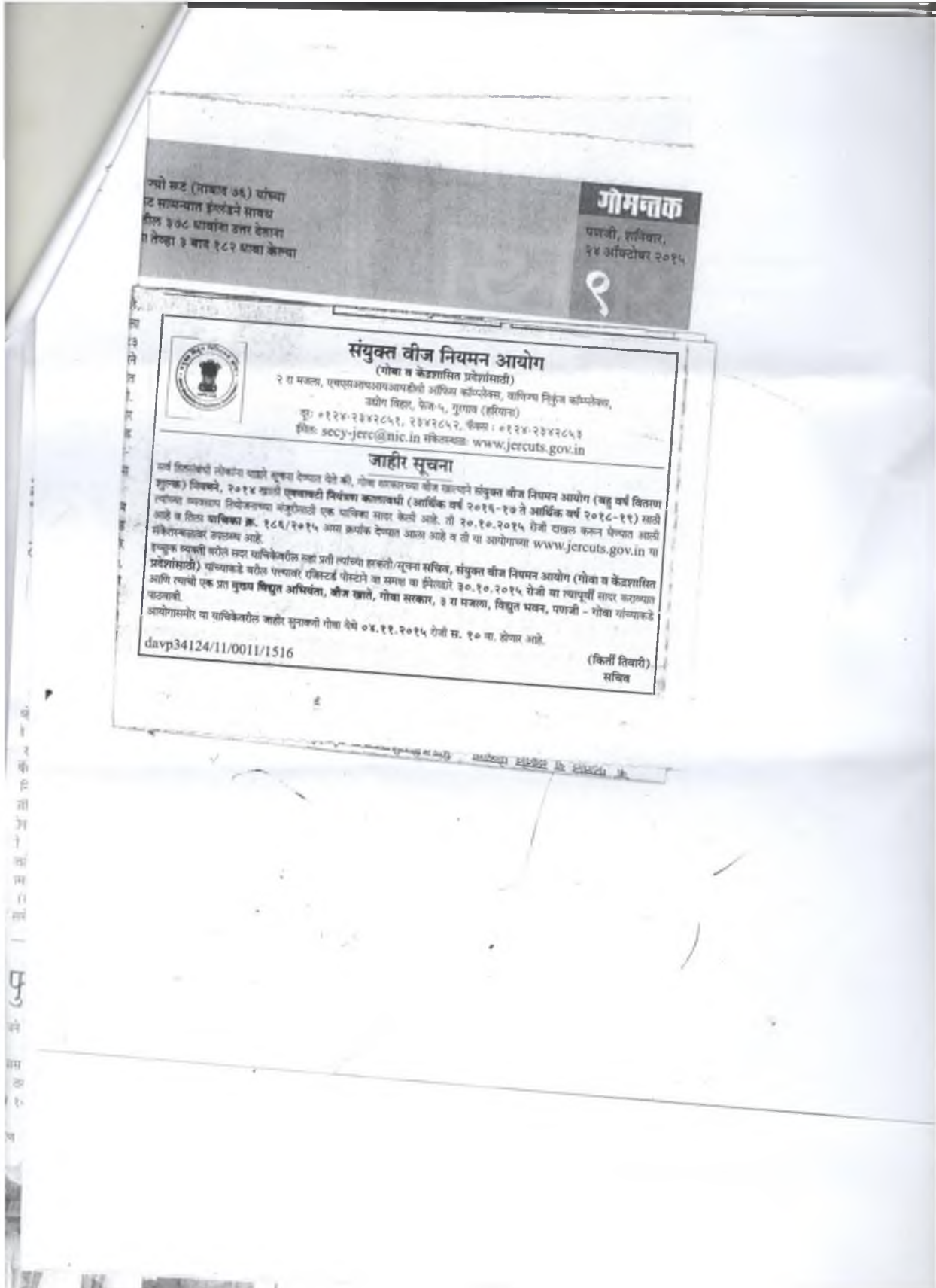
PUBLIC NOTICE

Notice is hereby given to all interested persons that Electricity Department of Goa has filed a petition for approval of its Business Plan for the MYT Control Period (FY 2016-17 to FY 2018-19) under Joint Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014. The same has been admitted on 20.10.2015 and numbered as **Petition No. 186/2015** and is available on the Commission's website www.jercuts.gov.in

Interested persons may file objections/suggestions in six copies on the above said Petition in person or through e-mail/registered post on or before **30.10.2015** addressed to **The Secretary, Joint Electricity Regulatory Commission (for GoS & UTs)** with a copy to **The Chief Electrical Engineer, Electricity Department, Government of Goa, 3rd floor, Vidyut Bhawan, Panaji-Goa.**

The Commission shall conduct a Public Hearing on 4.11.2015 at 1000 hrs at Goa.
davp 34124/11/0011/1516

29/10/15 otarido.



ge
Ansari

other side is security co-operation in the internal security sense. We are happy with the level of co-operation that exists at the moment. In fact one of the documents (related to this) is going to be exchanged, during the course of this visit," he said referring to document exchange related to the extradition pact.

Indonesia, he said, is a maritime neighbour and also the biggest ASEAN country, which fits into the India's Look East and Act East policy.

On a question whether counterbalancing China's assertiveness in South China Sea was a priority for the government, Ansari said, "I don't think we should be in the business of counterbalancing."

from Modiji," he added.

Infosys founder N R Narayana Murthy yesterday lamented the considerable fear in the minds of minorities in India and wanted the Centre and state governments to bring back the sense of confidence in them.

NATIONAL FOOD SECURITY CARDS

The Goa State Government has decided to implement the National Food Security Act, 2013 in the state w.e.f December 2015 onwards. The ration card of households who had applied & found to be eligible as per guidelines are ready and available for distribution upto 4th November 2015 at all Village Panchayat Offices.

The approved List of National Food Security Cards is available on our website www.goacivilsupplies.gov.in All the eligible households whose names figure in the list may collect their card from their respective Village Panchayat office (for villages) and from respective Taluka Office of Civil supplies Department in case of Municipal areas. The uncollected Cards after the last date will be distributed through Civil Supplies Offices at Taluka Head Quarters.

As per the National Food Security Act 2013 the eldest lady member has been designated as the Head of the Family. The Card will be handed over only either to the Head of Family or any other member listed in the card upon producing proper identity proof. Ration card will not be given to any other person. At the time of collection of card each cardholder shall handover Rs. 20/- Special Adhesive Stamp to the official handing over the Card which will be affixed to the register maintained in the office as fees for new card.

In case of any difficulties/clarification may please contact Helpline No. 18002330022 & 1967 or the respective Civil Supplies Taluka Office on their Landline numbers given below during Government Office Hours only:-

Pemem - 2201700	Bardez - 9158472363	Trevoed - 2220225
Bicholim - 2360500	Sattari - 2374900	Ponda - 2319341
Dharwad - 2614021	Bangur - 2604090	Quepem - 2662500
Salcete - 2725099	Canacona - 2644425	Mormugao - 2500550

Note: In case if any errors in the new ration cards are noticed the same will be corrected by the respective Taluka office only from January 2016 onwards upon request from cardholders.

Issued by:- Civil Supplies Dept., Govt. of Goa, Panaji, Goa - 403001
DI/Adv/1218/2015

should have the following written on it and underlined as shown below:

(a) **TECHNICAL BID FOR UPGRADATION OF WALL AT NAVAL WAR COLLEGE, VEREM, GOA.**

(b) **COMMERCIAL BID OF UPGRADATION OF WALL AT NAVAL WAR COLLEGE, VEREM, GOA.**

4. The EMD for an amount of Rs. 24,200 (Twenty Four thousand only) in favor of Defence Accounts (Navy) payable at Banker's Cheque or Bank Guarantee public sector banks is to be submitted in Technical Bid. No personal cheques or I form will be accepted. Any other queries will be clarified from Store Section, Naval Mandovi, Tel No. 0832-2403609/2403609 upto 16:00 hrs.

PANJIM GYMKHANA REQUEST FOR PRE-QUALIFICATION OF CIVIL, STRUCTURAL, ALLIED MISCELLANEOUS

It is proposed to construct new club facilities at Panjim Gymkhana a Pre-Qualification bids from experienced Structural Contractors having Pro

- Contractors should have a turnover not less than Rs. 100 lakhs per annum with a minimum single job of Rs. 10 lakhs executed by them.
- The brief scope of work comprise:
 - A) Club House Building with various facilities
 - B) Structure: Steel roof with Galvalum Roof
 - C) Plumbing and Sanitation works
 - D) Electrical Installation and Outdoor Light
 - E) Demolition of existing structures as per attached drawings
- Details shall be submitted in duplicate and executed in the last 3 years and Under Certificate of solvency certificate for value not less than Rs. 100 lakhs.
- The Tender documents shall be issued by the Panjim Gymkhana committee and be final and binding.
- The documents may be submitted in duplicate to the secretary, Panjim Gymkhana, Mandovi, Goa latest by 7.00 pm on 10th Nov 2015 accepted.

JOINT ELECTRICITY REGULATORY COMMISSION
(For the State of Goa and Union territories)

2nd Floor, HSIDC Office Complex, Vanija Nikunj Complex, Udyog Vihar, Phase V, Gurgaon (Haryana)
Pin: 0124-2342851, 2342852 Fax: 0124-2342853 Email: jeerc@jeerc.in, Website: www.jeerc.in

PUBLIC NOTICE

Further to the Public Notice published on 24.10.2015, the stakeholders of the State of Goa are hereby informed that the Public Hearing in Petition No. 185/2015 for approval of Business Plan of Electricity Department, Goa for the Control Period FY 2016-17 to 2018-19 under the Joint Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014 is scheduled to be held as under:

Date and Time	Venue
4 th November, 2015 at 1000 hrs onwards	Goa State Museum Auditorium Hall, Directorate of Museum, Pato, Panaji - Goa.

Immediately after the Hearing, the Commission shall interact with various stakeholders on the provisions of JERC Solar Power Regulations, 2015.

The abovementioned Petition is available on the website of the Commission at www.jeercs.gov.in and of Electricity Department, Goa at www.electricity.goa.gov.in

Interested persons may appear before the Commission and submit their written/oral comments for consideration of the Commission on the day of Public Hearing.

(Keerti Tewari)
Secretary

govp 34124/11/0013/1516

Annexure 3: List of Stakeholders present during the public hearing

ELECTRICITY REGULATORY COMMISSION FOR GOA AND UTS PUBLIC HEARING ON 04-11-2015 AT PANAJI - GOA IN RESPONSE TO PETITION FOR APPROVAL OF BUSINESS PLAN FOR THE FIRST CONTROL PERIOD OF FY 2016-17 TO FY 2018-19.

PARTICIPATION OF PUBLIC IN THE PUBLIC HEARING TO BE HELD ON 04-11-2015 AT PANAJI - GOA

Sr. No.	Name	Address	Contact No.	E-mail ID	Wheth (T/c)
1	Basurraj. Hulakund.	GOA 365.	8308556110	basurrajgoa365@gmail.com	
2	Rishad Braganza	259, Soares Vaddo, Margao - Sidlim	7774909242	rishad.braganza@gmail.com	
3	M. E. A. RODRIGUES	H.No. 1316/C DAMON EAST KATA SALLETTE, GOA.	982298201	MARTINRODRIGUES1952@GMAIL.COM	✓
4	Eudes F. D'Souza	H.No. 214, Colaguardo, Calangute, GOA.	9822165382	eudesbelinda@gmail.com	
5	P. N. LOTLIKAR	Post no 65, Filera, Ind. Estate, Goa 403511	9326163086	trancelgoa@gmail.com	✓
6	Dr. Pandurang R. Gonsalves	H.No. 182, Vetal waddo, Camurim, Bardez - Goa. Pincode 403587	8390372667		✓
7	ROLAND MARTINS	GOACAN Post Box 187, MARGAO 403601	9822180182	goacan@gmail.com	✓
8	Loena Fernandes	Goa women's forum P.O. Box 187, Margao	9011866429	goawomensforum@gmail.com	✓
9	Ramona Almeida	Velim Cine & Consumer Forum P.O. VELIM SALLETTE GOA	9822162459	velim-ccf2003@yahoo.com	✓

**JOINT ELECTRICITY REGULATORY COMMISSION FOR GOA AND UTS PUBLIC HEARING ON 04-11-2015 AT PANAJI - GOA IN RESPECT
PETITION FOR APPROVAL OF BUSINESS PLAN FOR THE FIRST CONTROL PERIOD OF FY 2016-17 TO FY 2018-19.**

PARTICIPATION OF PUBLIC IN THE PUBLIC HEARING TO BE HELD ON 04-11-2015 AT PANAJI - GOA

Sr. No.	Name	Address	Contact No.	E-mail ID	Whether to C (Tick mark)
10	A.K. Banerjee	GCCI - Panaji	9657063927	director@goachamber.org	<input checked="" type="checkbox"/>
11	Joseph D'Souza	Goa Fish Farming Association	9326101750	dsouza.joseph@gmail.com	<input type="checkbox"/>
12	Mania Magdalena Vales	Raina Gate + Lourenca Forum 553416 Raina, Panaji, Goa 412022	9850974651	manivales72@gmail.com	<input type="checkbox"/>
13	Sunil Salkar	MRF LTD.	9422579141	Sunil.Salkar@mrfmail.com	<input checked="" type="checkbox"/>
14	Atul Saldne	MRF LTD	8411040909	atul.saldne@mrfmail.com	<input checked="" type="checkbox"/>
15	Durai Raj	Goa Clark & Gunnra	9420888481	durairoj.goa@gmail.com	<input type="checkbox"/>
16	A. S. Deshpande	Nann Engineering	9922922141	nannho.panaji.goa	<input checked="" type="checkbox"/>
17	M.S. Gajalikar	Bondhkar Brothers Pvt-Ltd	989020206	pubhakar@bondhkar	<input type="checkbox"/>
18	Rajesh Sheth	Vasco-da-Costa Jai Bhawan Builders	9326101464	rajsheth@gmail.com	<input type="checkbox"/>
19	Karen Fonseca	TTAG - Dampas Towers	9823002261	ffapsecv@ttag.goa	<input type="checkbox"/>

JOINT ELECTRICITY REGULATORY COMMISSION FOR GOA AND UTS PUBLIC HEARING ON 04-11-2015 AT PANAJI - GOA IN RESPONSE TO PETITION FOR APPROVAL OF BUSINESS PLAN FOR THE FIRST CONTROL PERIOD OF FY 2016-17 TO FY 2018-19.

PARTICIPATION OF PUBLIC IN THE PUBLIC HEARING TO BE HELD ON 04-11-2015 AT PANAJI - GOA

Sr. No.	Name	Address	Contact No.	E-mail ID	Whether (Tick)
20	Gerard D' Mello	IEI Goa State Centre	9822175357	g.j.dmello@gmail.com	✓
21	Shelby Sanderou	Touros	9822486104	—	✓
22	A. C. Julka	Medizest (Agrawal Group)	9822714317	info@agrawal.com	✓
23	V. S. Hemadhr	Agrawal Renewable Energy	952537711	hd@ .	
24	Sunil Kawthale	CPCC	9923770934	sunil.kawthale@gmail.com	✓
25	Padmavati Prabhu	The Goan	9922022847	padmavati.prabhu@gmail.com	
26	Mahesh Ghadi	President Media	9011048365	ghadimahesh13@gmail.com	
27	Gujanus Nete	Truq. Pany.	9822164337	-	
28	Rajesh Redkar	Panaji	9422442266	-	
29	SUNIL NAIK	D.D-NEWS ALTINHU PANAJI	9422443933	sunilnaik.dd@gmail.com	

**JOINT ELECTRICITY REGULATORY COMMISSION FOR GOA AND UTS PUBLIC HEARING ON 04-11-2015 AT PANAJI - GOA IN RESPI
PETITION FOR APPROVAL OF BUSINESS PLAN FOR THE FIRST CONTROL PERIOD OF FY 2016-17 TO FY 2018-19.**

PARTICIPATION OF PUBLIC IN THE PUBLIC HEARING TO BE HELD ON 04-11-2015 AT PANAJI - GOA

Sr. No.	Name	Address	Contact No.	E-mail ID	Wheth (Tic)
30	D. G. Deshpande	Consumer Universities Redressal Forum - Vasco da Gama	8007275729		
31	Samanish Hegde Doin	M/S ALTER ENERGEY	9922952552	alterenegy43@gmail.com	
32	LYNDON PIMTO	PORVORIM	9545923193	lyndon.jp@gmail.com	
33	Nandan Polay (Alco-Develop)	101/1A Sankar Marg, Panaji, Goa	9764448256	nnp@elco-go.com	
34	Dilip Sahakshi	Panaji	9822164782	dilipsahakshi@hotmail.com	
35	Guru Pawarkar	Panaji	9822132023	guru.pawarkar@gmail.com	✓
36	Hemant Naik	Smartlic Network Systems Verna	9158899452	hemant.naik@smartlic.com	
37	Hemant D. Giddeh	1st Coni - Phelt Marey - FISVULI-GO	9422062189		
38	Kirkore Kubal	Lolem	9011603110		
39	Manjesh Kopnis	Parvairi	8007030609		

JOINT ELECTRICITY REGULATORY COMMISSION FOR GOA AND UTS PUBLIC HEARING ON 04-11-2015 AT PANAJI - GOA IN REPLY TO PETITION FOR APPROVAL OF BUSINESS PLAN FOR THE FIRST CONTROL PERIOD OF FY 2016-17 TO FY 2018-19.

PARTICIPATION OF PUBLIC IN THE PUBLIC HEARING TO BE HELD ON 04-11-2015 AT PANAJI - GOA

Sr. No.	Name	Address	Contact No.	E-mail ID
40	Suraj Mantravadi	President TIE, Tivim, Borda.	9422059484	suraj@mantravadi.in
41	Nikhil Rawal	Ribandar Patto Goa	967370894	nikhil6744@gmail
42	Upendra Naik	Pangem	9042085895	Upendranait13@goa
43	RASHMIK NAIK	PANAJI.	9423881311	rajilankar@gmail
44	Nanayan Ganes	Panaji	9923784203	nanayanganai18@yahoo
45	Vasant Karkar	Pang	9011030074	VK.Sourno@gmail
46	Saif Shaitan	Panjin	9049848796	Saifshaitan@panji
47	Dr. Pramod V Pathak	GEDA, GOA	9976559155	gedagoa@yahoo.co