

BEFORE
JOINT ELECTRICITY REGULATORY COMMISSION GURGAON

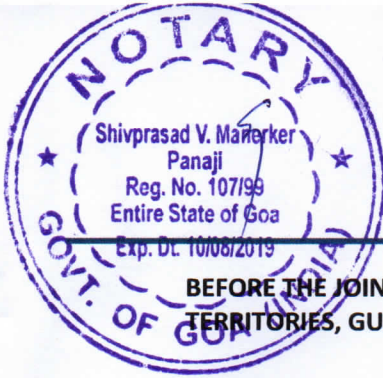
PETITION
FOR
APPROVAL OF
TRUE-UP FOR FY 2013-14, ANNUAL PERFORMANCE REVIEW OF FY 2016-17 & FY
2017-18 AND TARIFF DETERMINATION FOR FY 2018-19

BY



ELECTRICITY DEPARTMENT
Government of GOA

DECEMBER 2017



*Petition for True-up of FY 2013-14, APR for FY 2016-17 & FY 2017-18 and
Tariff Determination for FY 2018-19*

**BEFORE THE JOINT ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF GOA, & UNION
TERRITORIES, GURGAON**

Filing No.....

Case No.....

IN THE MATTER OF: Petition for approval of True-up of FY 2013-14, APR for FY 2016-17 & FY 2017-18 and Tariff Determination proposal for FY 2018-19 for the Electricity Department of Goa under Section 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003

AND

IN THE MATTER OF: Electricity Department, Government of Goa,
Vidyut Bhavan, Panaji,

Goa

.....Petitioner

Electricity Department, Government of Goa (hereinafter referred to as "EDG"), files petition for approval of True-up of FY 2013-14, APR for FY 2016-17 & FY 2017-18 and Tariff Determination proposal for FY 2018-19 for the Electricity Department of Goa under Section 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003

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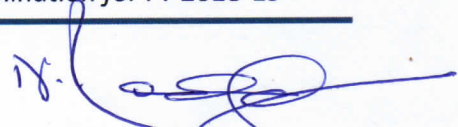
.....Petitioner

AFFIDAVIT VERIFYING THE PETITION

I, **Shri N. Neelakanta Reddy**, son of **Shri. N. Basappa Reddy** aged **60** years, the deponent named above do hereby solemnly affirm and state on oath as under:-

1. That I am Chief Electrical Engineer and Head of Electricity Department, Government of Goa and am authorised to sign and submit the said petition, and am acquainted with the facts deposed to below.
2. I say that on behalf of EDG, I am now filing this Petition under The Electricity Act, 2003, Petition for approval of True-up of FY 2013-14, APR for FY 2016-17 & FY 2017-18 and Tariff Determination proposal for FY 2018-19 for the Electricity Department of Goa under Section 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003, for its Licensee Area.
3. I further say that the statements made and financial data presented in the aforesaid Petition are as per records of the Department and believe that to be true to the best of my knowledge.
4. Further, to my knowledge and belief, no material information has been concealed in the aforesaid Petition.

Petition for True-up of FY 2013-14, APR for FY 2016-17 & FY 2017-18 and
Tariff Determination for FY 2018-19


The Electricity Department,
Government of Goa
DEPONENT

Place: Panaji, Goa

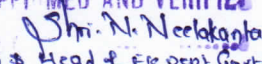
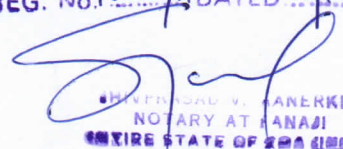
Dated: 06/12/17

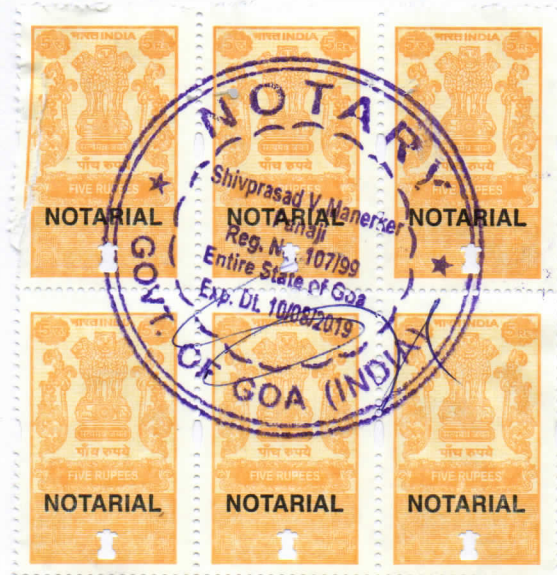
VERIFICATION

I, Shri Shivprasad Vassudev Manerker Advocate and Notary having office at Panaji-Goa, do hereby declare that the person making this affidavit is known to me through the perusal of records and I am satisfied that he is the same person alleging to be deponent himself.

Advocate

Solemnly affirmed before me on this **6th day of December 2017** by the deponent who has been identified by the aforesaid Advocate. I have satisfied myself by examining the deponent that he understood the contents of the affidavit which has been read over and explained to him. He has also been explained about section 193 of Indian Penal Code that whoever intentionally gives false evidence in any of the proceedings of the Commission or fabricates evidence for purpose of being used in any of the proceedings shall be liable for punishment as per law.

SOLEMNLY AFFIRMED AND VERIFIED
BEFORE ME 
Shri. N. Neelakanta
Reddy (CEE) & Head of Encl Dept. Govt of Goa
REG. No. 10250/A DATED 06/12/17

SHIVPRASAD V. MANERKER
NOTARY AT PANAJI
ENTIRE STATE OF GOA (INDIA)



BEFORE
JOINT ELECTRICITY REGULATORY COMMISSION GURGAON

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FOR
APPROVAL OF
TRUE-UP FOR FY 2013-14, ANNUAL PERFORMANCE REVIEW OF FY 2016-17 & FY
2017-18 AND TARIFF DETERMINATION FOR FY 2018-19
BY



ELECTRICITY DEPARTMENT
Government of GOA

DECEMBER 2017

**The Electricity Department,
Government of Goa
DEPONENT**

Place: Panaji, Goa

Dated:

VERIFICATION

I, Shri **Shivprasad Vassudev Manerker** Advocate and Notary having office at Panaji-Goa, do hereby declare that the person making this affidavit is known to me through the perusal of records and I am satisfied that he is the same person alleging to be deponent himself.

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**BEFORE THE JOINT ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF GOA, & UNION
TERRITORIES, GURGAON**

Filing No.....

Case No.....

IN THE MATTER OF: Petition for approval of True-up of FY 2013-14, APR for FY 2016-17 & FY 2017-18 and Tariff Determination proposal for FY 2018-19 for the Electricity Department of Goa under Section 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003

AND

IN THE MATTER OF: Electricity Department, Government of Goa
Vidyut Bhavan, Panaji,
Goa

.....Petitioner

PETITIONER, UNDER SECTIONS 45, 46, 61, 62 AND 64 OF THE ELECTRICITY ACT, 2003 FILES FOR INITIATION OF PROCEEDINGS BY THE HON'BLE COMMISSION FOR DECIDING ON THE MATTERS CONCERNING THE PETITION FOR APPROVAL OF TRUE-UP OF FY 2013-14, APR FOR FY 2016-17 & FY 2017-18 AND TARIFF DETERMINATION PROPOSAL FOR FY 2018-19 UNDER SECTION 45, 46, 61, 62, 64 AND 86 OF THE ELECTRICITY ACT, 2003 FOR ELECTRICITY DEPARTMENT OF GOA (HEREIN AFTER REFERRED TO AS "EDG") FOR FY 2018-19.

The Petitioner respectfully submits as under: -

1. The Petitioner, The Electricity Department – Goa (EDG) has been allowed to function as Distribution Utility for the State of Goa.
2. Pursuant to the enactment of the Electricity Act, 2003, EDG is required to submit its Annual Revenue Requirement (ARR) / Multi-year Tariff (MYT) Petition and Tariff Petition as per the procedures outlined in section 61, 62 & 64 of EA 2003, and the governing regulations thereof.
3. EDG hereby submits the present Petition for approval of True-up of FY 2013-14 based on the principles outlined in the Tariff Regulations 2009 and APR for FY 2016-17 & FY 2017-18 and Tariff Determination proposal for FY 2018-19 based on the principles outlined in the MYT Regulations 2014, notified by the Hon'ble Commission.

4. EDG hereby submits that the documents of Budgetary Support assurance from Government of Goa for FY 2018-19 shall be submitted after issuance of the same by Government of Goa.

5. EDG prays to the Hon'ble Commission to admit the attached petition for True-up of FY 2013-14, APR for FY 2016-17 & FY 2017-18 and Tariff Determination proposal for FY 2018-19 and would like to submit that:

Prayers to the Commission:

- A. The petition provides, inter-alia, EDG's approach for formulating the present petition, the broad basis for projections used, performance of EDG in the recent past, and certain issues impacting the performance of EDG in the Licensed Area.

- B. Broadly, in formulating the APR for FY 2016-17 & FY 2017-18, the principles specified by the Joint Electricity Regulatory Commission in Multi Year Distribution Tariff (MYT) Regulations, 2014 has been considered as the basis.

- C. Formulating Aggregate Revenue Requirement for the control period of FY 2018-19 based on the principles specified by MYT Regulations 2014 and as per MYT order approved dated 18th April 2016.

- D. In order to align the thoughts and principles behind the ARR/MYT and Tariff Petition, EDG respectfully seeks an opportunity to present its case prior to the finalization of the Tariff Order. EDG believes that such an approach would go a long way towards providing a fair treatment to all the stakeholders and may eliminate the need for a review or clarification.

The petitioner respectfully prays that the Hon'ble Commission may:

- a) Accept and admit the petition for True-up of FY 2013-14 as per Tariff Regulations 2009, APR for FY 2016-17 & FY 2017-18 and Tariff Determination for FY 2018-19 which is in line with the principles laid by Joint Electricity Regulatory Commission contained in MYT Regulations 2014 ;

- b) Approve the total recovery and revenue gap of Final True up of FY 2013-14, Provisional Annual Performance Review of FY 2016-17, Annual Performance Review for FY 2017--18 and Aggregate Revenue Requirement for FY 2018-19 and other claims as proposed by EDG.

- c) Approve the proposed cumulative Revenue Gap till FY 2018-19 amounting to Rs. **79 Crores** on provisional basis and the revenue gap as may be approved by the Hon'ble Commission during the process of finalising tariff petition is proposed to be met part from

the tariff hike and balance from the Budgetary support by Govt. of Goa. It is submitted that Budgetary Support is limited to this amount and any further revenue gap at a later date when petition for true-up is filed based on actual accounts / figures, it would be dealt appropriately at that time.

- d) To consider the Tariff Design Philosophy and approve the proposed changes in Tariff Schedule (rationalisation of tariff categories & changes in applicability clauses) for FY 2018-19.
- e) Approve the Expected Revenue from Charges (ERC) for FY 2018-19 and the consolidated gap till FY 2018-19.
- f) The delay in filing this MYT Petition may please be condoned and the Hon'ble Commission is requested to accept this Petition and process the same.
- g) Pass suitable orders with respect to True-up of FY 2013-14, APR for FY 2016-17 & FY 2017-18 and Tariff Determination for 2018-19 for the expenses to be incurred by EDG for serving its consumers;
- h) To allow cost related to past interest on security deposit into ARR of FY 2017-18.
- i) Grant approval for the schedule of tariff, charges for services and schedule of charges as made in the petition for FY 2018-19.
- j) Grant any other relief as the Hon'ble Commission may consider appropriate.
- k) The petitioner craves leave of the Hon'ble Commission to allow further submission, addition and alteration to this petition as may be necessary from time to time.
- l) Condone any inadvertent omissions/errors/shortcomings and permit EDG to add/change/modify/alter this filing and make further submissions as may be required at a future date.
- m) To 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.

Electricity Department, Government of Goa

Petitioner

Place: Panaji

Dated: ___ December 2017

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LIST OF ABBREVIATIONS

| S. No | Abbreviations | Descriptions |
|-------|---------------|---|
| 1 | A&G | Administrative and General |
| 2 | ABT | Availability Based Tariff |
| 3 | ACoS | Average Cost of Supply/ Service |
| 4 | AMI | Automated Metering Infrastructure |
| 5 | AMR | Automatic Meter Reading |
| 6 | APR | Annual Performance review |
| 7 | ARR | Aggregate Revenue Requirement |
| 8 | CAGR | Compound Annual Growth Rate |
| 9 | CAPEX | Capital Expenditure |
| 10 | CEA | Central Electricity Authority |
| 11 | CERC | Central Electricity Regulatory Commission |
| 12 | CGS | Central Generating Station |
| 13 | CUF | Capacity Utilization Factor |
| 14 | CWIP | Capital work in progress |
| 15 | DELP | DSM based Efficient Lighting Programme |
| 16 | Discom | Distribution Companies |
| 17 | DSM | Demand Side Management |
| 18 | EA Act | The Electricity Act 2003 |
| 19 | EDG | Electricity Department, Government of Goa |
| 20 | EC | Energy Charges |
| 21 | EHT | Extra High Tension |
| 22 | FC | Fixed Charges |
| 23 | FOR | Forum of Regulators |
| 24 | FY | Financial Year |
| 25 | GFA | Gross Fixed Assets |
| 26 | GoI | Government of India |
| 27 | HT | High Tension |
| 28 | JERC | Joint Electricity Regulatory Commission |
| 29 | KV | Kilo Volt |
| 30 | kVA | Kilo Volt Ampere |
| 31 | kVAh | Kilo Volt Ampere Hour |
| 32 | kW | Kilo Watt |
| 33 | kWh | Kilo Watt Hour |
| 34 | LT | Low Tension |
| 35 | MNRE | Ministry of New and Renewable Energy |
| 36 | MOD | Merit Order Despatch |

| S. No | Abbreviations | Descriptions |
|--------------|----------------------|--|
| 37 | MoP | Ministry of Power |
| 38 | MOU | Memorandum of Understanding |
| 39 | MU | Million Units (Million kWh) |
| 40 | MVA | Mega Volt Ampere |
| 41 | MW | Mega Watt |
| 42 | MYT | Multi Year Tariff |
| 43 | NFA | Net Fixed Assets |
| 44 | NPCIL | Nuclear Power Corporation of India Limited |
| 45 | NTP | National Tariff Policy |
| 46 | NTPC | National Thermal Power Corporation |
| 47 | O&M | Operation & Maintenance |
| 48 | PLR | Prime Lending Rate |
| 49 | POC | Point of Connection |
| 50 | PPA | Power Purchase Agreement |
| 51 | PV | Photo voltaic |
| 52 | R&M | Repair and Maintenance |
| 53 | R-APDRP | Restructured Accelerated Power Development and Reforms Programme |
| 54 | REC | Renewable Energy Certificate |
| 55 | ROE | Return on Equity |
| 56 | RPO | Renewable Purchase Obligation |
| 57 | Rs | Rupees |
| 58 | SBI | State Bank of India |
| 59 | SECI | Solar Energy Corporation of India |
| 60 | SLDC | State Load Dispatch Centre |
| 61 | T&D | Transmission and Distribution |
| 62 | TOD | Time of Day |
| 63 | UI | Unscheduled Interchange Charges |
| 64 | w.e.f | With effect from |
| 65 | WPI | Wholesale Price Index |

CHAPTER 1. INTRODUCTION

1.1 Preamble

- 1.1.1 The Hon'ble Commission had notified the Joint Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 and Multi Year Distribution Tariff Regulations 2014. In line with the same, EDG submits this petition for Truing up for FY 13-14 as per the provisions of the Tariff Regulations, 2009 and APR of FY 2016-17 and FY 2017-18 as well as tariff Proposal for FY 2018-19.
- 1.1.2 EDG hereby submits that that the audit of the accounts for FY 13-14 is completed and certificate from CAG is awaited and it is expected that the CAG certificate for the same will be submitted prior to the date of Public Hearing. Also accounts for FY 14-15 are completed and audit will be initiated now, EDG submits that if audit is completed before Public hearing, in that case EDG would submit the True up for FY 14-15 as addendum to current petition.
- 1.1.3 The financial statement of FY 2015-16 and FY 2016-17 are yet to be prepared and therefore EDG submits that in the current petition, the figures used for the FY 2015-16 are as approved by the Hon'ble Commission in the Tariff Order dated 06th April 2015. A separate True-up petition for FY 15-16 will be submitted after finalising and audited the account for the year.
- 1.1.4 EDG also submits that for the FY 2016-17 and H1 of FY 2017-18, the provisional actual figures have been used and for H2 of FY 2017-18, the projected figures has been considered. For the year 2018-19, the ARR and sales figures as approved by the Hon'ble Commission in its order dated 18th April 2016 have been considered. EDG also submits that the Revenue for the year 2018-19 has been calculated as per the existing Tariff approved by the Hon'ble Commission.

1.2 Background: Electricity Department of Goa

- 1.2.1 The Electricity Department 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 Electrical Energy. The Electricity Department of Goa does not 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 as allocated by the Central Government.
- 1.2.2 The peak demand of Goa during FY 2016-17 was around 545 MW. The Energy Deficit and the peak deficit as per CEA report for FY 2016-17 for the State of Goa are 0.1% (2.48 MU) and 2.6% (14 MW) respectively. The total firm allocation of power from central sector is approx 470 MW in FY 2016-17. In addition, the department also purchases power from Co-generation, IPP and Trader.

A. POWER PROCUREMENT

1.2.3 The firm allocation and unallocated share of power from Central Sector Stations is provided in the table below:

Table 1-1: Present Power Allocation of Central Sector Stations (WR+SR)

| Sr. No | Station | Peak Hrs (18.00 to 22.00) | | Off Peak Hrs. (00 to 18.00 & 22.00 to 24.00) | |
|--------|----------------------|---------------------------------|--|--|--|
| | | Share from firm Allocation (MW) | Share from unallocated Allocation (MW) | Share from firm Allocation (MW) | Share from unallocated Allocation (MW) |
| 1 | Korba STPS | 210 | 4.7 | 210 | 6.25 |
| 2 | Korba STPS-7 | 4.5 | 2.29 | 4.5 | 3.04 |
| 3 | Vindhyachal STPS-I | 35 | 4.28 | 35 | 5.69 |
| 4 | Vindhyachal STPS-II | 12 | 3.23 | 12 | 4.29 |
| 5 | Vindhyachal STPS-III | 10 | 3.23 | 10 | 4.29 |
| 6 | Vindhyachal STPS-IV | 11.2 | 4.58 | 11.2 | 6.08 |
| 7 | Vindhyachal STPS-V | 5.18 | 2.29 | 5.18 | 3.04 |
| 8 | Sipat Stage-I | 20 | 9.06 | 20 | 12.05 |
| 9 | Sipat Stage-II | 10 | 3.06 | 10 | 4.07 |
| 10 | Mouda STPS-I | 11.2 | 4.58 | 11.2 | 6.08 |
| 12 | Mouda STPS-II | 14.5 | 6.04 | 14.5 | 8.03 |
| 11 | Kawas Gas PP | 0 | 13 | 0 | 13.01 |
| 12 | Gandhar Gas PP | 0 | 13 | 0 | 13.01 |
| 13 | Solapur STPS | 7.55 | 3.02 | 7.55 | 4.02 |
| 14 | KAPP | 15 | 1.69 | 15 | 2.25 |
| 15 | TAPP3&4 | 11 | 4.15 | 11 | 5.52 |
| 15 | Ramagundum STPS | 100 | 0 | 100 | 0 |
| | Total | 477.13 | 82.2 | 477.13 | 100.72 |

* - Power from RGPPL is not available due to technical minimum load requirement for operation which is not met as MSEDCL being principle beneficiary is not scheduling the power.

1.2.4 As can be seen, more than 75% demand of EDG is met from three major sources viz KAPP, KSTPS and RSTPS. If there is any forced outage/ event in any of these power

stations, it severely affects power position of EDG and it needs to resort to short term power procurement from Traders & UI Pool to the extent of permissible limit and grid frequency norms.

1.2.5 EDG also has arrangement of power purchase from three Co-generation Power Plants in the State:

- Vedanta Ltd. Plant I (Erst while Sesa Sterlite) for minimum 14-21 MW
- Vedanta Ltd. Plant II (Erst while Sesa Sterlite) for minimum 10 MW
- Goa Sponge and Power Limited for 2 MW

1.2.6 Over and above this, EDG has been procuring power to meet RPO from the Renewable Sources whereby 6 MW Solar Power is procured from NVVNL and 25 MW from SECIL.

1.2.7 However, to meet any shortfall, if occurs, EDG purchase power through short term (Traders) for 50 to 100 MW

B. DISTRIBUTION

1.2.8 The Electricity Department of Goa caters to around 6 Lacs consumers with an annual energy consumption of approx 3500 MUs. The Consumers of the Electricity Department of Goa are classified as under:

- Domestic (28% of consumption)
- Commercial (14% of consumption)
- Industrial (55% of consumption)
- Agriculture (1% of consumption)
- Public Lighting (1% of consumption)
- Others (1% of consumption)

1.2.9 As seen from the above classification, the energy consumption of industrial consumers is the highest (55%) amongst all these categories.

1.2.10 EDG takes up efficient measures to provide world class services to the consumers and hence utilizes more capital investment on the system, more number of employees for better operation and maintenance facilities and efficient redressal of consumer complaints.

1.3 Measures to Increase Power Availability

1.3.1 The power allocation made by the Ministry of Power for some of the upcoming power sectors of central generating companies is as under. Power will be supply according to the respective PPA executed.

Table 1-2: Future Power Allocation from MOP (MW)

| Sr. | Power Projects | Capacity |
|-----|--|----------|
| 1 | Subansari (lower) | 8 |
| 2 | Kameng | 2 |
| 3 | Kakrapar Atomic Power Project (Unit 3 & 4) | 15.68 * |
| 4 | Lara STPP – I & II | 7.31 |
| 5 | Khargone STPP | 11.75 |
| 6 | Gadarwara STPP | 14.55 |

**PPA yet to be executed*

- 1.3.2 In addition to the above, Power supply agreement for 50 MW of wind power for fulfilment of Non Solar RPO has been executed with Solar Energy Corporation of India Ltd on 24th November 2017. Likely CoD of the same is from the month of November 2018, and power will be procured at the rate of Rs.2.72/kWh (Inclusive of trading margin of SECI of Rs.0.05/kWh)

1.4 Approach for Present Filings

- 1.4.1 Under the provisions of Electricity Act, 2003, Licensee is required to submit its ARR and Tariff Petition as per procedures outlined in section 61, 62 and 64 of EA 2003, and the governing regulations of JERC of the relevant years thereof.
- 1.4.2 In exercise of powers conferred on it under Section 61 read with Section 181 of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in this behalf, the JERC for the State of Goa and Union Territories has laid the MYT Regulations 2009 with effect from 9th February 2010.
- 1.4.3 The Hon'ble Commission had notified the Joint Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 and JERC (Multi Year Distribution Tariff) Regulations, 2014. The Hon'ble Commission has notified the JERC (Multi Year Distribution Tariff) (First Amendment) Regulations, 2015 on 10th August, 2015.
- 1.4.4 In line with the Tariff Regulations, 2009, EDG has been filing the True-up petitions for FY 2013-14 for consideration of the Hon'ble Commission in the formats laid down for providing information. Though audit has been completed, CAG certificate is awaited and EDG will try to submit the same before the public hearing process.
- 1.4.5 Also, based on the Tariff Order as approved by the Hon'ble Commission on 18th April 2016 and 23rd May 2017, EDG is hereby submitting the Annual Performance Review of FY 2016-17 and 2017-18 respectively. The revenue proposal and determination of gap in the revenue for FY 2018-19 based on the MYT Order dated 18th April 2016 is also being submitted by EDG.

- 1.4.6 Accounts of FY 2014-15 have been finalised and the report have been submitted to CAG for conducting audit. EDG shall submit the true up of FY 2014-15 based on audited accounts as addendum to this petition.
- 1.4.7 For FY 2015-16 accounts finalisation will be started post completion of Audit of FY 2014-15, thus the true up for FY 2015-16 shall be submitted in separate petition once accounts get audited for FY 2015-16.
- 1.4.8 Considering that the FY 2016-17 has been completed and the accounts finalisation is under process, however EDG also submits the provisional actual figures for approval of the Hon'ble Commission.
- 1.4.9 The excerpt of the relevant Regulations as per Clause 12.1 is produced below:
"The Tariff Application shall also contain tariff proposals so as to fully cover the gap between the expected aggregate revenue at the prevalent tariff and the expected cost of services including schemes for reduction in loss levels and other efficiency gains to be achieved.
- A set of performance in which the integrated utility has to file Tariff Application is enclosed (Information to be furnished in Formats 1 to 28).
..... "
- 1.4.10 As specified in the Tariff Regulations, the Hon'ble Commission shall undertake the Truing Up exercise of the Licensee by considering variations between the approved and actual components of the ARR as per the actual sale of electricity, income and expenditure for the relevant year in the control period.
- 1.4.11 EDG is filing this True-Up Petition for FY 2013-14 based on the actual performance during the year. However, FY 14-15 accounts have been finalised and report have been submitted to CAG for conducting audit and true up will be submitted as addendum to this petition on completion of audit. For FY 2015-16 and FY 2016-17, the accounts preparation is still under process and hereby EDG requests the Hon'ble Commission to condone the delay and allow the petitioner to submit the true-up petition at a later stage.
- 1.4.12 The applicable tariff formats in line with the Tariff Regulations 2009 and 2015 are enclosed as Annexure 1 of the said petition.

1.5 Applicable Provision of Law

- 1.5.1 The relevant clause of the Regulations to carrying out the true-up of the relevant years

is reproduced as under:

“8. Review and Truing Up

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

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

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

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

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

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

(6) In case additional supply is required to be made to any particular category, the licensee may, any time during the year make an application to the Commission for its approval. The application will demonstrate the need for such change of consumer mix and additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such change of consumer mix and additional supply of power.

(7) The Commission may consider granting approval to such proposals provided the cost of additional supply is ordinarily met by the beneficiary category.”

1.6 Petition Structure

1.6.1 The Petition includes the following Chapters:

- a) Section 1 contains executive summary of the Petition
- b) Section 2 contains introduction, background and overall approach to filing of the Petition
- c) Section 3 contains True-up for FY 2013-14

- d) Section 4 contains Approved ARR for FY 2014-15 and 2015-16
- e) Section 5 contains Annual Performance Review of FY 2016-17
- f) Section 6 contains Annual Performance Review of FY 2017-18
- g) Section 7 contains ARR for FY 2017-18
- h) Section 8 contains Treatment of Revenue Gap
- i) Section 9 contains Tariff Determination for FY 2018-19
- j) Section 10 contains Tariff Proposal
- k) Section 11 contains determination of charges related to Open Access
- l) Section 12 contains EDG's compliance to Commission's Directives
- m) Section 13 contains EDG's prayers to the Hon'ble Commission

CHAPTER 2. OVERALL APPROACH FOR PRESENT FILING

The Hon'ble Commission had notified the Joint Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 in 9th February 2010 and JERC (Multi Year Distribution Tariff) Regulations, 2014. The Hon'ble Commission has notified the JERC (Multi Year Distribution Tariff) (First Amendment) Regulations, 2015 on 10th August, 2015.

In line with the same, EDG has been filing the True-up and ARR petitions for consideration of the Hon'ble Commission in the formats laid down for providing information relating to past, present and future performance.

2.1 Truing up for FY 2013-14

2.1.1 As specified in the Tariff Regulations, the Hon'ble Commission shall undertake the truing-up exercise for the previous year based on audited accounts. EDG submits that the finalisation of audited accounts for FY 2013-14 has been completed, however, the CAG certificate is in process and yet to be issued and the same will be submitted prior to the date of public hearing. Accordingly, EDG is submitting the true-up petition for the FY 2013-14. The said audited accounts are enclosed as Annexure 2 of this Petition.

2.2 Truing up for FY 2014-15 and FY 2015-16

2.2.1 EDG submits that preparation of accounts of FY 2014-15 are completed and the same shall be submitted for CAG audit soon. If it gets audited on or before Public hearing of this petition, in that case EDG shall submit true up for FY 2014-15 along with audited accounts as addendum to this petition. For FY 15-16, it is in process of finalisation of audited accounts of FY 2015-16. EDG shall approach the Hon'ble Commission for truing-up at a later date when audited accounts are available. However, at present the approved figures for FY 2014-15 and FY 2015-16 are considered for ARR & tariff petition exercise propose in next chapter.

2.3 Annual Performance Review for FY 2016-17

2.3.1 As specified in the Tariff Regulations, the Hon'ble Commission shall undertake the Annual Performance Review by considering variations between the approved and revised estimates / pre-actuals of sale of electricity, income and expenditure for the relevant year.

2.3.2 Accordingly, EDG is filing this Annual Performance Review petition for the year FY 2016-17 based on the provisional actual performance during the year.

2.4 Annual Performance Review FY 2017-18

2.4.1 EDG is filing this Annual Performance Review petition for the year FY 2017-18 based on the provisional actual performance during the 1st half of the year and revised estimated for the 2nd half of the year.

2.5 Revenue Calculation for the FY 2018-19

2.5.1 For the year 2018-19, the ARR and sales figures as approved by the Hon'ble Commission in its order dated 18th April 2016 have been used. EDG also submits that the Revenue for the year 2018-19 has been calculated as per the Tariff approved by the Hon'ble Commission and the gaps in the figures have been determined and submitted.

2.6 Impact of UDAY

2.6.1 The Central Government has implemented Ujwal DISCOM Assurance Yojana (UDAY) for the financial turnaround and revival package for electricity distribution companies of India (DISCOMs) with the intent to find a permanent solution to the financial issues that the power distribution is in. The scheme comprises four initiatives - improving operational efficiencies of Discoms, reduction of cost of power, reduction in interest cost of Discoms and enforcing financial discipline on Discoms through alignment with state finances.

2.6.2 Goa has participated and signed MoU on 16th June 2016 with trajectory of Operational efficiencies to be achieved in FY 2016-17 to FY 2018-19. However, there was no proposal for restructuring of loan and therefore, there will be no impact on the financial cost in ARR. However, EDG submits that the impact related to operational efficiencies are not considered in the said petition and will be considered at the time of True-up of the respective years.

CHAPTER 3. FINAL TRUING UP OF FY 2013-14

3.1 Preamble

3.1.1 This section outlines the performance of Goa Electricity Department (EDG) for FY 2013-14. EDG submits that the Hon'ble Joint Electricity Regulatory Commission after undertaking a thorough analysis had issued the APR Order for Financial Year 2013-14 on 15th April 2014. In the Order issued by JERC for Determination of Tariff for FY 2017-18 on 23rd May 2017, the Hon'ble Commission has directed EDG to file petition of True up for the FY 2013-14 to FY 2016-17 (along with audited accounts) with the tariff petition of FY 2018-19 on or before 30th November 2017. However, it is submitted that due to unavoidable circumstances, EDG is submitting true up of FY 2013-14 only and therefore request the Hon'ble Commission to condone the delay of submission of true up till FY 2016-17. Submission of true up for FY 2014-15 to FY 2016-17 shall be submitted once accounts are audited.

3.1.2 Accordingly, the final truing up of FY 2013-14 is submitted by comparing actual audited figures for the respective years with those approved by Hon'ble Commission for FY 2013-14 vide APR order dated 15th April 2014. The Audited balance sheet for FY 2013-14 is enclosed as Annexure 2 of this petition.

3.1.3 This chapter summarizes each of the components of ARR for FY 2013-14 thereby working out the revenue gap for the respective financial years.

3.2 Energy Sales

3.2.1 The total actual sales of EDG for FY 2013-14 are 3,071 MU's. The category wise actual and approved sales for FY 2013-14 are shown in the table below.

Table 3-1: Energy Sales (MUs) for FY 2013-14

| Sr.No | Category of Consumer | FY13-14 | |
|-------|---|------------------------|--------------|
| | | Approved by Commission | Actuals |
| | A. LOW TENSION SUPPLY | 1,247 | 1,283 |
| 1 | (a) LTD/Domestic | 800 | 844 |
| | (b) LTD/L.I.G. | 3 | 8 |
| | (c) LTD Domestic Mixed | 5 | 5 |
| 2 | LTC/Commercial | 291 | 281 |
| 3 | (a) LTP/Motive Power | 89 | 74 |
| | (b) LTP Mixed (Hotel Industries) | 5 | 5 |
| | (c) LTP Ice Manufacturing | 8 | 8 |
| 4 | LTAG/Agriculture | 16 | 18 |
| 5 | (a) LTPL (Public lighting) | 24 | 37 |
| 6 | LTPWW/Public Water works | 6 | 2 |
| | B. HIGH TENSION SUPPLY | 1,705 | 1,770 |
| 7 | HT (Mixed) | 111 | 118 |
| 8 | HTI (Industrial) Ferro Metallurgical/ Steel | 532 | 517 |
| 9 | HTI Industrial | 629 | 619 |
| 10 | HTAG (Agriculture) | 5 | 6 |
| 11 | EHTI (Industrial) | 184 | 143 |
| 12 | HT P.W.W. & Sewage system | 140 | 138 |
| 13 | HT. M.E.'s Defence Estt. | 25 | 27 |
| 14 | HTI (Steel Rolling) | 59 | 69 |
| 15 | HTI / IT High Tech | 20 | 66 |
| 16 | HTI/Ice Manufacturing | - | 1 |
| 17 | Sale from EDG to GSPL (Div. VII) | | 9 |
| 18 | HTI Hotel Industry | | 57 |
| | C. TEMPORARY SUPPLY | 10 | 18 |
| 19 | (a) L.T. Temporary | 10 | 18 |
| | (b) H.T. Temporary | - | 0 |
| | Total | 2,962 | 3,071 |

3.2.2 It is requested to Hon'ble Commission to approve the actual sales of FY 2013-14 as stated in the table above.

3.3 Intra-state & Inter State Transmission & Distribution Loss

3.3.1 EDG has submitted 11.16% and 4.68% as the Intra State T&D Loss and Inter State Loss respectively for FY 2013-14 as compared to that approved by Hon'ble Commission at 12% and 4.47% respectively for power procured through generating stations in western region and southern region. It is submitted to the Hon'ble Commission that there is a reduction in the distribution loss as compared to the approved distribution losses in APR order of FY 2013-14. Therefore, it is requested to approve the actual T&D Loss level

mentioned in this para.

- 3.3.2 EDG while computing Energy balance for entire FY 2013-14 has considered actual of UI overdrawal/ under drawal, purchase of traders, sale to exchange etc.

Table 3-2: Energy Balance for FY 2013-14

| Sr. No. | Item | FY13-14 Approved (MUs) | FY13-14 Audited (MUs) |
|----------|---|------------------------------|-----------------------------|
| 1 | Energy Input at Goa Periphery | 3,366 | 3,267 |
| 2 | Total Power Scheduled/ Purchased at Goa Periphery | | |
| | Total Schedule Billed Drawal - CGS | 3,385 | 3,395 |
| | Add: Overdrawal / purchase from Traders | 78 | 107 |
| | Add: Power purchase from NVVN | 8 | |
| | Less: Underdrawal | 34 | 75 |
| | Less: Power diverted to Exchange | | |
| | Less: Banking Power | | |
| | Total | 3,437 | 3,428 |
| 3 | PGCIL Losses - MUs | 158.93 | 160 |
| | PGCIL Losses - % * | 4.47% | 4.68% |
| 4 | Total Power Purchased within Goa State | | |
| | Add: Co-generation | 29 | 74 |
| | Add: Independent Power Producers (IPP) | 59 | 115 |
| | Total | 88 | 189 |
| 5 | Total Power Purchase availability after PGCIL Losses | 3,366 | 3,456 |
| | Less: Retail Sales to Consumers | 2,962 | 3,071 |
| | Distribution Losses - MUs | 403.88 | 386 |
| 6 | Distribution Losses - % | 12.00% | 11.16% |

- 3.3.3 The Hon'ble Commission is requested to approve the Energy Balance for the year FY 2013-14 as provided in the above table. The energy requirement and source wise power purchase details along with actual cost are discussed in subsequent section. The details of approved vis-à-vis actual loss are depicted in the table below:

Table 3-3: Intra-state & Inter State Transmission & Distribution Loss for FY 13-14

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|----------------------|-----------------------|----------------------|
| Intra State T&D Loss | 12.00% | 11.16% |
| Inter State Loss | 4.47% | 4.68% |

3.4 Power Purchase Quantum & Cost for FY 2013-14

- 3.4.1 EDG meets its total energy requirement from its allocation from the Central Generating Stations (CGS) and Co-generating Company like Goa Energy Pvt Ltd. Goa Sponge & Power Ltd. Energy requirement also meets through NVVNL and through IPP (Reliance Infra).

- 3.4.2 The transmission charges comprises of transmission charges to Western Region, Southern Region, KPTCL and other Transmission Licensees.
- 3.4.3 The Power Purchase costs also includes ED, Cess, Incentive, MOPA etc. and supplementary charges considered on actual basis. EDG would like to mention with regards to RPO, the matter has been pursued in case no. 61/2012. However EDG would like to mention that Non-Solar RPO is being met through purchase of Co-generation power and the same has been acknowledged by Hon'ble Commission vide its order dated 27th December 2013 in case no.61/2012. Also, the details with regards to fulfil of the RPO till FY 2017-18 has been provided in the subsequent chapter of this Petition.
- 3.4.4 The table below shows the summary of Power Purchase from various sources along with their costs for FY 2013-14 including Transmission Charges, UI charges and purchase from traders.

Table 3-4: Power Purchase Quantum & Cost for FY 2013-14

| Sr. No. | Source | FY13-14 (Approved) | | FY13-14 (Audited) | |
|----------|--|--------------------|---------------|-------------------|-----------------|
| | | Quantum (MUs) | Cost (Rs. Cr) | Quantum (MUs) | Cost (Rs. Cr) |
| A | Central Sector Power Stations | | | | |
| I | NTPC | 3,200.98 | 717.70 | 3,194.96 | 718.68 |
| II | NPCIL | 191.43 | 49.68 | 200.21 | 50.80 |
| III | POOL PURCHASE/OVERDRAWAL | 77.75 | 15.50 | 32.34 | 24.19 |
| B | Within State Generations | | | | |
| | Co-Generation | 29.19 | 6.66 | 74.03 | 17.54 |
| | Goa Energy Private Limited | 23.57 | 5.32 | 67.65 | 16.08 |
| | Goa Sponge & Power Limited | 5.62 | 1.34 | 6.37 | 1.46 |
| | Sesa Goa | | | | |
| C | IPP | 58.83 | 34.83 | 115.39 | 146.46 |
| | Reliance Infra | 58.83 | 34.83 | 115.39 | 146.46 |
| | | | | | |
| D | Traders | - | - | - | - |
| E | RPO | - | - | | |
| F | OTHER CHARGES | - | 109.03 | - | 120.79 |
| | PGCIL Transmission Charges | | 109.03 | | 120.79 |
| | KPTCL Wheeling Charges | | | | |
| | NVVN Swapping / Banking Charges | | | | |
| | Other Charges (WR & SR Fees, Scada Charges, Open Access, Reactive, WRTMPL, WRTGPL etc) | | | | |
| G | Less: Penal UI Charges | | | | |
| | Total | 3,558.18 | 933.40 | 3,616.94 | 1,078.46 |
| | Power purchase cost per unit | | 2.62 | | 2.98 |

3.4.5 EDG submits that the Regional Energy Accounts (REA) and Regional Transmission Accounts (RTA) for the period has already been provided in soft format along with the past petition for verification and scrutiny of the Commission.

3.4.6 EDG request the Hon'ble Commission to approve the power purchase cost including the transmission charges for FY 2013-14.

3.5 Operation & Maintenance Expenses

3.5.1 Operation & Maintenance Expenses consists of three elements viz Employee Expenses, A&G Expense and R&M Expense:

- Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses

- Administrative expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.
- Repairs and Maintenance Expenses go towards the day to day upkeep of the distribution network of the Company and form an integral part of the Company's efforts towards reliable and quality power supply as also in the reduction of losses in the system.

3.5.2 Regulation 27 (3) of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009 provides for O&M Expense for a distribution licensee. The relevant regulation is re-produced hereunder:

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

- a) O&M expenses as approved by the Commission for the first time for a year shall be considered as base O&M expenses for determination of O&M expenses for subsequent years;*

Base O&M expenses as above shall be adjusted according to variation in the rate of WPI per annum to determine the O&M expenses for subsequent year, where WPI is the Wholesale Price Index on April 1 of the relevant year....."

3.5.3 **Employee Expenses:** EDG has computed the Employee expense for FY 2013-14 based on the actual employee expenses incurred during the entire year.

3.5.3.1 The details of the employee cost are outlined in the following table for the approval of the Hon'ble Commission:

Table 3-5: Employee Expenses for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|--------------------------------------|-----------------------|----------------------|
| Salaries& Allowances | 144.21 | 170.07 |
| Terminal Benefits | | |
| Other Salary payments | | |
| Total | 144.21 | 170.07 |
| Less: Add/Deduct share of others | | - |
| Total | 144.21 | 170.07 |
| Less: Amount capitalized | | - |
| Net amount | 144.21 | 170.07 |
| Add: Pension/ DA and other Provision | | - |
| Total Employee Expenses | 144.21 | 170.07 |

3.5.3.2 EDG submits that employee cost as approved by the Hon'ble Commission for FY 2012-13 was Rs. 144.21 Crs whereas the actual expenditure for FY 2013-14 is Rs. 170.07 Crs, resulting in increase of 18%. EDG humbly submits that the WPI for FY 2013-14 was ~5.98% against which the escalation in the cost is ~18%. Employee Cost for FY 2013-14 is on higher side, which is due to increase in dearness allowance, HRA and travel allowance, out of the same dearness allowance is uncontrollable factor, further it is submitted that dearness allowance amount is approx. 35% to 40% of the total employee cost. Also, the audited

employee cost for FY 2012-13 was Rs. 155 Crs which means the resultant increase on YoY basis is ~10%.

3.5.3.3 EDG Also submits that in audited accounts employee expense are including the expense related to CGRF to the tune of Rs.0.27 Crores. However while showing employee cost in above mentioned table employee expense are shown excluding expense related to CGRF. CGRF related expense are shown separately in ARR.

3.5.3.4 It is submitted that employee cost needs to be considered as uncontrollable and therefore, EDG request the Hon'ble Commission to approve the actual employee cost during FY 2013-14 reflecting in annual accounts.

3.5.4 **Repairs & Maintenance Expenses:** The repairs and maintenance cost has been claimed as per expenses actually incurred during FY 2013-14 which is reflecting in annual accounts of that financial year.

Table 3-6: R&M Expenses for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|-------------------------------|-----------------------|----------------------|
| Total R&M expenses | 19.61 | 21.45 |

3.5.4.1 It is submitted that it has been undertaking various Repairs and Maintenance activities as a step towards improvement of systems, reduction in breakdowns, and reduction in response time and increasing preventive maintenance.

3.5.4.2 EDG submits that R&M expenses are necessary for maintenance of infrastructure and for ensuring proper Standard of Performance of the Electricity Department Goa and therefore request the Hon'ble Commission to approve Rs. 21.45 Crs for FY 2013-14 as R&M expenses.

3.5.5 **Administration & General expenses:** The administrative expense mainly comprise of rents, professional charges, office expenses, etc. The expenses incurred by the EDG for FY 2013-14 are shown in the table below.

Table 3-7: A&G Expenses for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|--|-----------------------|----------------------|
| Travelling Expenses | | 0.39 |
| Office Expenses | | 13.51 |
| Petrol,Oil,Lubricant (P.O.L) | | 0.00 |
| Rent,Rates & Taxes | | 0.29 |
| Advertisement & Publicity | | 0.26 |
| Professional & Special Services | 9.08 | 0.97 |
| Other Charges | | 1.46 |
| Overtime Allowance | | 0.00 |
| Minor Works | | 1.66 |
| Audit of Accounts and Professional Fees | | |
| Total | 9.08 | 18.54 |
| Less : share of others (To be specified) | | - |
| Total expenses | 9.08 | 18.54 |
| Less : Capitalized | | - |
| Net expenses | 9.08 | 18.54 |
| Add: prior period | | - |
| Total A&G expenses | 9.08 | 18.54 |

3.5.5.1 The Hon'ble Commission is therefore requested to approve the A&G expenses of Rs.18.54 Crs for FY 2013-14. Actual A&G cost is higher than the approved amount. However it is lower than the actual A&G Cost for FY 2012-13, which is of Rs.22.27 Crores.

3.5.6 O&M Expenses Summary: Based on the foregoing paragraphs, the O&M expenses for the year FY 2013-14 vis-a-vis the approved level by the Hon'ble Commission is shown in the table below:

Table 3-8: O&M Expenses for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|---------------------------------|-----------------------|----------------------|
| Employee Expenses | 144.21 | 170.07 |
| A&G Expenses | 9.08 | 18.54 |
| R&M Expenses | 19.61 | 21.45 |
| O&M Expenses (Rs Cr) | 172.90 | 210.06 |

3.5.6.1 The Hon'ble Commission is requested to approve the O&M Expenses of Rs. 210.06 Crs for FY 2013-14 as shown in the table above. The details of O&M expense for FY 2013-14 are provided in the Formats 13, 15 & 16 of the Tariff Filing Formats.

3.6 Capital Work in Progress, GFA and Depreciation

3.6.1 GFA: The Opening Balance of GFA for FY 2013-14 comes to around Rs.816.84 as per annual accounts of respective years. The following table shows the opening balance,

additions, deductions and closing balance of GFA for FY 2013-14.

Table 3-9: GFA for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|--|-----------------------|----------------------|
| Opening Value of Assets at the beginning of the year | 207.30 | 816.84 |
| Additions during the year | 191.44 | 66.35 |
| Value of assets sold/disposed off | | - |
| Gross Fixed Assets at the end of year | 398.74 | 883.20 |

- 3.6.2 As seen from the above table, the approved opening value of GFA is lower than the actual opening GFA as in the Tariff order dated 27th June 2012, the Hon’ble Commission had not considered the opening value of Assets while approving Gross Fixed Assets component since EDG had not submitted reliable fixed asset register and audited accounts to support the claim in petition. Now in submission of True Up for FY 13-14, EDG is submitting the above mentioned GFA figures based on the Audited Accounts as directed by the Hon’ble Commission and request the Hon’ble Commission to approve the same.
- 3.6.3 **CAPEX and Capitalisation:** EDG submits that the prevailing infrastructure is insufficient to cater to the present load and hence to meet the increasing demand from HT and LT load, it is absolutely necessary to undertake significant capital expenditure. Accordingly, EDG has undertaken the CAPEX of Rs. 103.08 Crs and capitalisation of Rs. 66.5 Crs for FY 2013-14. The detailed capital investment plan (scheme wise) in line with Regulations 21 of JERC for the State of Goa and UTs (Terms and conditions for determination of Tariff), Regulation 2009 has been submitted with format 5 of the submission.
- 3.6.3.1 EDG request the Hon’ble Commission to allow the actual expenditure and capitalisation so as to ensure the creation of infrastructure for adherence to Standard of Performance and Supply Code Regulations
- 3.6.4 **Depreciation:** “As per Regulation 26 of JERC Tariff Regulations, depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The same have been applied on different asset categories.
- 3.6.4.1 EDG would like to submit that the depreciation arrived in annual accounts for FY 2013-14 is based on the rates specified by Hon’ble Commission in its Tariff Regulations.
- 3.6.4.2 The rates of depreciation for various assets are used as tabulated below:

Table 3-10: Rate of Depreciation applicable for various assets

| Description of Assets | Rate of Depreciation |
|---------------------------------|----------------------|
| Land and Land Rights | -- |
| Building | 3.34% |
| Plant and Machinery | 5.28% |
| Lines and Cables | 5.28% |
| Office Equipment | 6.33% |
| IT Equipment | 15.00% |
| Vehicles | 9.50% |
| Furniture and Fixtures | 6.33% |
| Testing and measuring equipment | 5.28% |
| SCADA Centre | 5.28% |

3.6.4.3 The following table shows the depreciation arrived by EDG for FY 2013-14 based on the approved depreciation rates specified by the Hon'ble Commission for different asset class. The same is reflecting in the annual audited accounts for respective years.

Table 3-11 : Depreciation for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|--|-----------------------|----------------------|
| Opening Value of Assets at the beginning of the year (Rs Cr) | 207.30 | 816.84 |
| Additions during the year (Rs Cr) | 191.44 | 66.35 |
| Value of assets sold/disposed off (Rs Cr) | | - |
| Gross Fixed Assets at the end of year (Rs Cr) | 398.74 | 883.20 |
| Rate of depreciation | 5.28% | |
| Depreciation | 16.00 | 39.57 |

3.6.4.4 The Hon'ble Commission is requested to approve Rs. **39.57** Crs for FY 2013-14 as submitted in the table above.

3.7 Interest & Finance Charge

3.7.1 The Regulation 25 provides for Interest and Finance Charges on Loan. EDG has submitted that the majority of capital assets are created out of the equity contribution from Government of Goa. However EDG has claimed the interest expenses based on normative loan calculation whereby 70% of the opening GFA and the capitalisation during the year has been considered as normative debt. The Interest expense arrived is based on normative loan considered to the extent of capitalization during the year after deducting the Electricity duty available as grant.

3.7.2 Opening balance of normative loan for FY 2013-14 considered as per the approved normative loan in truing up of FY 2012-13. Accordingly the Interest expenses vis-a-vis approved by the Hon'ble Commission for FY 2013-14.

Table 3-12 : Interest on normative loan for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|-------------------------------------|-----------------------|----------------------|
| Opening Normative Loan | 136.29 | 148.07 |
| Add: Normative Loan during the year | 134.01 | 28.22 |
| Less: Normative Repayment | 13.63 | 14.81 |
| Closing Normative Loan | 256.67 | 161.49 |
| Average Normative Loan | 196.48 | 154.78 |
| Rate of Interest (@SBI PLR rate) | 7.99% | 14.45% |
| Interest on Normative Loan | 15.70 | 22.37 |

3.7.3 As seen from the above table, EDG has submitted Interest on normative loan which is higher than approved in order by Hon'ble Commission. Main reason for the actual amount is higher than approved amount is that rate of Interest is now considered as per SBI PLR rate, however at the time of APR EDG had submitted provisional Interest.

3.7.4 Considering FY 2011-12 is the first year of ARR, while approving the loan in true up for FY 2011-12 and FY 2012-13, Hon'ble Commission has not approved opening of normative loan. Hon'ble Commission found inappropriate to approve any loan for capitalisation prior to FY 2011-12. EDG request the Hon'ble Commission that non-consideration of normative loan on the opening asset will impact the loan profile in future whereby the Tariff Regulations, 2014 states that the loan repayment is linked to depreciation and the depreciation is linked to the GFA resulting in a lower interest rate. Hence EDG request the Hon'ble Commission to reconsider the whole GFA excluding Grants and consumer contribution for computation of normative loan.

3.7.5 Other than Interest on normative loan, EDG claimed other Interest and Finance charges in the table highlighted below, it is submitted that certain financial charges are incurred by the department which are related to bank charges, LC charges, etc.

Table 3-13 : Other Interest and Finance Charges for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|------------------------------------|-----------------------|----------------------|
| Other Interest and Finance Charges | 1.00 | 1.48 |

3.7.6 The Hon'ble Commission is requested to approve the Interest & Finance Charges of Rs. **23.84** Crs (Rs. 22.37 Cr+ Rs. 1.48 Cr) for FY 2013-14. The details of Interest & Finance charges are provided in Format 10A of the Tariff Filing Formats

3.8 Interest on Working Capital

3.8.1 Regulation No. 29 of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009, stipulates the procedure for

calculation of normative Working Capital and Interest on Working Capital as applicable to Goa Electricity Department. This is as shown below:

- (1) For generation and transmission business, the working capital shall be as per CERC norms.
- (2) Subject to prudence check, the working capital for distribution business shall be the sum of one month requirement for meeting:
 - (a) Power purchase cost.
 - (b) Employees cost.
 - (c) Administration & general expenses and
 - (d) Repair & Maintenance expenses.
- (3) Subject to prudence check, the working capital for integrated utility shall be sum of one month requirement for meeting:
 - (a) Power purchase cost
 - (b) Employees cost
 - (c) Administration & general expenses
 - (d) Repair & Maintenance expenses.
 - (e) Sum of two month requirement for meeting Fuel cost..
- (4) The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures.

3.8.2 The EDG hereby submits that it has adopted the same methodology adopted by the Hon'ble Commission in its APR order for FY 2013-14 for arriving at the working capital requirement whereby it has excluded the available security deposits available with EDG from the working capital requirement though the same has not been specified in the Regulations.

Table 3-14 : Interest on working capital for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|---|-----------------------|----------------------|
| Power Purchase Cost for one month* | 77.09 | 89.87 |
| Employee Cost for one month | 12.02 | 14.17 |
| A&G Expenses for one month | 0.76 | 1.55 |
| R&M Expenses for one month | 1.63 | 1.79 |
| Total Working Capital for one month | 91.50 | 107.38 |
| Closing Security Deposit (amount already with ED Goa) | 64.95 | 17.17 |
| Total Working Capital considered for one month (5-6) | 26.55 | 90.21 |
| SBI PLR Rate | 14.45% | 14.45% |
| Interest on Working Capital | 3.84 | 13.04 |

3.8.3 As per Regulation No. 29 of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009, Interest on working capital is

computed. The Hon'ble Commission is requested to approve the Interest on Working Capital of Rs. **13.04** Cr for FY 2013-14 as presented in the table above.

3.9 Interest on Security Deposits

3.9.1 The Regulation 25 of JERC (for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009 provides for Interest on Security Deposit, if any, made by the consumer with the licensee. The provision of interest on security deposits is to be made at the bank rate. The prevailing Bank rate is considered at 8.50% for FY 2013-14 as notified by Reserve Bank of India.

3.9.2 However, since the actual interest were not been paid to consumers for the respective Financial year, the amount is not claimed in the year in which it has been accrued but has been claimed in the year in which it has been paid to the consumers. EDG has requested the Hon'ble Commission for separate treatment for balance security deposit in the subsequent chapter.

Table 3-15 : Interest on Security deposit for FY 2013-14– Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|-------------------------------------|-----------------------|----------------------|
| Opening Security Deposit | 64.95 | 17.17 |
| Add: Deposits during the Year | 9.62 | 8.26 |
| Less: Deposits refunded | 0.84 | 4.33 |
| Closing Security Deposit | 73.73 | 21.09 |
| Average Security Deposit | 69.34 | 19.13 |
| Bank Rate | 8.50% | 8.50% |
| Interest on Security Deposit | 5.42 | 1.63 |

3.9.3 The Hon'ble Commission is requested to approve the Interest on Security Deposit of Rs. **1.63** Crs for FY 2013-14.

3.10 Return on Capital Base/ Net Fixed Assets

3.10.1 EDG being an integrated Utility, it is entitled to return on capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide provision under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. Thus, in line with the, EDG has calculated the return on capital base at 3%. The summary of the Return on Net Fixed Assets as claimed by EDG, as approved by the Commission and as calculated for FY 2013-14 is tabulated below:

Table 3-16 : Return on Capital Base/net Fixed Assets for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|--|-----------------------|----------------------|
| Gross block at beginning of the year | 207.30 | 1,304.08 |
| Less accumulated depreciation | 12.13 | 217.42 |
| Net fixed assets at beginning of the year | 195.17 | 1,086.67 |
| Reasonable return @3% of NFA | 5.86 | 32.60 |

3.10.2 EDG hereby submits Return on capital base/Net Fixed Assets figures as above. As seen from the table above, the RoE is lower than the amount approved as the Hon'ble commission has not considered the opening GFA for FY 2011-12 due to non-availability of the data which has been stated in the current petition post audit of FY 2013-14.

3.10.3 In view of above, the Hon'ble Commission is requested to kindly allow the above Return on Net Fixed Assets of Rs. **32.60** Crs for FY 2013-14.

3.11 Provision for Doubtful debts

3.11.1 As specified in Regulation 28 of JERC Tariff Regulations (to be read with the format):

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

3.11.2 The Hon'ble Commission has stated in the tariff order that bad and doubtful debts actually written off, limited to 1% as per the regulations, would be considered only after the availability of audited accounts and would be taken up at the time of the true-up of the ARR. Accordingly, based on the audited accounts, EDG claims the following bad and doubtful debts actually written off in the ARR:

Table 3-17: Bad debts written off for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|--------------------------------------|-----------------------|----------------------|
| Provision for bad and doubtful debts | - | 2.96 |

3.11.3 In view of above, the Hon'ble Commission is requested to kindly allow provision for Bad and doubtful debt of Rs. 2.96 Cr for FY 2013-14.

3.12 Non-Tariff Income

3.12.1 The Non-Tariff Income comprises metering, late payment charges, interest on staff loans, income from trading, reconnection fee, UI sales/ Sales to Exchanges and miscellaneous income among others. The Non-Tariff Income approved by the Hon'ble Commission in the ARR for FY 2013-14 was Rs. 22.55 Crs.

3.12.2 The details of Non-Tariff Income for FY 2013-14 are provided in Format 20 of the Tariff Filing Formats.

3.12.3 The summary of total Non-Tariff Income is tabulated below:

Table 3-18: Non-Tariff Income for FY 2013-14– Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|--|-----------------------|----------------------|
| Sale Proceeds of dead stock, waste paper etc | | |
| Receipt from State Electrical Inspectorate | | |
| Misc. Receipts/income | 22.55 | 12.46 |
| Meter/service rent | | 3.81 |
| Deferred Income (Electricity Development fund) | | |
| Income from trading | | 0.75 |
| Total income | 22.55 | 17.02 |
| Add: prior period income | | |
| Total Non-tariff income | 22.55 | 17.02 |

3.12.4 In view of above, the Hon’ble Commission is requested to kindly allow Non-Tariff Income of Rs. **17.02 Cr** for FY 2013-14.

3.13 Revenue from sale of Surplus Power of Power

3.13.1 Revenue from sale of Surplus power of Power is Rs. **10.34 Cr** against approved amount of Rs.8.38 Cr and while approving in the Order Hon’ble Commission has not approved Revenue from Sale of surplus power – UI Pool since EDG had purchased costlier power, but Hon’ble commission suggested that Revenue from Sale of surplus power – UI Pool would be considered at the time of True up based on actual and the power availability and demand requirement.

Table 3-19: Revenue from Sale of Surplus power for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|--|-----------------------|----------------------|
| Revenue from sale of surplus power – UI Pool | 8.38 | 10.34 |
| Total | 8.38 | 10.34 |

3.13.2 In view of above, the Hon’ble Commission is requested to kindly allow the above Revenue from Sale of Surplus Power of Rs. **10.34 Cr** for FY 2013-14.

3.14 Aggregate Revenue Requirement for FY 2013-14

3.14.1 The Aggregate Revenue Requirement for FY 2013-14 as approved by the Hon’ble Commission and as per the true-up Petition claimed by EDG are outlined in the following table:

Table 3-20: Calculation of ARR for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved by Commission) | FY13-14 (Claimed in True-Up) |
|--|----------------------------------|------------------------------|
| Cost of power purchase | 933.41 | 1,078.46 |
| Employee costs | 144.21 | 170.07 |
| Other Expenses | 0.56 | 0.33 |
| R&M expenses | 19.61 | 21.45 |
| Administration and general expenses | 9.08 | 18.54 |
| Depreciation | 16.00 | 39.57 |
| Interest and Finance Charges | 16.70 | 23.84 |
| Interest on Working Capital | 3.84 | 13.04 |
| Interest on Security Deposit | 5.42 | - |
| Return on NFA | 5.86 | 32.60 |
| Provision for Bad Debts | | 2.96 |
| Total Revenue Requirement | 1,154.68 | 1,400.86 |
| Less: Non Tariff Income | 22.55 | 17.02 |
| Less: Revenue from Sale of Power - UI Pool | 8.38 | 10.34 |
| Add : Provision for RPO Obligation | 29.42 | - |
| Aggregate Revenue Requirement | 1,153.17 | 1,373.50 |
| Sales (MUs) | 2,962 | 3,070.56 |
| ACOS | 3.89 | 4.47 |
| ABR | 3.42 | 3.45 |

3.14.2 EDG hereby requests the Hon'ble Commission to approve the ARR of Rs. **1,373.50** Cr for FY 2013-14 as submitted above.

3.15 Revenue from Sale of Power at Existing Tariff

3.15.1 The Revenue from Tariff for FY 2013-14 approved by the Hon'ble Commission in APR order dated 15th April 2014 was Rs. **1014.05** Cr.

3.15.2 The actual revenue earned from tariffs for FY 2013-14 is shown in the table below

Table 3-21: Revenue from Tariff for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | | FY13-14 (Audited) | |
|--|--------------------|-----------------------|-------------------|-----------------------|
| | Sales (MUs) | Total Revenue (Rs Cr) | Sales (MUs) | Total Revenue (Rs Cr) |
| A. LOW TENSION SUPPLY | 1,247 | 303.01 | 1,282.68 | 345.07 |
| (a) LTD/Domestic | 800 | 152.00 | 844.23 | 172.74 |
| (b) LTD/L.I.G. | 3 | 0.73 | 8.26 | 1.15 |
| (c) LTD Domestic Mixed | 5 | 2.00 | 5.00 | 1.67 |
| LTC/Commercial | 291 | 100.00 | 280.97 | 119.86 |
| (a) LTP/Motive Power | 89 | 33.00 | 74.41 | 26.85 |
| (b) LTP Mixed (Hotel Industries) | 5 | 1.99 | 4.73 | 2.62 |
| (c) LTP Ice Manufacturing | 8 | 2.50 | 8.00 | 2.60 |
| LTAG/Agriculture | 16 | 2.71 | 17.76 | 3.20 |
| (a) LTPL (Public lighting) | 24 | 6.61 | 37.23 | 13.39 |
| LTPWW/Public Water works | 6 | 1.47 | 2.08 | 0.99 |
| B. HIGH TENSION SUPPLY | 1,704 | 678.66 | 1,769.92 | 701.82 |
| HT (Mixed) | 111 | 47.14 | 117.88 | 52.15 |
| HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive. | 532 | 188.00 | 517.37 | 193.00 |
| HTI Industrial | 629 | 262.36 | 619.33 | 239.96 |
| HTAG (Agriculture) | 5 | 0.89 | 6.09 | 1.35 |
| EHTI (Industrial) | 184 | 70.48 | 142.55 | 56.82 |
| HT P.W.W. & Sewage system | 139 | 48.47 | 138.12 | 69.50 |
| HT. M.E.'s Defence Estt. | 25 | 8.86 | 26.66 | 9.70 |
| HTI (Steel Rolling) | 59 | 29.00 | 69.02 | 28.04 |
| HTI / IT High Tech | 20 | 23.25 | 66.23 | 24.43 |
| HTI/Ice Manufacturing | - | 0.21 | 0.85 | 0.33 |
| (a) Sale from EDG to GSPL (Div. VII) | | | 8.70 | 3.61 |
| Sale to MSEDCL (Div. VI) | | | | - |
| HTI Hotel Industry | | | 57.11 | 22.93 |
| C. TEMPORARY SUPPLY | 10 | 9.19 | 17.95 | 13.40 |
| (a) L.T. Temporary | 10 | 9.11 | 17.89 | 13.33 |
| (b) H.T. Temporary | 0 | 0.08 | 0.06 | 0.08 |
| Hoarding/Sign Board | | | | |
| Arrears under RRC (with no. of cases) | | | | - |
| FPPCA charge | | | | |
| Total | 2,962 | 990.36 | 3,070.56 | 1,060.29 |

3.15.3 In view of above, the Hon'ble Commission is requested to kindly allow Revenue of Rs. **1,060.29** Cr for FY 2013-14.

3.16 Revenue Gap for FY 2013-14

3.16.1 EDG in its submission of the 'Tariff Proposal for FY 2014- has submitted that the entire revenue gap for FY 2013-14 has to be met through budgetary support. EDG has also submitted the letter from Government of Goa wherein the Government of Goa has assured to provide requisite budgetary support to meet the deficit at the existing tariff for FY 2013-14. In view of the budgetary support for FY 2013-14 from the Government of Goa, there is no net revenue gap for FY 2013-14.

3.16.2 Accordingly, the revenue gap of Rs. **313.20** Crs for FY 2013-14 has not been carried forward and the same will be met through the budgetary support as per letter submitted earlier dated 1st February 2013 from Government of Goa.

Table 3-22: Revenue Gap for FY 2013-14 – Rs. Crs

| Particulars | FY13-14 (Approved) | FY13-14 (Audited) |
|-------------------------------------|-------------------------------|------------------------------|
| Aggregate Revenue Requirement | 1,153.17 | 1,373.50 |
| Revenue from existing tariff | 1,014.05 | 1,060.29 |
| Revenue Gap | 139.12 | 313.20 |
| Less : Budgetary Support from Govt. | 139.12 | 313.20 |
| Net Final revenue Gap | - | - |

3.16.3 In view of above, the Hon'ble Commission is requested to kindly allow Revenue Gap of Rs **313.20** Crs for FY 2013-14.

CHAPTER 4. ARR FOR FY 2014-15 AND FY 2015-16

4.1 Preamble

- 4.1.1 This section outlines the submission on the performance of EDG for FY 2014-15 and FY 2015-16.
- 4.1.2 It is submitted that the True-up of FY 2014-15 and FY 2015-16 has to be carried out as per the Regulation 8 of JERC Tariff Regulations, 2009. However, EDG submits that the preparation of the financial statement for the said financial years is in the process and accordingly the audit will be undertaken.
- 4.1.3 The Hon'ble Commission in its previous Order/(s) had stressed upon the requirement of the audited accounts to bring in more accuracy in the estimates to be approved. Also, the applicable JERC Tariff Regulations also requires the licensee to file the true up Petition along with the audited accounts.
- 4.1.4 In the last tariff order dated 23rd May 2017, the Hon'ble Commission has directed EDG to file the True-up Petitions from FY 2013-14 to FY 2016-17 along with the next APR Petition. However, due to uncontrollable factors, the audit of the FY 2014-15 to FY 2016-17 is not yet completed and hence seek condonation for delay in filing the true-up petition and request the Hon'ble Commission to allow EDG to file the true-up petition for FY 2015-16 and FY 2016-17 separately. As discussed in foregoing chapter, true up for FY 2014-15 shall be submitted once accounts are audited on or before the public hearing of this petition.
- 4.1.5 Therefore in absence of the audited accounts and considering the earlier approach adopted by the Hon'ble Commission in the past tariff orders, the summary of the cost for FY 2014-15 and FY 2015-16 as approved by the Hon'ble Commission in the Tariff Order dated 15th April, 2014 and 6th April, 2015 respectively has been summarised in the following table:

Table 4-1: ARR approved by JERC in Tariff Order for FY 2014-15 and FY 2015-16

| Particulars | FY 14-15 (Approved in Order dated 06.04.15) | FY 15-16 (Approved in Order dated 06.04.15) |
|--|--|--|
| Cost of power purchase | 1,093.62 | 1,048.34 |
| Employee costs | 152.42 | 161.53 |
| R&M expenses | 20.73 | 12.68 |
| Administration and General expenses | 9.46 | 10.03 |
| Depreciation | 25.87 | 38.81 |
| Interest on Loan & Finance charges | 24.12 | 33.49 |
| Interest on Working Capital | 1.80 | 2.34 |
| Interest on Security Deposit | 6.82 | 7.43 |
| Return on Equity | 11.12 | 15.82 |
| Total Revenue Requirement | 1,345.96 | 1330.47 |
| Less: Non Tariff Income | 6.74 | 6.74 |
| Add: Provision for RPO Obligation for previous Years | 20.7 | |
| Net Revenue Requirement | 1,359.92 | 1,323.73 |

4.1.6 The Hon'ble Commission had approved Rs. 212.48 Crs and Rs.185.43 Crs revenue gap for the FY 2014-15 and FY 2015-16 respectively in tariff order dated 6th April 2015. However, EDG request the Hon'ble Commission that the assessment of the actual gap may be considered at the time of the true-up petition.

CHAPTER 5. PROVISIONAL ANNUAL PERFORMANCE REVIEW OF FY 2016-17

5.1 Preamble

5.1.1 This section outlines the performance of Electricity Department Goa (EDG) for FY 2016-17. EDG submits that the accounts are in the process and therefore it submits the provisional actual for FY 2016-17 in this petition for provisional truing up along with the comparison of the approved figures by Hon'ble Commission vide tariff order dated 18th April 2016.

5.1.2 It is submitted that the Hon'ble Commission vide its Business Plan MYT Order dated 6th April 2015, has defer the implementation of Multi Year Tariff and concomitant business plan by one year and revised the control period as FY 2016-17 to FY 2018-19. Accordingly, for FY 2016-17, EDG submits the provisional review of FY 2015-16 in line with the Multi Year Tariff Regulations, 2015.

5.1.3 This chapter summarizes each of the components of ARR for FY 2016-17 and thereby working out the revenue gap for that year.

5.2 Provisional Annual Performance Review FY 2016-17

5.2.1 The summary of the charges for FY 2016-17 as approved by the Hon'ble Commission in the last Tariff Order dated 18th April 2016 is tabulated below:

Table 5-1: ARR of FY 2016-17 as per Tariff Order dated 18th April 2016 – Rs. Crs

| Sl.No. | Particulars | Approved |
|-----------|--|-----------------|
| 1 | Cost of power Purchase | 1,245.03 |
| 2 | Provision for RPO Compliance | 8.55 |
| 3 | Employee costs | 239.21 |
| 4 | R&M expenses | 27.86 |
| 5 | Administration and General expenses | 9.48 |
| 6 | Depreciation * | 49.22 |
| 7 | Interest on Loan and Finance charges | 57.63 |
| 8 | Interest on Working Capital * | 8.36 |
| 9 | Interest on Security Deposit * | 6.82 |
| 10 | Return on NFA /Equity * | 44.74 |
| 11 | Provision for Bad Debt | - |
| 12 | DSM Budget/ Expenses | 3.98 |
| 13 | Total Revenue Requirement | 1,700.88 |
| 14 | Less: Non-Tariff Income | 6.74 |
| 15 | Less: Revenue from Sale of Power - UI Pool | |
| 16 | Less: Revenue from Sale of Power-Exchanges | |
| 17 | Net Revenue Requirement (12-13-14-15) | 1,694.14 |

5.2.2 EDG submits that it has submitted the review of FY 2016-17 to the Hon'ble Commission in its MYT Petition no. 228/2017. However, certain inconsistencies were observed in

the submission and therefore, it was the view of the Hon'ble Commission not to undertake review of FY 2016-17 along with this petition. Accordingly, EDG resubmits the provisional figures of FY 2016-17 for review of Hon'ble Commission.

5.3 Number of Consumers

5.3.1 The Consumer base of Goa comprises of HT Industry, LT Industry, Commercial and Domestic consumers with the maximum number of consumers attributable to the domestic category. EDG submits before the Hon'ble Commission the actual consumer numbers for FY 2016-17 in comparison of the approved numbers as highlighted below:

Table 5-2: Details of No. of Consumer Numbers for FY 2016-17

| Category | Approved in Order dated 18.04.16 | FY16-17 |
|---|----------------------------------|-----------------|
| DOMESTIC | | |
| Low Tension-D/LT-D | 4,77,436 | 4,63,272 |
| Low Tension-LIG/LT-LIG | 3,049 | 1,125 |
| Low Tension-DM/LT-DM | 4,399 | |
| High Tension-D/HT-D | 2 | 3 |
| COMMERCIAL | | |
| Low Tension-C/LT-C | 89,263 | 89,328 |
| High Tension-C/HT-C | 115 | 191 |
| INDUSTRIAL | | |
| Low Tension-I/LT-I | 6,341 | 6,010 |
| Low Tension-Mixed/LT-P (Hotel Industries) | 212 | 109 |
| High Tension-I/HT-I | 640 | 657 |
| High Tension-Ferro/SM/PI/SR | 37 | 32 |
| AGRICULTURAL | | |
| Low Tension-AG/LT-AG | 10,821 | 11,306 |
| High Tension-AG/HT-AG | 41 | 41 |
| MILITARY ENGINEERING SERVICES/DEFENSE ESTABLISHMENTS | | |
| All Units | 12 | 12 |
| PUBLIC LIGHTING | | |
| All Units | 2,740 | 3,042 |
| HOARDINGS/SIGNBOARDS | | |
| All Units | 104 | 62 |
| TEMPORARY SUPPLY | | |
| LT Temporary | 2,581 | 4,224 |
| HT Temporary | | 1 |
| Single Point Supply | | |
| Residential Complexes | | |
| Commercial Complexes | | 1 |
| Industrial Complexes | | |
| Overall LT Number of consumers | 5,96,946 | 5,78,477 |
| Overall HT Number of consumers | 847 | 938 |
| Total Number of Consumers | 5,97,793 | 5,79,415 |

5.3.2 As per Order dated 18th April 2016, Hon'ble Commission had approved consumers, in which LT-DM (LT Domestic Mixed) consumers were approved, however while approving tariff proposal, LT-Domestic Mixed category has been removed, therefore in actual

number of consumers there were no consumer against LT-DM category, those consumers have been shifted to the LT Commercial category.

5.3.3 It is requested to Hon'ble Commission to consider the number of consumers as submitted in the above table for FY 2016-17.

5.4 Energy Sales

5.4.1 The total sales of EDG for FY 2016-17 are **3,027.50** MU's. The category wise provisional actuals and approved sales for FY 2016-17 are shown in the table below.

Table 5-3: Sales for FY 2016-17 (in Mus)

| Category | Approved in Order dated 18.04.16 | FY16-17 Actual |
|---|-------------------------------------|-----------------|
| DOMESTIC | | |
| Low Tension-D/LT-D | 866.96 | 803.78 |
| Low Tension-LIG/LT-LIG | 1.10 | 1.64 |
| Low Tension-DM/LT-DM | 12.27 | |
| High Tension-D/HT-D | 0.26 | 0.27 |
| COMMERCIAL | | |
| Low Tension-C/LT-C | 295.17 | 300.86 |
| High Tension-C/HT-C | 73.28 | 97.81 |
| INDUSTRIAL | | |
| Low Tension-I/LT-I | 125.38 | 78.62 |
| Low Tension-Mixed/LT-P (Hotel Industries) | 4.39 | 5.10 |
| High Tension-I/HT-I | 1,295.96 | 1,180.74 |
| High Tension-Ferro/SM/PI/SR | 561.19 | 454.16 |
| AGRICULTURAL | | |
| Low Tension-AG/LT-AG | 23.86 | 14.05 |
| High Tension-AG/HT-AG | 6.08 | 8.00 |
| MILITARY ENGINEERING SERVICES/DEFENSE ESTABLISHMENTS | | |
| All Units | 26.89 | 24.90 |
| PUBLIC LIGHTING | | |
| All Units | 36.95 | 36.60 |
| HOARDINGS/SIGNBOARDS | | |
| All Units | 0.35 | 0.16 |
| TEMPORARY SUPPLY | | |
| LT Temporary | 22.08 | 15.45 |
| HT Temporary | | 0.13 |
| Single Point Supply | | |
| Residential Complexes | | |
| Commercial Complexes | | 5.21 |
| Industrial Complexes | | |
| Overall LT Sales | 1,388.51 | 1,256.28 |
| Overall HT Sales | 1,963.66 | 1,771.22 |
| Total Sales | 3,352.17 | 3,027.50 |

5.4.2 Based on the above submission EDG requests the Hon'ble Commission to approve the provisional actual sales for FY 2016-17 as presented above

5.5 Distribution Loss & Energy Requirement

5.5.1 EDG estimated the energy distribution losses of **22.03%** for FY 2016-17 as compared to that approved by Hon'ble Commission at 10.75%. The comparison of Energy balance statement and the loss levels based on Provisional actuals and approved figures are shown in the table below:

Table 5-4: Distribution Loss and Energy Balance for FY 2016-17

| Sr. No. | Particulars | Approved in Order dated 18.04.16 | FY16-17 Actual |
|---------|---|----------------------------------|----------------|
| 1 | Energy Input at Goa Periphery | 3,996 | 3,706 |
| 2 | Total Power Scheduled/ Purchased at Goa Periphery | | |
| | Total Schedule Billed Drawal - CGS | 3,853 | 3,477 |
| | Add: Overdrawal / purchase from Traders | | 298 |
| | Add: Power purchase from NVVN | 140 | 4 |
| | Less: Underdrawal | | 26 |
| | Less: Power diverted to Exchange | | |
| | Add : Renewable Power | | 138 |
| | Less: Banking Power | | |
| | Total | 3,993 | 3,890 |
| 3 | PGCIL Losses - MUs | 164.30 | 185 |
| | PGCIL Losses - % * | 4.11% | 4.74% |
| 4 | Total Power Purchased within Goa State | | |
| | Add: Co-generation | 167 | 177 |
| | Add: Independent Power Producers (IPP) | | - |
| | Total | 167 | 177 |
| 5 | Total Power Purchase availability after PGCIL Losses | 3,996 | 3,883 |
| | Less: Retail Sales to Consumers | 3,566 | 3,027 |
| | Distribution Losses - MUs | 429.56 | 856 |
| 6 | Distribution Losses - % | 10.75% | 22.03% |

5.5.2 EDG would like to highlight that due to absence of billing for few months resulting in a cumulative billing in next Financial year, the actual T&D Loss may be different than what is being projected in this Petition and will be reconciled at the time of finalisation of accounts by accounting the energy billed for the respective Financial year of the consumption.

5.5.3 EDG submits that the meter reading, billing and collection process had gone through a transformation phase from FY 2015-16. In the past, it was maintained by several different agencies separately in each division and each agency had its separate logic for bill calculation and bill generation. However, now a single agency has taken over the billing and collection data for HT and LT consumer w.e.f FY 2017-18 and a common process will be followed for all the division to avoid ambiguity in the process and data.

While this streamlining process is in progress, a lot of errors in the legacy data have been discovered and the error rectification process is going on.

5.5.4 Due to above mentioned reason EDG's distribution loss shoot up to 22.03% in FY 2016-17 against 10.75% approved in the respective tariff Order.

5.5.5 Therefore, it is submitted that the Hon'ble Commission may allow EDG to revise the T&D loss figures after authenticated and audited data starts flowing from the new billing system and getting energy audit results after installation of necessary meters at feeder and DT level.

5.6 Power Purchase Quantum & Cost for FY 2016-17

5.6.1 EDG meets its total energy requirement from its allocation from the Central Generating Stations (CGS), state based Co-generation facilities, Power Exchanges etc. EDG receives power from CGS like NTPC and NPCIL as per allocation from time to time. The power purchases from other sources such viz. Co-generation has been as per respective PPAs.

5.6.2 With regards to Solar and Non-Solar RPO, EDG has already submitted vide its affidavit dated 22nd April 2016 and 14th August 2015 vide case no. 175 of 2015, that it has totally fulfilled its RPO (both solar and Non-solar) target till FY 2015-16 by way of partly purchase of physical power and partly by RECs. The RPO is fulfilled in FY 2014-15 as well as in FY 2015-16. In FY 2016-17 with respect to Solar RPO obligation, EDG has purchased solar power from NVVNL Solar and SECI more than the Solar RPO requirement. Excess quantum of Solar Power purchase is 15.58 Mus. While Non Solar RPO is met with the shortage of 24 Mus. To meet this requirement EDG shall require ~ 8 Cr to purchase REC as per the rate determined by CERC as per order dated 30th March 2017.

5.6.3 The compliance of Solar and Non-solar RPO has been highlighted in the following table:

Table 5-5: Compliance of Solar and Non-Solar RPO

| Sr. No. | Particulars | Approved in Order dated 18.04.16 | FY16-17 Actual |
|----------|--|----------------------------------|-----------------|
| 1 | Sales Within UT | 3,273.56 | 3,027.50 |
| 2 | RPO Requirement (in %) | 3.95% | 4.85% |
| | Solar | 1.15% | 1.65% |
| | Non Solar | 2.80% | 3.20% |
| 3 | RPO Requirement (in MU) | 129.31 | 146.83 |
| | Solar | 37.65 | 49.95 |
| | Non Solar | 91.66 | 96.88 |
| 4 | RPO Compliance (Actual Purchase) (in MU) | 85.25 | 138.42 |
| | Solar | 50.56 | 65.54 |
| | Non Solar | 34.69 | 72.88 |
| 5 | RPO Compliance (REC Purchase) (in MU) | 0 | - |
| | Solar | | |
| | Non Solar | | |
| 6 | Total RPO Compliance (in MU) | 85.25 | 138.42 |
| | Solar | 50.56 | 65.54 |
| | Non Solar | 34.69 | 72.88 |
| 7 | Net Shortfall in RPO Compliance (in MU) | 56.97 | 8.42 |
| | Solar | 0 | 15.58 |
| | Non Solar | 56.97 | 24.00 |
| 8 | Floor Price of REC Rs /MWH | | |
| | Solar | 3,500 | 5,800 |
| | Non Solar | 1,500 | 3,300 |
| 9 | Additional Provision for RPO Compliance (Rs Crores) | 8.55 | 7.92 |
| | Solar | 0 | - |
| | Non Solar | 8.55 | 7.92 |

5.6.4 **Banking arrangement:** EDG has issued an LOI for Banking of Power so as to take power during peak hours in exchange of off peak power in the next financial year i.e. FY 2016-17 and the details of the same are provided in the table below. Under the said arrangement, EDG has already received 14.30 Mus in FY 2015-16 and the energy returned under this arrangement in Q2 of FY 2016-17 is 14.35 MUs.

5.6.5 The table below shows the summary of actual (provisional) Power Purchase from various sources along with their costs for FY 2016-17 including Transmission Charges, UI charges and purchase from traders.

Table 5-6: Power Purchase Quantum & Cost for FY 2016-17

| Sr. No. | Source | Approved in Order dated 18.04.16 | | FY 16-17 | |
|----------|-------------------------------------|----------------------------------|-----------------|-----------------|-----------------|
| | | Quantum (MUs) | Cost (Rs. Cr) | Quantum (MUs) | Cost (Rs. Cr) |
| A | Co-Generation (Within State) | 167.24 | 40.13 | 177.31 | 42.56 |
| | Goa Energy Private Limited | 107.52 | 25.80 | 171.49 | 41.16 |
| | Goa Sponge & Power Limited | 4.72 | 1.13 | 5.82 | 1.41 |
| | Sesa Goa Limited | 55.00 | 13.20 | | |
| B | Renewable Power | 85.26 | 45.83 | 138.42 | 74.71 |
| | Solar RPO | | | | |
| | NVVN Solar | 9.79 | 7.82 | 11.73 | 10.00 |
| | Solar Energy Corp. of India | 40.78 | 22.43 | 53.81 | 31.98 |
| | Non Solar RPO | | | | |
| | NVVNL Hydro | 34.69 | 15.58 | 72.88 | 32.72 |
| C | NPCIL | 188.20 | 48.59 | 101.12 | 30.71 |
| | KAPS | 106.96 | 25.39 | - | 0.28 |
| | TAPS | 81.24 | 23.20 | 101.12 | 30.42 |
| D | NTPC and Other Stations | 3,365.13 | 828.04 | 3,375.58 | 907.78 |
| | KSTPS-III | 37.66 | 10.84 | 44.58 | 11.59 |
| | KSTPS | 1,483.17 | 248.02 | 1,590.99 | 366.62 |
| | SIPAT-1 | 160.38 | 43.82 | 180.80 | 50.35 |
| | SIPAT- II | 76.33 | 21.25 | 89.18 | 25.75 |
| | VSTPS -III | 78.98 | 21.99 | 88.25 | 26.22 |
| | VSTPS-IV | 87.96 | 28.28 | 103.48 | 33.15 |
| | VSTPS-V | 37.92 | 11.47 | 46.58 | 14.40 |
| | VSTPS - II | 93.58 | 21.20 | 90.91 | 23.58 |
| | VSTPS - I | 258.32 | 58.15 | 267.34 | 75.35 |
| | RSTPS | 708.25 | 214.42 | 765.46 | 219.80 |
| | Mouda | 100.10 | 46.66 | 17.16 | 20.90 |
| | Mouda II | 50.83 | 15.45 | 1.19 | 1.63 |
| | GGPP | 41.39 | 24.39 | 53.25 | 21.16 |
| | KGPP | 40.15 | 21.68 | 36.40 | 17.27 |
| | Lara I & II | 38.96 | 12.74 | | |
| | Solapur | 71.15 | 27.68 | | |
| | Add/ Less: Other Adjustments | | | | |
| E | PXIL/IEX | 55.34 | 16.60 | 86.11 | 32.16 |
| | PXIL/IEX | 55.34 | 16.60 | 86.11 | 32.16 |
| F | Banking | | | 3.65 | - |
| | Power Purchase Cost | 3,861.17 | 979.19 | 3,882.19 | 1,087.92 |
| G | PGCIL and Other Charges | - | 265.85 | - | 192.52 |
| | PGCIL Charges | | 262.40 | | |
| | KPTCL Wheeling Charges | | 1.80 | | |
| | Fees and charges of SLDC - WR | | 0.49 | | |
| | Fees and charges of SLDC - SR | | 0.41 | | |
| | SCADA & Reactive charges | | 0.75 | | |
| H | Tranmission Charges | | | - | - |
| I | Over/Under Drawal | | | 185.39 | 47.65 |
| J | Total | 3,861.17 | 1,245.04 | 4,067.58 | 1,328.08 |
| K | Power purchase cost per unit | 3.22 | | 3.27 | |

5.6.6 The Hon'ble Commission is requested to approve Rs. **1,328.08** Crs for FY 2016-17 as power purchase cost (provisional actual) incurred during the year.

5.7 Operation & Maintenance Expenses

5.7.1 Operation & Maintenance Expenses consists of three elements viz Employee Expenses, A&G Expense and R&M Expense:

- Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses
- Administrative expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.
- Repairs and Maintenance Expenses go towards the day to day upkeep of the distribution network of the Company and form an integral part of the Company's efforts towards reliable and quality power supply as well as in the reduction of losses in the system.

5.7.2 Regulation 27 (3) of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009 provides for O&M Expense for a distribution licensee. The relevant regulation is re-produced hereunder:

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

O&M expenses as approved by the Commission for the first time for a year shall be considered as base O&M expenses for determination of O&M expenses for subsequent years;

Base O&M expenses as above shall be adjusted according to variation in the rate of WPI per annum to determine the O&M expenses for subsequent year, where WPI is the Wholesale Price Index on April 1 of the relevant year....."

5.7.3 Employee Expenses: EDG has computed the O&M (Employee) expense for FY 2016-17 based on the provisional actual employee expenses incurred during the entire year.

5.7.3.1 The employee cost incurred during the year for FY 2016-17 is Rs. 230.92 Crores.

Table 5-7: Employee Expenses for FY 2016-17 – Rs. Crs

| Particulars | FY16-17 (Approved) | FY16-17 (Actual) |
|--------------------------------------|-----------------------|------------------|
| Salaries& Allowances | 239.21 | 230.92 |
| Terminal Benefits | | |
| Other Salary payments | | |
| Total | 239.21 | 230.92 |
| Less: Add/Deduct share of others | | - |
| Total | 239.21 | 230.92 |
| Less: Amount capitalized | | - |
| Net amount | 239.21 | 230.92 |
| Add: Pension/ DA and other Provision | | - |
| Total Employee Expenses | 239.21 | 230.92 |

5.7.3.2 Employee cost for FY 16-17 has been lower than the amount approved by Hon'ble Commission.

5.7.3.3 EDG requests the Hon'ble Commission to kindly approve the provisional actual Employee cost during the year for FY 2016-17.

5.7.4 **Repairs & Maintenance Expenses:** EDG has been carrying out various R&M activities as a step towards improvement of systems, reduction in breakdowns, reduction in response time and increasing preventive maintenance.

5.7.5 The repairs and maintenance cost has been claimed as per expenses actually incurred during FY 2016-17.

5.7.6 EDG has actually incurred Rs.**26.98** Crs during FY 2016-17 vis-à-vis Rs. 27.86 Cr approved in tariff order of FY 16-17.

5.7.7 EDG Submits Repairs & Maintenance expense for FY 16-17 as under.

Table 5-8: R&M Expenses for FY 2016-17 – Rs. Crs

| Particulars | FY16-17 (Approved) | FY16-17 (Actual) | |
|---|-----------------------|------------------|--------------|
| Plant & machinery * | 27.86 | | |
| Buildings (Electricity Residential & Non-Residential) | | 1.49 | |
| Hydraulic works & civil works | | | |
| Line cable & network * | | 0.09 | |
| Vehicles | | 5.92 | |
| Furniture & fixtures | | | |
| Office equipments | | | |
| Minor R&M Works | | 19.49 | |
| Total | | 27.86 | 26.98 |
| Add/Deduct share of others (To be specified) | | | |
| Total expenses | 27.86 | 26.98 | |
| Less : Capitalized | | | |
| Net expenses | 27.86 | 26.98 | |
| Add: prior period | | | |
| Total R&M expenses | 27.86 | 26.98 | |

5.7.8 Actual R&M expenses are lower than the cost approved by Hon'ble Commission in Order dated 18th April 2016.

5.7.9 Based on the above submission, EDG request the Hon'ble Commission to approve the R&M cost for FY 2016-17 as submitted in this petition.

5.7.10 Administration & General expenses: As mentioned earlier, Administrative expenses mainly comprise of rents, telephone & other communication expenses, professional charges, conveyance and travelling allowances and other debits.

5.7.11 The A&G expenses based on provisional actuals for the year FY 2016-17 computes to Rs. 18.20 Crs against the approved cost of Rs. 9.48 Crs. In case the same is linked to the number of consumers' base which has increased in past few years, the cost per consumers has witness a growth of marginally 4% which is in the range of WPI/CPI index in those years. The details are highlighted as below:

Table 5-9: Justification of A&G Expenses for FY 2016-17

| Particulars | Units | FY 2012-13 | FY 2016-17 | CAGR |
|-------------------|---------|------------|------------|------|
| A&G Cost | Rs. Crs | 13.80 | 18.20 | 7% |
| No. of Consumers | No. | 5,23,615 | 5,79,415 | 3% |
| Cost per consumer | Rs. | 264 | 314 | 4% |

5.7.12 The Hon'ble Commission is requested to approve A&G expenses as per provisional actuals.

5.7.13 O&M Expenses Summary: Based on the foregoing paragraphs, provisional actuals of the O&M expenses for the year FY 2016-17 are summarised below:

Table 5-10: O&M Expenses for FY 2016-17 – Rs. Crs

| Sl.No. | Particulars | Approved in Order dated 18.04.16 | FY16-17 Actual |
|----------|-------------------------------|----------------------------------|----------------|
| 1 | Employee Expenses | 239.21 | 230.92 |
| 2 | A&G Expenses | 9.48 | 18.20 |
| 3 | R&M Expenses | 27.86 | 26.98 |
| 4 | Total O&M Expenses | 276.55 | 276.11 |

5.7.14 As can be witnessed, Actual total O&M expense are within the amount approved by Hon'ble Commission for FY 2016-17, but if compared with the increase in number of employees, consumers and Asset base, all the cost are broadly in the range of WPI.

5.7.15 The Hon'ble Commission is requested to approve the O&M Expenses of Rs. **276.11** Crs for FY 2016-17 as shown in the table above. The details of O&M expense for FY 2016-17 are provided in the Formats 13, 15 & 16 of the Tariff Filing Formats.

5.8 Capital Work in Progress, GFA and Depreciation

5.8.1 The Capital Work in Progress (CWIP), Gross Fixed Asset (GFA) and Depreciation for FY 2016-17 are discussed hereunder.

5.8.2 GFA: The Opening Balance of GFA for FY 2016-17 comes to around Rs. **1,378.56** Crs as per provisional actuals. The following table shows the opening balance, additions and closing balance of GFA for FY 2016--17.

Table 5-11: GFA for FY 2016-17 - Rs. Crs

| Sr. No. | Particulars | Approved | actual |
|----------|-------------------------------------|---------------|-----------------|
| 1 | Opening Gross Fixed Assets | 888.87 | 1,378.56 |
| 2 | Add: Capitalization approved | 182.55 | 174.67 |
| 3 | Less: Capitalization through grants | 96.00 | 88.11 |
| 4 | Closing Gross Fixed Assets | 975.42 | 1,465.12 |

5.8.3 Considering the base of the audited accounts for historic balance of GFA, EDG hereby requests the Hon'ble Commission to approve the actual Gross Fixed Assets opening and additions as submitted above for FY 2016-17.

5.8.4 Depreciation: "As per Regulation 26 of JERC Tariff Regulations, depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The same have been applied on different asset categories.

5.8.5 The following table shows the depreciation arrived by EDG for FY 2016-17 based on the average approved depreciation rates specified by the Hon'ble Commission for different asset class after deducting the grants.

Table 5-12: Depreciation for FY 2016-17 – Rs. Crs

| No | Particulars | Approved in Order dated 18.04.16 | FY16-17 actual |
|----|--|----------------------------------|----------------|
| 1 | Opening Gross Fixed Assets (Excl. Grant) | 888.87 | 1,237 |
| 2 | Add: Capitalization approved/actual | 182.55 | 175 |
| 4 | Less: Capitalization through grants | 96 | 88 |
| 5 | Closing Gross Fixed Assets | 975.42 | 1,323 |
| 6 | Average Gross Fixed Assets | 932.15 | 1,280 |
| 7 | Rate of Depreciation | 5.28% | 5.28% |
| 8 | Depreciation | 49.22 | 67.58 |

5.8.6 The Hon'ble Commission is requested to approve the Depreciation of Rs. 67.58 Crs for FY 2016-17 as shown in the table above. The details of Depreciation for FY 2016-17 are provided in the Formats 12 of the Tariff Filing Formats.

5.8.7 It is submitted that Provisional GFA value of FY 16-17 is based on audited figures of FY 2011-12, FY 2012-13 and FY 2013-14. Therefore derived depreciation amount for FY 15-16 is at higher side as compare to approved figure of depreciation. Hence the Hon'ble Commission is requested to approve Rs. 67.58 Crs for FY 2016-17 as submitted in the table above.

5.9 Interest & Finance Charge

5.9.1 The Regulation 29 provides for Interest and Finance Charges on Loan. The following are the provisions with respect to Interest and Finance Charges in Tariff Regulations, 2009

“25. Interest and Finance Charges on Loan

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

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

(3) The interest rate on the amount of equity above 30% treated as loan shall be the weighted average rate of interest on loan capital of the generating company/ licensee: Provided that interest and finance charges of renegotiated loan agreements shall not be considered, if they result in higher charges:

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

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

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

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

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

5.9.2 The opening normative loan balances are also considered as per approved values. EDG submits those additions to loan has been taken as 70% of additions to GFA after excluding on the amount of GFA for APDRP Part B schemes as they are proposed to be funded by grant. The GFA considered is also after deducting assets created from ED funds. Normative loan repayments are considered as 1/10th of the opening balance till FY 2015-16 and further it has taken equivalent to Depreciation as per (Multi Year Distribution Tariff) Regulations, 2014.

5.9.3 However, it is submitted that in the last tariff order dated 23rd May 2017, the Hon'ble Commission in para 3.12 has stated as below:

The above stated Regulations prescribe the debt-equity ratio for the assets deployed, post the commencement of the Tariff Regulations, 2009. However, for the EDG, the Commission has determined the Aggregate Revenue Requirement (ARR) for the first time for the FY 2011-12 and accordingly, the Commission finds it appropriate not to consider any loan for capitalisation prior to FY 2011-12.

Therefore, opening normative loan for FY 2011-12 is taken as NIL and the normative interest on loan has been considered only on the assets created during the year FY 2011-12 onwards as per the audited accounts.

5.9.4 Due to above specified adopted principle, the opening normative loan has been considered on a lower side and the depreciation is charges on the whole GFA which has been reflected as a Loan repayment as per Tariff Regulations, 2014. This has resulted into contradictory approach whereby though the loan of the opening GFA has not been included, the loan repayment which is equivalent to depreciation includes the impact of opening GFA. EDG request the Hon'ble Commission to reconsider the above ruling and restate the opening normative loan for FY 2013-14 onwards.

5.9.5 The rate of Interest for long term Interest rate has been considered of 11.60% as submitted by EDG in earlier petition and approved by Hon'ble Commission in tariff order dated 18th April 2016. It is requested to Hon'ble Commission to approve Interest rate on normative principles.

5.9.6 In this petition EDG has not considered the Letter of Credit charges for payment security charges. As in order dated 18th April 2016 Hon'ble commission directed that the expenses towards Bank charges/Letter of credit etc. shall be considered at the time of True up on the basis of actual expenditure. The table below shows the Interest and Finance Charges vis-a-vis approved by the Hon'ble Commission.

Table 5-13: Interest & Finance Charges for FY 2016-17 – Rs. Crs

| Sl.No. | Particulars | Approved in Order dated 18.04.16 | FY16-17 Actual |
|----------|---|-------------------------------------|----------------|
| 1 | Opening Normative Loan | 491.11 | 438.34 |
| 2 | Add: Normative Loan during the year/GFA during the year | 60.59 | 60.59 |
| 3 | Less: Normative Repayment for the year | 49.22 | 76.88 |
| 4 | Closing Normative Loan/ GFA | 502.48 | 422.05 |
| 5 | Average Normative Loan | 496.80 | 430.19 |
| 6 | Rate of Interest | 11.60% | 11.60% |
| 7 | Interest on Normative Loan | 57.63 | 49.90 |

5.9.7 The Hon'ble Commission is requested to approve the Interest & Finance Charges at Rs. **49.90** Crs for FY 2016-17 as shown in the table above.

5.10 Interest on Working Capital

5.10.1 As per Regulation 29 of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009, Interest on Working Capital for a licensee shall be the sum of the following for one month:

- i) Power Purchase Cost.
- ii) Employees Cost.
- iii) Administration & General Expenses &
- iv) Repair & Maintenance Expenses.

5.10.2 The following are the Regulatory Provisions in Tariff Regulations 2009, with respect to Interest on Working Capital.

"29. WORKING CAPITAL AND INTEREST RATE ON WORKING CAPITAL.....

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

- (a) Power purchase cost.
- (b) Employees cost.
- (c) Administration & General expenses and
- (d) Repair & Maintenance expenses

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

5.10.3 The Interest Rate is considered equivalent to the SBI MCLR as on 1st May 2016 for the year FY 2016-17 which is at 9.15 %. The SBI PLR rate has been attached to this Petition.

5.10.4 In line with the aforesaid regulation, the Interest on Working Capital works out to Rs.9.38 Crs for FY 2016-17 which is provided in the table below:

Table 5-14: Interest on Working Capital for FY 2016-17 – Rs. Crs.

| Sl.No. | Particulars | Approved in Order dated 18.04.16 | FY16-17 Actual |
|----------|---|----------------------------------|----------------|
| 1 | Receivables of 2 Months Billing | 282.36 | 240.51 |
| 2 | Less: Power Purchase Cost 1 Month | 104.47 | 110.67 |
| 3 | Less: Consumer Security Deposit Excl. BG/FDR | 87.97 | 27.33 |
| 4 | Add: Inventory Based on Annual Requirement for Previous FY for 2 months | - | - |
| 5 | Total Working Capital Requirement | 89.92 | 102.51 |
| 6 | SBAR Rate (%) | 9.30% | 9.15% |
| 7 | Interest on Working Capital | 8.36 | 9.38 |

5.10.5 The Hon’ble Commission is requested to approve the Interest on Working Capital at Rs. **9.38** Crs for FY 2016-17 as shown in the table above.

5.11 Security Deposits

5.11.1 EDG has claimed interest on security as per bank rates. The Bank rate of 7.75% as on 1st April 2016 is considered to claimed Interest on Security deposit from consumers

Table 5-15: Interest on Security Deposit for FY 2016-17 - Rs. Crs

| Sl.No. | Particulars | Approved in Order dated 18.04.16 | FY16-17 Actual |
|----------|----------------------------------|----------------------------------|----------------|
| 1 | Opening Security Deposit | 87.97 | 22.23 |
| 2 | Add: Deposit during the year | 1.46 | 15.67 |
| 3 | Less: Deposits refunded | | 3.91 |
| 4 | Less: Deposits in form of BG/FDR | | 1.55 |
| 5 | Closing Security Deposit | 89.43 | 32.44 |
| 6 | Average | 88.70 | 27.33 |
| 7 | Bank Rate | 7.75% | 7.75% |
| 8 | Interest on Security Deposit | 6.82 | 2.12 |

5.11.2 EDG request the Hon'ble Commission to allow the said calculated interest on security deposit. However a subsequent section deals with the payment of interest on security deposit to be paid and the issues thereof.

5.12 Return on Equity

5.12.1 The proviso of Regulation 27 of MYT Regulations 2014 provides for entitlement for Return on Equity. As per the regulations, RoE is allowed @16% on 30% of the capital base or actual equity, whichever is lower. However, assets funded by consumer contribution, capital subsidies/grants and corresponding depreciation shall not form part of the capital base.

Table 5-16: Return on Equity for FY 2016-17 - Rs. Crs

| Sl.No. | Particulars | Approved in Order dated 18.04.16 | FY16-17 Actual |
|----------|---|----------------------------------|----------------|
| 1 | Opening Equity Amount | 266.66 | 332.50 |
| 2 | Equity Addition during year (30% of Capitalization) | 25.97 | 25.97 |
| 3 | Closing Equity Amount | 292.63 | 358.47 |
| 4 | Average Equity Amount | 279.65 | 345.48 |
| 5 | Rate of Return on Equity | 16.00% | 16% |
| 6 | Return on Equity | 44.74 | 55.28 |

5.12.2 In view of above, the Hon'ble Commission is requested to kindly allow the above Return on Equity of Rs. **55.28** Crs for FY 2016-17.

5.13 Non-Tariff Income

5.13.1 The amount received by the licensee on account of non-tariff Income shall be deducted from the aggregate revenue requirement in calculating the net revenue requirement of such licensee. The non-tariff Income comprises of metering, late payment charges, interest on staff loans, income from trading, reconnection fee, UI sales/ Sales to Exchanges and miscellaneous income.

Table 5-17: Non Tariff Income - Rs. Crs

| SI.No. | Particulars | Approved in Order dated 18.04.16 | FY16-17 Actual |
|--------|-------------------|--|----------------|
| 1 | Non-Tariff Income | 6.74 | 23.63 |

5.13.2 The details of Non-Tariff Income for FY 2016-17 are provided in Format 20 of the Tariff filing formats

5.13.3 In view of above, the Hon'ble Commission is requested to kindly allow Non-Tariff Income of Rs. 23.63 Crs for FY 2016-17.

5.14 Revenue from Sale of Power at Existing Tariff

5.14.1 The Revenue from Tariff for FY 2016-17 was Rs. 1,443.08 Crs including FPPCA. The actual revenue earned from tariffs for FY 2016-17 is shown in the table below:

Table 5-18: Revenue from Tariff for FY 2016-17 – Rs. Crs

| Sl.No. | Particulars | Approved in Order dated 18.04.16 | | FY16-17 actual | |
|--------|--|-------------------------------------|-----------------|-----------------|-----------------|
| | | Units (Mus) | Amt (Rs. Crore) | Units (Mus) | Amt (Rs. Crore) |
| 1 | Low Tension-D/LT-D | 866.96 | 255.31 | 803.78 | 200.46 |
| 2 | Low Tension-LIG/LT-LIG | 1.10 | 0.11 | 1.64 | 0.35 |
| 3 | Low Tension-DM/LT-DM | 12.27 | | | |
| 4 | High Tension-D/HT-D | 0.26 | 0.15 | 0.27 | 0.16 |
| 5 | Sub-total Domestic -Overall | 880.59 | 255.57 | 805.69 | 200.98 |
| 6 | COMMERCIAL | | | | |
| 7 | Low Tension-C/LT-C | 295.17 | 145.69 | 300.86 | 149.75 |
| 8 | High Tension-C/HT-C | 73.28 | 53.07 | 97.81 | 72.56 |
| 9 | Sub-total Commercial -Overall | 368.45 | 198.76 | 398.67 | 222.31 |
| 10 | Industrial | | | | |
| 11 | Low Tension-I/LT-I | 125.38 | 45.66 | 78.62 | 33.09 |
| 12 | Low Tension-Mixed/LT-P (Hotel Industries) | 4.39 | 2.13 | 5.10 | 2.44 |
| 13 | High Tension-I/HT-I | 1,295.96 | 681.06 | 1,180.74 | 691.53 |
| 14 | High Tension-Ferro/SM/PI/SR | 561.19 | 275.74 | 454.16 | 235.71 |
| 15 | Sub-total Industrial -Overall | 1,986.92 | 1,004.59 | 1,718.63 | 962.77 |
| 16 | Low Tension-AG/LT-AG | 23.86 | 3.86 | 14.05 | 2.49 |
| 17 | High Tension-AG/HT-AG | 6.08 | 1.30 | 8.00 | 1.61 |
| 18 | Sub-total Agricultural -Overall | 29.94 | 5.16 | 22.05 | 4.09 |
| 19 | Military Engineering Services/Defense Establishments | 26.89 | 14.93 | 24.90 | 15.05 |
| 20 | Public Lighting | 36.95 | 14.87 | 36.60 | 16.27 |
| 21 | Hoardings/Signboards | 0.35 | 0.35 | 0.16 | 0.22 |
| 22 | Temporary Supply | 22.08 | 16.89 | 15.58 | 17.99 |
| 23 | LT Temporary Domestic | 17.47 | 12.29 | 1.92 | 1.72 |
| 24 | LT Temporary Commercial | 4.61 | 4.60 | 13.53 | 16.13 |
| 25 | H Temporary Supply | - | - | 0.13 | 0.14 |
| 26 | Single Point Supply | - | - | 5.21 | 3.41 |
| 27 | Residential Complexes | - | - | - | - |
| 28 | Commercial Complexes | - | - | 5.21 | 3.41 |
| 29 | Industrial Complexes | - | - | - | - |
| 30 | Overall LT Sales | 1,388.51 | 484.87 | 1,256.28 | 422.90 |
| 31 | Overall HT Sales | 1,963.66 | 1,026.25 | 1,771.22 | 1,020.18 |
| 32 | Total Revenue from Sale of Power | 3,352.17 | 1,511.12 | 3,027.50 | 1,443.08 |

5.14.2 As explained in para of Number of consumers, revenue of category LT-DM has been considered under Category LT Commercial.

5.14.3 In view of above, the Hon'ble Commission is requested to kindly allow Revenue of Rs. **1,443.08** Crs including FPPCA.

5.15 Aggregate Revenue Requirement for FY 2016-17

5.15.1 The Aggregate Revenue Requirement for FY 2016-17 as approved by the Hon'ble Commission in the Review of ARR for FY 2016-17 was Rs. **1,781.76** Crs. The calculation for Aggregate Revenue Requirement on the basis of actuals (provisional) for FY 2016-17 is shown below:

Table 5-19: Calculation of ARR for FY 2016-17- Rs. Crs

| Sl.No. | Particulars | Approved in Order dated 18.04.16 | FY16-17 Actual |
|-----------|---------------------------------------|----------------------------------|-----------------|
| 1 | Cost of Power Purchase | 1,245.03 | 1,328.08 |
| 2 | Provision for RPO Compliance | 8.55 | |
| 3 | Employee Expenses | 239.21 | 230.92 |
| 4 | R&M Expenses | 27.86 | 26.98 |
| 5 | A&G Expenses | 9.48 | 18.20 |
| 6 | Depreciation | 49.22 | 76.88 |
| 7 | Interest on Loan | 57.63 | 49.90 |
| 8 | Interest on Consumer Security Deposit | 6.82 | 0.37 |
| 9 | Interest on Working Capital | 8.36 | 9.38 |
| 10 | Return on Equity | 44.74 | 55.28 |
| 11 | Provision for Bad Debit | - | 9.38 |
| 12 | Provision for DSM Expenses | 3.98 | - |
| 13 | Total Revenue Requirement | 1,700.88 | 1,805.38 |
| 14 | Less: Non-Tariff Income | 6.74 | 23.63 |
| 15 | Net Revenue Requirement | 1,694.14 | 1,781.76 |

5.15.2 EDG hereby requests the Commission to approve the ARR of Rs **1,781.76** Crs for FY 2016-17 as submitted above.

5.16 Revenue Gap for FY 2016-17

5.16.1 The Revenue Gap approved by the Hon'ble Commission for FY 2016-17 was Rs. 183.02 Crs.

5.16.2 The Revenue Gap as approved by the Hon'ble Commission and as calculated on the basis of provisional true up of FY 2016-17 is shown in the table below:

Table 5-20: Revenue Gap for FY 2016-17 - Rs. Crs

| Sl.No. | Particulars | Approved in Order dated 18.04.16 | FY16-17 Actual |
|----------|--------------------------------|----------------------------------|----------------|
| 1 | Net Revenue Requirement | 1,694.13 | 1,781.76 |
| 2 | Revenue from Sale of Power | 1,511.12 | 1,443.08 |
| 3 | Net Gap During the Year | 183.02 | 338.67 |

5.16.3 EDG submits that the treatment of the Revenue gap of Rs. **338.67** Crores will be considered at the time of actual true-up of FY 2016-17.

CHAPTER 6. ANNUAL PERFORMANCE REVIEW FOR FY 2017-18

6.1 Background to FY 2017-18 Petition

6.1.1 EDG in this chapter submits the performance of each parameter of ARR as against the values approved by the Hon'ble Commission. This chapter summarizes each of the components of ARR for FY 2017-18 and requests the Hon'ble Commission to review the performance for FY 2017-18. The Annual Performance Review for FY 2017-18 is based on actual data/ information for first 6 months (First Half – H1) and estimation/projections for second 6 months (Second Half – H2). The projections for the second 6 months are arrived at by expected escalation over performance of first half data/ information.

6.2 Review for FY 2017-18

6.2.1 Regulation 8 (1) of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Multi Year Distribution Tariff) Regulations, 2014 states that,

8. Annual Review of Performance and True-up

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

6.2.2 Further Regulation 20.2 (b) of the aforesaid regulations states that,

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

6.2.3 The Hon'ble Commission had issued the Tariff Order for FY 2017-18 on 23rd May 2017. For the purpose of ease of reference; the summary of approved ARR vis-a-vis submitted by EDG for FY 2017-18 submitted in the previous filing is reproduced hereunder:

Table 6-1: ARR approved by JERC for FY 2017-18 - Rs. Crs

| Sl.No. | Particulars | Submitted in petition | Approved in order dtd 18.04.2016 |
|-----------|--|-----------------------|----------------------------------|
| 1 | Cost of power purchase | 1,359.26 | 1330.98 |
| 2 | Provision for RPO Compliance | | 9.38 |
| 3 | Employee costs | 261.20 | 254.24 |
| 4 | R&M expenses | 53.05 | 30.57 |
| 5 | Administration and General expenses | 13.80 | 10.12 |
| 6 | Depreciation * | 56.92 | 64.16 |
| 7 | Interest on Loan and Finance charges | 73.87 | 74.04 |
| 8 | Interest on Working Capital * | 7.47 | 6.93 |
| 9 | Interest on Security Deposit * | 7.70 | 9.9 |
| 10 | Return on NFA /Equity * | 48.33 | 58.33 |
| 11 | Provision for Bad Debt | - | 0 |
| 12 | DSM Budget/ Expenses | 4.34 | 3.41 |
| 13 | Total Revenue Requirement | 1,885.94 | 1,852.06 |
| 14 | Less: Non-Tariff Income | 6.74 | 6.74 |
| 17 | Net Revenue Requirement (12-13-14-15) | 1,879.20 | 1,845.32 |

6.2.4 EDG would now discuss each of the elements of review in detail for H1 and H2 for determination of ARR and its gap for FY 2017-18.

6.3 Number of Consumers

6.3.1 The consumer base of Goa comprises of HT Industry, LT Industry, Commercial and Domestic consumers with the maximum number of consumers attributable to the domestic category. EDG has not considered any growth in the number of consumers for H2 as compared to H1 of FY 17-18 as EDG has witnessed a marginal growth in past which hardly affects the operation of EDG or revenue. However, in case of any growth in number of consumers, EDG is compatible enough to provide the new connection within the given scope of Supply Code and SoP Regulations and will not affect supply to any of the consumers. The table below shows category wise number of consumers for the year FY 2017-18 as per Projections against approved by the Hon'ble commission in the order dated 23rd May 2017.

Table 6-2: Number of Consumers for FY 2017-18 (Nos)

| Category | Approved in Order dated 18.04.16 | FY17-18 |
|---|-------------------------------------|---------------|
| DOMESTIC | | |
| Low Tension-D/LT-D | 486986 | 489358 |
| Low Tension-LIG/LT-LIG | 3049 | 1798 |
| Low Tension-DM/LT-DM | 0 | |
| High Tension-D/HT-D | 0 | 3 |
| COMMERCIAL | | |
| Low Tension-C/LT-C | 95447 | 94727 |
| High Tension-C/HT-C | | 200 |
| INDUSTRIAL | | |
| Low Tension-I/LT-I | 6403 | 5995 |
| Low Tension-Mixed/LT-P (Hotel Industries) | 222 | 135 |
| High Tension-I/HT-I | 764 | 679 |
| High Tension-Ferro/SM/PI/SR | 37 | 29 |
| AGRICULTURAL | | |
| Low Tension-AG/LT-AG | 10821 | 10865 |
| High Tension-AG/HT-AG | 41 | 42 |
| MILITARY ENGINEERING SERVICES/DEFENSE ESTABLISHMENTS | | |
| All Units | 12 | 12 |
| PUBLIC LIGHTING | | |
| All Units | 2740 | 2619 |
| HOARDINGS/SIGNBOARDS | | |
| All Units | 104 | 66 |
| TEMPORARY SUPPLY | | |
| LT Temporary | 2581 | 4374 |
| HT Temporary | 0 | 1 |
| Single Point Supply | 0 | 1 |
| Residential Complexes | | 0 |
| Commercial Complexes | | 1 |
| Industrial Complexes | | 0 |
| Overall LT Number o f consumers | 608353 | 609937 |
| Overall HT Number o f consumers | 854 | 967 |
| Total Number of Consumers | 609207 | 610904 |

6.3.2 The Hon'ble Commission is requested to approve number of consumers for FY 2016-17 as given above table.

6.4 Connected Load

6.4.1 In line with the similar principles of the projection of consumers in H2, EDG is not considering any growth in connected load, Sales and has been considered similar to H1 of FY17-1. Therefore there is no growth in connection load of H2 FY 17-18. Category wise connected load for FY 17-18 as compared to connected load approved in the tariff order are provided in the table below.

Table 6-3: Connected Load for FY 2017-18

| Category | Approved in Order dated 18.04.16 | FY17-18 |
|---|----------------------------------|------------------|
| DOMESTIC | | |
| Low Tension-D/LT-D | 1354057 | 1260724 |
| Low Tension-LIG/LT-LIG | 338 | 157 |
| Low Tension-DM/LT-DM | 13044 | |
| High Tension-D/HT-D | 193 | 300 |
| COMMERCIAL | | |
| Low Tension-C/LT-C | 281533 | 308058 |
| High Tension-C/HT-C | 42567 | 72042 |
| INDUSTRIAL | | |
| Low Tension-I/LT-I | 115580 | 137396 |
| Low Tension-Mixed/LT-P (Hotel Industries) | 4285 | 2766 |
| High Tension-I/HT-I | 417220 | 478437 |
| High Tension-Ferro/SM/PI/SR | 114756 | 111400 |
| AGRICULTURAL | | |
| Low Tension-AG/LT-AG | 34481 | 43633 |
| High Tension-AG/HT-AG | 8378 | 8860 |
| MILITARY ENGINEERING SERVICES/DEFENSE ESTABLISHMENTS | | |
| All Units | 7080 | 6955 |
| PUBLIC LIGHTING | | |
| All Units | 9598 | 9855 |
| HOARDINGS/SIGNBOARDS | | |
| All Units | 1098 | 619 |
| TEMPORARY SUPPLY | | |
| LT Temporary | 35 | 17264 |
| HT Temporary | | 350 |
| Single Point Supply | 0 | 4035 |
| Residential Complexes | | 0 |
| Commercial Complexes | | 4035 |
| Industrial Complexes | | 0 |
| Overall LT Connected load | 18,14,049 | 17,80,472 |
| Overall HT Connected load | 5,90,194 | 6,82,379 |
| Total Connected Load | 24,04,243 | 24,62,851 |

6.5 Energy Sales

6.5.1 It is submitted that the EDG projected H2 Sales of FY 2017-18 in proportion of H2 of FY 2016-17 over H1 of FY 2016-17. In FY 2016-17 H2 Sales were lower than the H1 of 2016-17. Thus in below projection, H2 of FY 2017-18 is lower than the H1 FY 2017-18.

6.5.2 EDG submits that still Billing of the EDG for FY 2016-17 is not yet streamlined, Sales and revenue may reconsider at the time of true up for those respective years.

6.5.3 The following table shows the overall sales projected by EDG for the year FY2017-18.

Table 6-4: Sales for FY 2017-18 (MUs)

| Category | Approved in Order dated 23.05.17 | FY17-18 H1 | FY17-18 H2 | FY17-18 Estimated |
|---|----------------------------------|-----------------|-----------------|-------------------|
| DOMESTIC | 931.27 | 589.79 | 400.23 | 990.03 |
| Low Tension-D/LT-D | 929.90 | 588.75 | 399.70 | 988.45 |
| Low Tension-LIG/LT-LIG | 1.10 | 0.89 | 0.36 | 1.25 |
| Low Tension-DM/LT-DM | | | | - |
| High Tension-D/HT-D | 0.27 | 0.15 | 0.18 | 0.33 |
| COMMERCIAL | 393.48 | 290.56 | 223.29 | 513.85 |
| Low Tension-C/LT-C | 317.38 | 237.95 | 165.66 | 403.61 |
| High Tension-C/HT-C | 76.10 | 52.61 | 57.63 | 110.24 |
| INDUSTRIAL | 2,053.74 | 938.03 | 1,034.61 | 1,972.64 |
| Low Tension-I/LT-I | 131.25 | 46.83 | 34.77 | 81.60 |
| Low Tension-Mixed/LT-P (Hotel Industries) | 4.83 | 2.95 | 2.43 | 5.39 |
| High Tension-I/HT-I | 1,345.82 | 682.73 | 833.79 | 1,516.52 |
| High Tension-Ferro/SM/PI/SR | 571.84 | 205.51 | 163.62 | 369.13 |
| AGRICULTURAL | 29.95 | 13.15 | 11.88 | 25.03 |
| Low Tension-AG/LT-AG | 23.87 | 8.94 | 5.71 | 14.65 |
| High Tension-AG/HT-AG | 6.08 | 4.22 | 6.17 | 10.38 |
| MILITARY ENGINEERING SERVICES/DEFENSE ESTABLISHMENTS | 26.89 | 14.10 | 13.78 | 27.88 |
| All Units | 26.89 | 14.10 | 13.78 | 27.88 |
| PUBLIC LIGHTING | 36.95 | 14.54 | 15.54 | 30.08 |
| All Units | 36.95 | 14.54 | 15.54 | 30.08 |
| HOARDINGS/SIGNBOARDS | 0.35 | 0.13 | 0.08 | 0.21 |
| All Units | 0.35 | 0.13 | 0.08 | 0.21 |
| TEMPORARY SUPPLY | 22.08 | 10.51 | 9.54 | 20.05 |
| LT Temporary | 22.08 | 10.51 | 9.54 | 20.05 |
| HT Temporary | - | 0.12 | 0.69 | 0.81 |
| Single Point Supply | 0 | 2.27 | 3.32 | 5.59 |
| Residential Complexes | | - | - | - |
| Commercial Complexes | | 2.27 | 3.32 | 5.59 |
| Industrial Complexes | | - | - | - |
| Overall LT Sales | 1,467.71 | 911.50 | 633.79 | 1,545.29 |
| Overall HT Sales | 2,027.00 | 961.71 | 1,079.18 | 2,040.89 |
| Total Sales | 3,494.71 | 1,873.20 | 1,712.97 | 3,586.18 |

6.5.4 EDG submits that the sales as estimated for FY 2017-18 is **3,586.18** MU's against approved sales of 3494.71 MUs in the order.

6.5.5 The Hon'ble Commission is requested to kindly approve the sales figures as estimated in the table above. The figures of Number of Consumers, Connected Load and Sales for FY 2017-18 are provided in Format 1 of Tariff Filing Formats.

6.6 T&D Loss & Energy Requirement

6.6.1 **T&D Loss H1:** The Distribution Loss for the 1st half of the year FY 2017-18 (i.e. Apr 17 to Sep 18) based on the actual data available comes to 10.90%

6.6.2 **Energy Input H1:** The actual measured energy input at periphery for H1 from WR and SR is provided in the table below: (Data is as per the SEM readings recorded at the

Periphery of Goa)

Table 6-5: Energy Input for WR & SR: FY 17-18 – H1

| Particulars | WR | SR | H1 |
|----------------------------|------|-----|------|
| Energy Inputs at Periphery | 1622 | 324 | 1945 |

6.6.3 **Energy Balance H1:** The Energy Balance for the 1st half of the year FY 2017-18, based on the provisional figures is shown in the table below:

Table 6-6: Energy Balance for FY 2017-18 H1 (in MU's)

| Sr. No. | Particulars | FY17-18 H1 |
|-----------|---|-----------------|
| 1 | Sales within State (MU) | 1,873.20 |
| 2 | Savings under DELP (MU) | - |
| 3 | Total Sales | 1,873.20 |
| 4 | Intra-State Transmission Loss (%) | 7.33% |
| | Intra-State Transmission Loss (in MU) | 148 |
| 5 | Sales to common pool consumers/Banking Return | - |
| 6 | Energy Requirement at periphery (MU) | 2,021.31 |
| 7 | Inter State Transmission Loss (%) | 7.88% |
| | Inter State Transmission Loss (in MU) | 172.84 |
| 8 | Energy Required at Generator End | 2,194 |
| 9 | Gross Availability (in MUs) | - |
| | Co-Generation (Within State) | 75.86 |
| | Power purchase from R.E. Sources -Solar | |
| | Power purchase from R.E. Sources -Non Solar | 68.05 |
| | NPCIL | |
| | NTPC and Other Stations | 1,770.38 |
| | Over/Under Drawal | - |
| 10 | PXIL (Buy) to match the Energy Requirement / Overdrawal and under drawal / Banking | 46.14 |
| 11 | Net power purchase (in MUs) | 2,148.01 |
| 12 | Gross Purchase including PXIL (in MUs) | 2,194.15 |

6.6.4 **Inter-State Transmission Losses:** PGCIL losses are on account of two regions, Western region (WR) and Southern Region (SR), for FY 17-18 H1 and H2 PGCIL total losses arrived as under.

Table 6-7: Inter-State Transmission Losses for FY 17-18 (MUs)

| Particulars | FY 17-18 (Approved) | FY17-18H1 | | | FY17-18H2 | | |
|-----------------------------------|---------------------|-----------|-------|-------|-----------|-------|-------|
| | | WR | SR | Total | WR | SR | Total |
| Inter-State Transmission Loss (%) | 4.17% | 4.37% | 9.23% | 5.21% | 4.37% | 7.50% | 4.93% |

- 6.6.5 **PGCIL SR Losses:** It can be seen from the table above, that PGCIL loss for the southern region is on higher side as compare to Western Region. This is due to the following reasons:
- The Power Scheduled from the SR originates from Ramagundam Periphery, which is located in Telangana.
 - Hence, the power which shall be made available at Goa periphery is subjected to substantial amount of losses viz Intra State Loss of Telangana and Inter State Losses and Losses between regions and Goa belong to the western region and Telangana to southern.
 - Thus, the PGCIL loss for the southern region tends to be more than the Western Region.
- 6.6.6 **Distribution Loss for overall FY 17-18:** The Distribution Loss for the year FY 2017-18 on overall basis is estimated to be around 10.90% against 11% approved by the Hon'ble Commission. In H1 T&D loss comes around whereby it is still facing the transition issues of billing agencies and the issue related to accuracy of data provided by them is yet to be resolved. EDG has been trying to minimize the Distribution Loss and shall continue with the efforts in reducing the Distribution Loss further. Therefore based on the Projection for H2, T&D Loss is at 14.50%, consequently comes 10.90% at FY17-18 as a whole.
- 6.6.7 The figures of AT&C loss and Distribution Loss for FY 2017-18 are provided in **Format 2 of Tariff Filing Formats.**
- 6.6.8 PGCIL Losses for H2 of FY 2017-18: As discussed in above Para, the total PGCIL Losses are considered for both the regions, i.e. WR & SR. The PGCIL loss for the SR for FY 2017-18 H2 is estimated as 27 MUs (Telangana Intra State Transmission Loss + Interstate Losses + Losses between regional grids). On the other hand PGCIL losses for the WR are estimated at 73 MUs.
- 6.6.9 EDG submits that it has projected power purchase quantum for H2 of FY 2017-18 based on the following assumptions.
- Percentage Allocation arrived for each of CGS station from Central Generating Station allocation data dated 31st Oct 2016
 - PLF of CGS station considered for H2 are based on recent actual PLF of the Plant.
 - Auxiliary consumption for CGS stations is taken from revised CERC tariff Regulations 2014.
 - Based on the above assumptions power purchase quantum from CGS stations have been arrived.
 - The remaining power requirement will be catered through power from power exchanges/ open market.

- While projecting the purchase from IEX/Traders, EDG considered the quantum of 100 MUs purchase from IEX/Traders against actual of 186 MUs in H1 FY 17-18.
- Also, additional quantum of 22 Mus has been considered for Solar RPO at the rate of Rs.4.90 per unit. For non-Solar 22 MUs from Mittal at the rate of Rs.4.84 for the period of Jan to March 2018, Also LOI issued for 64.65 MUs for non-Solar

6.6.10 EDG has therefore estimated the power purchase quantum for H2 of FY 2017-18 and has integrated with actual quantum of H1 to arrive at energy balance for entire year of FY 2017-18.

6.6.11 EDG while computing Energy balance for entire FY 2017-18 has considered actual of over-draw/under-drawl during first half of FY 2017-18. Thus, on the basis of the foregoing paragraphs, the Energy Balance for the year FY 2017-18 is computed by EDG vis-à-vis approved by the Hon'ble commission shown in the table below.

Table 6-8: Energy Balance for FY 17-18 (H1 + H2) - (MUs)

| Sr. No. | Particulars | Approved in Order dated 18.04.16 | FY17-18 H1 | FY17-18 H2 | FY17-18 Estimated |
|---------|---|----------------------------------|-----------------|-----------------|-------------------|
| 1 | Sales within State (MU) | 3494.71 | 1,873.20 | 1,712.97 | 3,586.18 |
| 2 | Savings under DELP (MU) | 78.6 | | | |
| 3 | Total Sales | 3416.11 | 1,873.20 | 1,712.97 | 3,586.18 |
| 4 | Intra-State Transmission Loss (%) | 11.00% | 7.33% | 14.50% | 10.90% |
| | Intra-State Transmission Loss (MU) | 422 | 148 | 290 | 438.58 |
| 5 | Sales to common pool consumers/Banking Return | 0 | | | - |
| 6 | Energy Requirement at periphery (MU) | 3,838.33 | 2,021.31 | 2,003.44 | 4,024.75 |
| 7 | Inter State Transmission Loss (%) | 4.17% | 7.88% | 4.75% | 6.35% |
| | Inter State Transmission Loss (in MU) | 160.00 | 172.84 | 99.89 | 272.73 |
| 8 | Energy Required at Generator End | 3,998 | 2,194 | 2,103 | 4,297 |
| 9 | Gross Availability (in MUs) | | | | |
| | Co-Generation (Within State) | 167.24 | 75.86 | 75.86 | 151.73 |
| | Power purchase from R.E. Sources -Solar | 50.56 | | | |
| | Power purchase from R.E. Sources -Non Solar | 34.69 | 68.05 | 139.78 | 207.83 |
| | NPCIL | 188.2 | | | |
| | NTPC and Other Stations | 3546.61 | 1,770.38 | 1,787.69 | 3,558.07 |
| | Over/Under Drawal | 11.03 | | | - |
| | Power purchase from trader | | 187.57 | 100.00 | 287.57 |
| 10 | PXIL (Buy) to match the Energy Requirement / Overdrawal and under drawal / Banking | 0 | 46.14 | - | 46.14 |
| 11 | Net power purchase (in MUs) | 3,998.33 | 2,148.01 | 2,103.34 | 4,251.34 |
| 12 | Gross Purchase including PXIL (in MUs) | 3,998.33 | 2,194.15 | 2,103.34 | 4,297.49 |

6.6.12 The Hon'ble Commission is requested to approve the Energy Balance for the FY 2017-18 as provided in the above table. The energy requirement and source wise power purchase details along with actual cost for H1 are discussed in subsequent section. The figures of energy Balance for FY 2017-18 (H1, H2 and overall for FY 2017-18) are provided in Format 3 of Tariff Filing Formats.

6.7 Power Purchase Quantum & Cost for FY 2017-18

Power Purchase Cost for H1 FY 2017-18

6.7.1 EDG meets its total energy requirement from its allocation from the Central Generating Stations (CGS), state based Co-generation facilities, Power Exchanges etc. EDG receives power from CGS like NTPC and NPCIL as per allocation from time to time. The power purchases from other sources such viz. Co-generation has been as per respective PPAs.

6.7.2 The table below shows the summary of Power Purchase from various sources along with their costs for the 1st half of FY 2017-18 including Transmission Charges, Overdrawl and purchase from traders:

Table 6-9: Power Purchase Quantum & Cost for FY 2017-18 (H1)

| Sl. No | Particulars | Gross Purchase | Cost | Rate |
|--------|------------------|-----------------|---------------|-------------|
| | | MUs | Rs. Crs | Rs./kWh |
| 1 | NTPC | 1,753.96 | 322.34 | 1.84 |
| 2 | NPCIL | 16.42 | 5.16 | 3.14 |
| 3 | Traders | 187.57 | 66.60 | 3.55 |
| 4 | Overdrawal | 46.14 | 17.43 | 3.78 |
| 5 | Co-Generation | 75.86 | 18.22 | 2.40 |
| 6 | Renewable | 68.05 | 38.28 | 5.63 |
| 7 | Transmission | | 89.32 | |
| 8 | Banking of Power | - | - | - |
| 9 | Total | 2,128.33 | 557.36 | 2.62 |

6.7.3 The source wise details of Power Purchase Quantum and its cost are covered in Format 4 of the Tariff Filing Formats.

6.7.4 EDG on a real time basis has also overdrawn/ under drawn power from both WR and SR grids. Reactive charges has been adjusted in the over drawal and under drawal charges. The summary details of the same are provided in the table below for H1:

Table 6-10: DSM Power (Overdrawl & Underdrawl) Charges for H1 of FY 2017-18

| Region | Over drawal | | Under drawal | | Net Drawal | |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Rs. Cr | MUs | Rs. Cr | MUs | Rs. Cr | MUs |
| Western | 16.83 | 54.29 | 1.58 | 14.13 | 15.26 | 40.16 |
| Southern | 4.22 | 17.99 | 2.04 | 12.00 | 2.18 | 5.99 |
| Total | 21.05 | 72.28 | 3.62 | 26.13 | 17.43 | 46.14 |

6.7.5 Transmission Charges H1: The transmission charges for the 1st half of FY 2017-18 comprises of transmission charges for Western Region and Southern Region. The Transmission charge comes to around Rs.89.32 Crores.

Power Purchase Cost for H2FY 2017-18

6.7.6 Power Purchase Fixed Cost for H2 FY 2017-18: The Fixed charges for CGS have been taken in line with the cost actually incurred by EDG during the first half of FY 2017-18.

The fixed cost has been considered only for CGS stations.

- 6.7.7 Power Purchase Variable Cost for H2 FY 2017-18: Power purchase requirement for H2 FY 2017-18 is projected as per the availability of plants. Further cost for the same has been projected considering Fixed cost. The variable cost for CGS stations for FY 2017-18 has been computed considering per unit cost incurred in H1 of FY 2017-18. The variable cost per unit for Co-Generation Stations (existing as well as upcoming) has been taken as per actuals of H1 on average basis.

Power Purchase from Renewable Energy Sources:

- 6.7.8 Solar RPO: As regards fulfilment of Solar RPO is concerned, In H2 FY 2017-18, EDG would purchase same quantum of Renewable energy as purchase in H1, In addition to that for 22 MUs tender has been opened and LOI is placed at Rs.4.90 per unit.
- 6.7.9 Non-Solar RPO: To meet Non-Solar RPO LOI has been issued for 64.65 MUs at Rs.4.82 to Rs.4.86 per unit. Further additional 22 MUs shall be purchase from Mittal at Rs.4.84 per unit.
- 6.7.10 To meet balance RPO till FY 2017-18, EDG has projected cost of Rs. 4.23 Crs which is considered in ARR Separately.
- 6.7.11 EDG submits that cumulative RPO target for solar and Non-Solar till FY 17-18 is projected to be met through purchase of REC for balance quantum of Renewable Energy. Details of the Solar and Non Solar RPO Status for FY 2017-18 are given in the table below:

Table 6-11: Solar & Non-Solar RPO Status for FY 2017-18

| Sr. No. | Particulars | Approved in Order dated 23.05.17 | FY17-18 Estimated |
|---------|--|----------------------------------|-------------------|
| 1 | Sales Within UT | 3,416.11 | 3,586.18 |
| 2 | RPO Requirement (in %) | 4.30% | 6.70% |
| | Solar | 1.50% | 2.50% |
| | Non Solar | 2.80% | 4.20% |
| 3 | RPO Requirement (in MU) | 146.89 | 240.27 |
| | Solar | 51.24 | 89.65 |
| | Non Solar | 95.65 | 150.62 |
| 4 | RPO Compliance (Actual Purchase) (in MU) | 85.25 | 248.83 |
| | Solar | 50.56 | 83.30 |
| | Non Solar | 34.69 | 165.52 |
| 5 | RPO Compliance (REC Purchase) (in MU) | - | - |
| | Solar | | |
| | Non Solar | | |
| 6 | Total RPO Compliance (in MU) | 85.25 | 248.83 |
| | Solar | 50.56 | 83.30 |
| | Non Solar | 34.69 | 165.52 |
| 7 | Net Shortfall in RPO Compliance (in MU) | 61.64 | (8.55) |
| | Solar | 0.68 | 6.35 |
| | Non Solar | 60.96 | (14.91) |
| 8 | Floor Price of REC Rs /MWH | | |
| | Solar | 3,500.00 | 2,500.00 |
| | Non Solar | 1,500.00 | 2,900.00 |
| 9 | Additional Provision for RPO Compliance (Rs Crores) | 9.38 | |
| | Solar | 0.24 | 1.59 |
| | Non Solar | 9.14 | - |

6.7.12 Transmission Charges FY 2017-18 (H2): The Transmission Charges for FY 2017-18 are considered as per POC rates. As per CERC Order (determination of PoC rates and transmission losses for the period of October to December 2017) dated 31st October 2017. Further, the transmission charge has also been considered factoring the wheeling charges pertaining to KPTCL. The computation of transmission charges consists of POC Charges, Reliability support charges and HVDC charges and is provided in the table below.

Table 6-12: POC Transmission Charges for H2 for FY 2017-18

| Regions | POC Rates | Reliability support charges | HVDC Charges | Total Charges | Monthly Quantum | Monthly charges | Total charges for 6 months |
|---------|---------------|-----------------------------|---------------|---------------|-----------------|-----------------|----------------------------|
| | (Rs/Mw/month) | (Rs/Mw/month) | (Rs/Mw/month) | (Rs/Mw/month) | (MW) | (Rs. Crs) | (Rs. Crs) |
| SR | 72811 | 24271 | 14113 | 111195 | 100.00 | 1.11 | 6.66 |
| WR | 238477 | 24271 | 7459 | 270207 | 385.49 | 10.42 | 62.52 |

6.7.13 The total transmission charges for H2 including Wheeling and SLDC charges etc for FY 2017-18 are given in the table below:

Table 6-13: Total Transmission Charges for H2 FY 2017-18

| Particulars | H2 FY 2017-18 |
|--|---------------|
| POC Transmission charge (Oct 2017 to March 2018) | 69.18 |
| KPTCL Wheeling Charge (H2 FY 2017-18) | 0.00 |
| Fees and Charges of SRLDC-WR | 0.14 |
| Fees and Charges of SRLDC-SR | 0.03 |
| SCADA and Reactive Charges | 0.00 |
| Total | 69.35 |

6.7.14 Thus, the total Transmission charge for H2 of FY 2017-18 works out to be Rs. **69.35** Crores.

6.7.15 Power Purchase Cost summary FY 2017-18: In line with the foregoing paragraphs, the total Power Purchase for FY 2017-18 estimated and approved in the tariff order is summarized in the table below:

Table 6-14: Power Purchase Summary for FY 2017-18

| Sl. No | Particulars | Gross Purchase | Cost | Rate |
|--------|--------------------|-----------------|-----------------|-------------|
| | | MUs | Rs. Crs | Rs./kWh |
| 1 | NTPC | 3,498 | 765 | 2.19 |
| 2 | NPCIL | 60 | 19 | 3.14 |
| 3 | Traders | 288 | 105 | 3.65 |
| 4 | Overdrawal | 46 | 17 | 3.78 |
| 5 | Co-Generation | 152 | 36 | 2.40 |
| 6 | Renewable | 208 | 111 | 5.33 |
| 7 | Transmission/PGCIL | - | 159 | |
| 9 | Total | 4,231.66 | 1,212.08 | 2.86 |

6.7.16 It is submitted that net power purchase at state periphery after losses is 4025 MUs with total power purchase cost of Rs. Crores and the average power purchase cost works out to Rs. /kWh against approved net power purchase cost of Rs. **2.86** /kWh for FY 2017-18.

6.7.17 EDG submits that the actual Total Power purchase cost is within the approved amount of power purchase.

6.7.18 The power purchase details for H1 and H2 and for FY 2017-18 (H1+H2) are provided in Tariff Filing Format 4.

6.7.19 It is requested to the Hon'ble Commission to approve the power purchase cost including transmission charges at Rs. **1,212.08** Crores for FY 2017-18 as per workings and at an

average cost of Rs. /kWh on net power purchase basis.

6.8 Operation & Maintenance Expenses

6.8.1 Operation & Maintenance Expenses consists of three elements viz Employee Expenses, A&G Expense and R&M Expense:

- Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses
- Administrative expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.
- Repairs and Maintenance Expenses go towards the day to day upkeep of the distribution network of the Company and form an integral part of the Company's efforts towards reliable and quality power supply as also in the reduction of losses in the system.

6.8.2 As per Regulation 21 of JERC MYT Regulations, 2014, the Hon'ble Commission shall stipulate separate trajectory of norms for each component of O&M expenses.

" 21. Operation & Maintenance Expenses

(a) The Commission shall stipulate a separate trajectory of norms for each of the components of O&M expenses viz., Employee cost, R&M expense and A&G expense.

Provided that such norms may be specified for a specific Distribution Licensee or a class of Distribution Licensees.

....

(c) One-time expenses such as expense due to change in accounting policy, arrears paid due to pay commissions etc., shall be excluded from the norms in the trajectory.

(d) The expenses beyond the control of the Distribution Licensee such as dearness allowance, terminal benefits in Employee cost etc., shall be excluded from the norms in the trajectory.

(e) The One-time expenses and the expenses beyond the control of the Distribution Licensee shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check."

6.8.3 Employee Expenses for FY 2017-18:

6.8.3.1 As per Regulation 21.1 of JERC MYT Regulations, 2014 expenses beyond the control of the Distribution Licensee like arrears and impact of pay commission shall be adjusted.

6.8.3.2 The relevant extract of regulations is reproduced below for reference.

"21.1 Employee Cost

*Employee cost shall be computed as per the approved norm escalated by wholesale price index (WPI), adjusted by provisions for expenses beyond the control of the Distribution Licensee and one time expected expenses, such as recovery/adjustment of terminal benefits, **implications of pay commission,***

arrears and Interim Relief, governed by the following formula:

$$EMP_n = (EMP_b * WPI \text{ inflation}) + \text{Provision}$$

Provision: Provision for expenses as necessitated by the licensee due to expansion of the consumer base, yearly increments of Employees, and any expected one-time expenses as specified above.”

Table 6-15: Justification on the employee cost for FY 2017-18

| Particulars | Units | FY 2011-12 | FY 2017-18 | CAGR |
|-------------------------|----------|------------|------------|------|
| Employee Expenses | Rs. Crs | 154.63 | 296.88 | 11% |
| Average No. of Employee | No. | 5,606 | 7,194 | 4% |
| Cost per Employee | Rs. Lacs | 2.76 | 4.13 | 7% |

- 6.8.4 Also, the above salary component also includes the impact of 7th Pay commission which if excluded will witness a marginal increase as compare to FY 2017-18. Accordingly, EDG request the Hon’ble Commission to approve the Employee cost as submitted in the petition.
- 6.8.5 The head wise actual information for employee expenses has been provided in Format 16 of Tariff Filing Format.
- 6.8.6 **Repairs & Maintenance Expenses for FY 2017-18:**
- 6.8.7 EDG has been carrying out various R&M activities as a step towards improvement of systems, reduction in breakdowns, reduction in response time and increasing preventive maintenance.
- 6.8.8 EDG has actually incurred amount of Rs. 13.47 Crores in the first six months period from April-September 2017 which includes Rs.10.05 Crs spend for the minor R&M works. While projecting the R&M expense for H2, have estimated the expenses based on the budget available with the department except for minor R&M works. In H2, Minor R&M works of Rs. 12.48 Crs is projected only resulting in total estimated expenses of Rs. 16.59 Crs.
- 6.8.9 The R&M expenses based on provisional and revised estimates for the year FY 2017-18 compute to Rs. 30.06 Crs Projected R&M expense are lower than the approved amount which of Rs.30.57 Crores.
- 6.8.10 R&M cost is mainly on account of repairs and maintenance of 33 KV substations, 11 KV substations, LT Lines etc. Also minor R&M works are also contributing to significant part of R&M Expenses.

6.8.11 It is submitted that in the past few years, EDG has increased the fixed asset base to the large extent and to preserve and maintain such assets always demand appropriate cost so that consumers gets an uninterrupted power supply. EDG has been strictly following the Standard of Performance Regulations and Supply Code which needs a proper maintenance of such assets. Though the absolute number of R&M expenses is on the higher side, the % of R&M as compare to GFA is within the limits as highlighted in the table below:

Table 6-16: Justification of R&M Expenses for FY 2017-18

| Particulars | Units | FY 2017-18 |
|--------------|---------|------------|
| R&M Expenses | Rs. Crs | 30.06 |
| Average GFA | Rs. Crs | 1,659 |
| % of GFA | % | 1.81% |

6.8.12 The R&M cost claimed by EDG is ~1.85% of GFA which is far lower than the norm of 2.92% approved by the Hon’ble Commission. Accordingly, EDG request the Hon’ble Commission to approve the R&M cost as submitted in the petition.

6.8.13 Administration & General expenses for FY 2017-18:

6.8.13.1 As mentioned earlier, Administrative expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.

6.8.13.2 As per Regulation 21.3 of JERC MYT Regulations, 2014 there is provision for expected expenses and one-time expenses.

“21.3 Administrative and General Expenses

A&G expenses shall be computed as per the norm escalated by wholesale price index (WPI) and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by the Distribution Licensee and validated by the Commission) or other expected one-time expenses, and shall be governed by following formula:

$$A\&G_n = (A\&G_b * WPI \text{ inflation}) + \text{Provision}$$

where:

A&G_n: A&G expense for the year n A&G_b:

A&G expense as per the norm

WPI inflation: is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years

Provision: Cost for initiatives or other one-time expenses as proposed by the Distribution Licensee and validated by the Commission. “

6.8.13.3 The A&G expenses are estimated on higher side as compared to H1 of FY 2017-18 due to

higher cost estimated for regulatory expenses, legal and professional fees and office expense.

6.8.13.4 The A&G expenses based on provisional and revised estimates for the FY 2017-18 computes to Rs. Crores. The Hon'ble Commission is requested to approve A&G expenses as per projections for FY 2017-18.

6.8.13.5 In case the same is linked to the number of consumer base which has increased in past few years, the cost per consumers has witness a growth of marginally 6% which is far below then WPI/CPI index in those years. The details are highlighted as below:

Table 6-17: Justification of A&G Expenses for FY 2017-18

| Particulars | Units | FY 2012-13 | FY 2017-18 | CAGR |
|-------------------|---------|------------|------------|------|
| A&G Cost | Rs. Crs | 13.80 | 23.67 | 11% |
| No. of Consumers | No. | 5,23,615 | 6,10,904 | 3% |
| Cost per consumer | Rs. | 264 | 387 | 10% |

6.8.14 Accordingly, EDG request the Hon'ble Commission to approve the A&G cost as submitted in the petition.

6.8.15 O&M Expenses Summary FY 2017-18: Based on the foregoing paragraphs, the O&M expenses for the FY 2017-18 vis-a-vis the approved level by the Hon'ble Commission is shown in the table below:

Table 6-18: O&M Expenses for FY 2017-18 - Rs. Crs.

| Sl.No. | Particulars | Approved in Order dated 18.04.16 | FY17-18 Estimated |
|----------|-------------------------------|----------------------------------|-------------------|
| 1 | Employee Expenses | 254.24 | 296.88 |
| 2 | A&G Expenses | 10.12 | 23.67 |
| 3 | R&M Expenses | 30.57 | 30.06 |
| 4 | Total O&M Expenses | 294.93 | 350.61 |

6.8.16 The Hon'ble Commission is requested to approve the O&M Expenses as shown in the table above. The details of O&M expense for FY 2017-18 are provided in the Formats 14, 16 & 17 of the Tariff Filing Formats.

6.9 Capital Work in Progress, GFA and Depreciation

6.9.1 The Capital Work in Progress (CWIP), Gross Fixed Asset (GFA) and Depreciation for FY 2017-18 are discussed hereunder.

6.9.2 EDG would like to submit that the Gross Block considered in FY 2017-18 is based on audited figure of FY 2013-14 and further addition is taken based on the approved figure

of FY 2014-15 and FY 2015-16, also for FY 16-17 actual number and for FY 17-18 actual provisional number taken while arriving at gross block for FY 2017-18.

6.9.3 EDG hereby submits a gist on the Capital Expenditure & Capitalisation for the FY 2017-18.

Table 6-19: Capital Expenditure & Capitalisation for FY 2017-18 – Rs. Crs.

| S. No. | Name of Scheme | Capex during FY17-18 | Capitalisation during FY17-18 |
|--------|---|----------------------|-------------------------------|
| 1 | Scheduled castes development scheme(P) | - | - |
| 2 | Schedule Tribe Development Scheme (P) | 20.00 | 14.65 |
| 3 | Infrastructure development through Electricity Duty (Plan) | 77.66 | 42.00 |
| 4 | Erection and Augmentation of 33/11 KV S/S line (Plan) | 1.00 | 1.00 |
| 5 | Normal Development Schemes (Plan) | 14.00 | 14.00 |
| 6 | System Improvement Schemes (Plan) | 6.50 | 6.50 |
| 7 | Construction of staff quarters and office buildings (Plan) | 1.00 | 1.00 |
| 8 | Erection of 220/33 KV 1X50 MVA Sub- Station at Cuncolim | 0.10 | 0.10 |
| 9 | Erection of 220 KV line from Xeldem to Cuncolim | - | - |
| 10 | Strengthening of 220 KV Transmission Network | 1.50 | 1.50 |
| 11 | Restructured Accelerated Power Development and Reforms Programme Part A | 56.00 | 56.00 |
| 12 | Underground Cabling | 18.50 | 18.50 |
| 13 | Public Lighting Scheme | 1.50 | 1.50 |
| 14 | R-APDRP Part B / IPDS | 52.07 | 52.07 |
| 15 | EHV new Transmission / Sub-Station / Capacitor banks schemes | 15.00 | 3.00 |
| 16 | Erection of 220/110/33/11 KV Sub-Station at Verna (New) | 10.00 | - |
| 17 | Erection of 220 KV line from Ponda-Verna-Xeldem | 5.00 | - |
| | Total | 279.83 | 211.82 |

6.9.4 As seen from the above table, the majority of the CAPEX incurred is for Infrastructure development schemes through APDRP, System Strengthening Schemes and R-APDRP. The total Capital Expenditure and Capitalization for FY 2017-18 as per estimates is Rs.279.83 Crores and Rs.211.82 Crores respectively. The detail of capital expenditure schemes for FY 2017-18 is provided in the Format 5 of Tariff Filing Formats.

6.9.1 The details of opening Capital Works-in-Progress, investments during the year and investments capitalised for the year are summarised in the table below:

Table 6-20: CWIP for FY 2017-18 – Rs. Crs

| Sr. No. | Particulars | FY 2017-18 |
|---------|-----------------------------|------------|
| 1 | Opening Balance | 250.41 |
| 2 | Add: New Investments | 279.83 |
| 3 | Total | 530.24 |
| 4 | Less Investment Capitalized | 211.82 |
| 5 | Other Entries in CWIP | - |
| 5 | Closing Balance | 318.42 |

6.9.2 The Opening Balance of GFA for FY 2017-18 comes to around Rs. 1553.23 Crores. The additions to GFA are estimated to be around Rs.211.82 Crores; the details of which are provided in the table below:

Table 6-21: Details of GFA for FY 2017-18 – Rs. Crs.

| Sr. No. | Particulars | Approved | Projected |
|----------|-------------------------------------|-----------------|-----------------|
| 1 | Opening Gross Fixed Assets | 838.18 | 1,553.23 |
| 2 | Add: Capitalization approved | 479.54 | 211.82 |
| 3 | Less: Capitalization through grants | - | 75.60 |
| 4 | Closing Gross Fixed Assets | 1,317.72 | 1,689.45 |

6.9.3 The Regulation 23 of JERC MYT Regulations, 2014 provides for depreciation to be calculated. Further, as per the regulation, depreciation shall be calculated annually at the rate of depreciation specified by the JERC/ CERC from time to time. Therefore, in line with the Regulation, EDG has calculated the depreciation at Rs. 85.61 Crores after excluding the capitalisation as per grants. The table below shows the working of Depreciation.

Table 6-22: Depreciation for FY 2017-18 – Rs. Crs.

| Sr. No | Particulars | Approved in Order dated 18.04.16 | FY17-18 Estimated |
|----------|--|----------------------------------|-------------------|
| 1 | Opening Gross Fixed Assets | 975.42 | 1,553.23 |
| 2 | Add: Capitalization approved/Estimated | 579.54 | 211.82 |
| 4 | Less: Capitalization through grants | 100.00 | 75.60 |
| 5 | Closing Gross Fixed Assets | 1,454.96 | 1,689.45 |
| 6 | Average Gross Fixed Assets | 1,215.19 | 1,621.34 |
| 7 | Rate of Depreciation | 5.28% | 5.28% |
| 8 | Depreciation | 64.16 | 85.61 |

6.9.4 The detail of GFA & Depreciation for FY 2017-18 is provided in the Format 7 & Format 12 of Tariff Filing Formats respectively. The Hon'ble Commission is requested to approve the depreciation for the assets added during the year for FY 2017-18.

6.10 Interest & Finance Charge

6.10.1 As per regulation 24 (b) of MYT Regulations, 2014,

“(b) If the equity deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans.

...

(e) The repayment for the control period shall be deemed to be equal to the depreciation allowed for the year.”

6.10.2 The Regulation 24(b) provides for Interest and Finance Charges on Loan. EDG has submitted that the majority of capital assets are created out of the equity contribution from Government of Goa and the actual borrowing of loan is only to the extent of the

APDRP schemes. EDG has computed loan balance and interest on loan as per normative principles and methodology adopted by Commission in past orders.

6.10.3 The opening normative loan balances considered from the audited accounts of FY 2013-14. additions to loan has been taken as 70% of additions to GFA after excluding on the amount of GFA for APDRP Part B schemes as they are proposed to be funded by grant. Also amount of GFA for Scheme which are funded through Electricity Duty fund excluded from the addition to loan amount. Normative loan repayments are considered same as depreciation amount for FY 2017-18.

6.10.4 The rate of Interest for long term Interest rate has been considered at the rate of 11.60% as approved by Commission in MYT Order dated 18th April 2016 for FY 2017-18. It is requested to Hon'ble Commission to approve Interest on Loan on normative principles. The details of actual loan are provided at Tariff Filing Format 10.

6.10.5 EDG has not considered the Letter of Credit charges for payment security charges as directed by the Hon'ble Commission, as the same will be considered at the time of true up.

Table 6-23: Interest & Finance Charges for FY 2017-18 – Rs. Crs.

| Sl.No. | Particulars | Approved in Order dated 23.05.17 | FY17-18 Estimated |
|----------|---|-------------------------------------|----------------------|
| 1 | Opening Normative Loan | 502.48 | 422.05 |
| 2 | Add: Normative Loan during the year/GFA during the year | 335.68 | 95.35 |
| 3 | Less: Normative Repayment for the year | 64.16 | 87.01 |
| 4 | Closing Normative Loan/ GFA | 774.00 | 430.39 |
| 5 | Average Normative Loan | 638.24 | 426.22 |
| 6 | Rate of Interest | 11.60% | 11.60% |
| 7 | Interest on Normative Loan | 74.04 | 49.44 |

6.10.6 The Hon'ble Commission is requested to approve the Interest & Finance Charges for FY 2017-18 as shown in the above table. The details of Interest & Finance charges are provided in Format 10 of the Tariff Filing Formats.

6.11 Interest on Working Capital

6.11.1 As per Regulation 25 of JERC MYT Regulations, 2014, interest on Working Capital for retail supply activity of the licensee shall consist of:

- Receivables for two months of billing
- Less power purchase cost of one month
- Less consumer security deposit but excluding bank guarantee/ fixed deposit receipt
- Inventory for two months based on annual requirement for previous year.

6.11.2 The Interest Rate is considered equivalent to the SBI MCLR Rate for the year FY 2017-18 which is at 8%.

6.11.3 In line with the aforesaid regulation, the Interest on Working Capital works out to Rs. **11.62** Crores for FY 2017-18 which is provided in the table below:

Table 6-24: Interest on Working Capital for FY 2017-18 – Rs. Crs.

| Sl.No. | Particulars | Approved in Order dated 18.04.16 | FY17-18 Estimated |
|--------|---|----------------------------------|-------------------|
| 1 | Receivables of 2 Months Billing | 307.55 | 284.16 |
| 2 | Less: Power Purchase Cost 1 Month | 111.7 | 101.01 |
| 3 | Less: Consumer Security Deposit Excl. BG/FDR | 89.43 | 37.86 |
| 4 | Add: Inventory Based on Annual Requirement for Previous FY for 2 months | - | - |
| 5 | Total Working Capital Requirement | 106.42 | 145.29 |
| 6 | SBI MCLR Rate (%) | 9.30% | 8.00% |
| 7 | Interest on Working Capital | 9.90 | 11.62 |

6.11.4 The Hon'ble Commission is requested to approve the Interest on Working Capital as presented in the table above. The details of Interest on Working Capital for FY 2017-18 are provided in Format 18A of the Tariff Filing Formats.

6.12 Interest on Security Deposit

6.12.1 As per the Regulation 6.10 (8) of Electricity Supply Code Regulations, 2010:

"The distribution licensee shall pay interest, at the bank rate notified by the Reserve Bank of India from time to time on such security deposits taken from the consumer. In this regard it shall be the responsibility of the licensee to keep a watch on the bank rate from time to time.

The interest amount of previous financial year shall be adjusted in the energy bill issued in May/ June of each financial year depending on billing cycle."

6.12.2 The provision of interest on security deposits is to be made at the bank rate. The prevailing Bank rate is considered at 7.75% as notified by Reserve Bank of India vide circular dated 4th March 2015.

6.12.3 In lieu of the above, Interest on Security Deposit is calculated at Rs. **2.93** Crores on cash security deposit amounts excluding Bank Guarantee & Fixed Deposit Receipts. The table below shows details of Interest on Security Deposit for FY 2017-18:

Table 6-25: Interest on Security Deposit for FY 2017-18 – Rs. Crs.

| Sl.No. | Particulars | Approved in Order dated 18.04.16 | FY17-18 Estimated |
|--------|----------------------------------|-------------------------------------|----------------------|
| 1 | Opening Security Deposit | 89.43 | 32.44 |
| 2 | Add: Deposit during the year | 1.14 | 17.03 |
| 3 | Less: Deposits refunded | | 1.91 |
| 4 | Less: Deposits in form of BG/FDR | | 4.26 |
| 5 | Closing Security Deposit | 90.57 | 43.29 |
| 6 | Average | 90.00 | 37.86 |
| 7 | RBI Bank Rate | 7.75% | 7.75% |
| 8 | Interest on Security Deposit | 6.93 | 2.93 |

6.12.4 EDG has worked out the Interest on Security Deposit payable to consumer based on the regulation stated above, however as per direction of Hon'ble Commission EDG has started payment of Interest on Security Deposit, based on the same in this petition EDG has claimed Interest on Security Deposit only for the payment amount in respective years.

6.12.5 The Hon'ble Commission is requested to approve the Interest on Security Deposit as claimed in ARR for FY 2017-18.

6.13 Return on Equity

6.13.1 The proviso of Regulation 27 of MYT Regulations 2014 provides for entitlement for Return on Equity. As per the regulations, RoE is allowed @16% on 30% of the capital base or actual equity, whichever is lower. However, assets funded by consumer contribution, capital subsidies/grants and corresponding depreciation shall not form part of the capital base.

6.13.2 In line with the regulation and the methodology proposed in the MYT Regulations, 2014, EDG has calculated the Return on Equity as outlined in the following table for FY 2017-18.

6.13.3 The opening balance of assets and accumulated depreciation are considered as per audited account of FY 13-14 and further provisional actual numbers used to arrive at the FY17-18. Opening equity has been computed by confiscating electricity duty utilised from FY 2008-09 to FY 2014-15 from the GFA as on 31st March 2015.

6.13.4 Further normative equity addition during the year is considered 30% of the net GFA addition as computed in format 6

Table 6-26: Opening Balance of Equity as on FY 2017-18 – Rs. Crs

| Sr. No. | Particulars | Amount |
|----------|---|------------|
| | Calculation of Opening Balance of Equity | |
| 1 | Cl. Balance of GFA as on 31st March 2015 | 1,066 |
| 2 | Electricity Duty utilised from FY 2008-09 to FY 2010-11 | 64 |
| 3 | Additional of Electricity Duty Fund from FY 2011-12 to FY 2014-15 | 115 |
| 4 | Op. Balance of Equity as on 1st April 2015 = (1-2-3)*30% | 266 |
| 5 | Add: capitalisation in FY 2015-16 = 30% of GFA Excluding grants | 66 |
| 6 | Add: capitalisation in FY 2016-17 = 30% of GFA Excluding grants | 26 |
| 7 | Op. Balance of Equity as on 1st April 2017 | 358 |

6.13.5 The table below shows Return on equity for FY 2017-18:

Table 6-27: Return on equity for FY 2017-18 – Rs. Crs

| Sl.No. | Particulars | Approved in Order dated 18.04.16 | FY17-18 Estimated |
|----------|---|-------------------------------------|----------------------|
| 1 | Opening Equity Amount | 292.63 | 358.47 |
| 2 | Equity Addition during year (30% of Capitalization) | 143.86 | 40.87 |
| 3 | Closing Equity Amount | 436.49 | 399.33 |
| 4 | Average Equity Amount | 364.56 | 378.90 |
| 5 | Rate of Return on Equity | 16.00% | 16% |
| 6 | Return on Equity | 58.33 | 60.62 |

6.13.6 The Hon'ble Commission is requested to approve the Return on equity at Rs. **60.62** Crores as shown in the table above. The details of Return on equity for FY 2017-18 are provided in Format 6 of the Tariff Filing Formats.

6.14 Non-Tariff Income

6.14.1 Non-Tariff Income comprises of proceeds from sale of dead stock, waste paper, Receipt from State Electrical Inspectorate and other miscellaneous receipts. The Non-Tariff Income for the year FY 2017-18 comes to Rs. **28.14** Crores.

6.14.2 The details of Non-Tariff Income for FY 2017-18 are provided in Format 20 of the Tariff Filing Formats.

6.15 Revenue from Retail Sale of Power

6.15.1 The provisional revenue from sale of power including FPPCA charges for H1 of FY 2017-18 is Rs. **885.50** Crores including FPPCA of Rs. 112.11 Crores. The category wise details of revenue are provided in Format 26 of the MYT Filing Formats.

6.15.2 While projecting Revenue from Sale of power for FY 2017-18 H2, EDG has considered same number of consumers and connected load of FY 17-18 H1. Also Sales are projected in the ratio of H2 Sales over H1 in FY 2016-17.

6.15.3 FPPCA Charges are projected based on the FPPCA charges per unit of 2nd quarter of FY 2017-18 (Jul17 to Sep17). Also while calculating FPPCA charges, it is considered only for one quarter, as it cannot be predictable rightly, and FPPCA for 2nd quarter is positive, thus as a conservative approach considered only for one quarter.

6.15.4 The overall revenue from sale of power for FY 2017-18 computes to Rs. **1,704.98** Crores and Hon'ble commission is requested to approve the same.

Table 6-28: Revenue from Sale of Power for FY 2017-18

| Sl.No. | Particulars | Approved in Order dated 23.05.17 | | FY17-18 H1 | | FY17-18 H2 | | FY17-18 Estimated | |
|--------|--|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-----------------|
| | | Units (Mus) | Amt (Rs. Crore) | Units (Mus) | Amt (Rs. Crore) | Units (Mus) | Amt (Rs. Crore) | Units (Mus) | Amt (Rs. Crore) |
| 1 | Low Tension-D/LT-D | 929.90 | 271.40 | 589 | 156 | 400 | 88 | 988.45 | 243.90 |
| 2 | Low Tension-LIG/LT-LIG | 1.10 | 0.11 | 1 | 0 | 0 | 0 | 1.25 | 0.22 |
| 3 | Low Tension-DM/LT-DM | - | - | - | - | - | - | - | - |
| 4 | High Tension-D/HT-D | 0.27 | 0.15 | 0 | 0 | 0 | 0 | 0.33 | 0.21 |
| 5 | Sub-total Domestic -Overall | 931.27 | 271.66 | 590 | 156 | 400 | 88 | 990.03 | 244.33 |
| 6 | COMMERCIAL | | | | | | | | |
| 7 | Low Tension-C/LT-C | 317.38 | 152.49 | 238 | 129 | 166 | 81 | 403.61 | 209.53 |
| 8 | High Tension-C/HT-C | 76.10 | 54.62 | 53 | 42 | 58 | 46 | 110.24 | 87.80 |
| 9 | Sub-total Commercial -Overall | 393.48 | 207.11 | 291 | 171 | 223 | 127 | 513.85 | 297.33 |
| 10 | Industrial | | | | | | | | |
| 11 | Low Tension-I/LT-I | 131.25 | 47.61 | 47 | 22 | 35 | 15 | 81.60 | 37.14 |
| 12 | Low Tension-Mixed/LT-P (Hotel Industries) | 4.83 | 2.33 | 3 | 2 | 2 | 1 | 5.39 | 2.84 |
| 13 | High Tension-I/HT-I | 1,345.82 | 702.45 | 683 | 392 | 834 | 464 | 1,516.52 | 855.90 |
| 14 | High Tension-Ferro/SM/PI/SR | 571.84 | 280.32 | 206 | 112 | 164 | 94 | 369.13 | 205.61 |
| 15 | Sub-total Industrial -Overall | 2,053.74 | 1,032.71 | 938 | 527 | 1,035 | 574 | 1,972.64 | 1,101.50 |
| 16 | Low Tension-AG/LT-AG | 23.87 | 3.86 | 9 | 2 | 6 | 1 | 14.65 | 2.64 |
| 17 | High Tension-AG/HT-AG | 6.08 | 1.30 | 4 | 1 | 6 | 1 | 10.38 | 2.05 |
| 18 | Sub-total Agricultural -Overall | 29.95 | 5.16 | 13 | 2 | 12 | 2 | 25.03 | 4.69 |
| 19 | Military Engineering Services/Defense Establishments | 26.89 | 14.93 | 14 | 9 | 14 | 8 | 27.88 | 16.99 |
| 20 | Public Lighting | 36.95 | 14.87 | 15 | 6 | 16 | 7 | 30.08 | 12.89 |
| 21 | Hoardings/Signboards | 0.35 | 0.35 | 0 | 0 | 0 | 0 | 0.21 | 0.28 |
| 22 | Temporary Supply | 22.08 | 16.89 | 11 | 12 | 10 | 11 | 20.86 | 23.21 |
| 23 | LT Temporary Domestic | 17.47 | 12.29 | 0 | 1 | 0 | 0 | 0.68 | 0.70 |
| 24 | LT Temporary Commercial | 4.61 | 4.60 | 10 | 11 | 9 | 11 | 19.37 | 22.35 |
| 25 | H Temporary Supply | - | - | 0 | 0 | 1 | 0 | 0.81 | 0.17 |
| 26 | Single Point Supply | - | - | 2 | 2 | 3 | 2 | 5.59 | 3.75 |
| 27 | Residential Complexes | - | - | - | - | - | - | - | - |
| 28 | Commercial Complexes | - | - | 2 | 2 | 3 | 2 | 5.59 | 3.75 |
| 29 | Industrial Complexes | - | - | - | - | - | - | - | - |
| 30 | Overall LT Sales | 1,467.71 | 509.91 | 911.50 | 328.14 | 633.79 | 204.35 | 1,545.29 | 532.49 |
| 31 | Overall HT Sales | 2,027.00 | 1,053.77 | 959.44 | 555.52 | 1,075.86 | 613.22 | 2,035.30 | 1,168.74 |
| 32 | Total Revenue from Sale of Power | 3,494.71 | 1,563.68 | 1,873.20 | 885.50 | 1,712.97 | 819.48 | 3,586.18 | 1,704.98 |

6.16 Aggregate Revenue Requirement for FY 2017-18

6.16.1 Based on the submissions made in the foregoing paragraphs, the net Aggregate Revenue Requirement for the year FY 2017-18 and the revenue gap is shown in the table below:

Table 6-29: Aggregate Revenue Requirement for FY 2017-18 - Rs. Crs

| Sl.No. | Particulars | Approved in Order dated 23.05.17 | FY17-18 H1 | FY17-18 H2 | FY17-18 Estimated |
|-----------|---------------------------------------|----------------------------------|---------------|---------------|-------------------|
| 1 | Cost of Power Purchase | 1,330.98 | 557.36 | 654.73 | 1,216.31 |
| 2 | Provision for RPO Compliance | 9.38 | | 4.23 | |
| 3 | Employee Expenses | 254.24 | 171.88 | 125.00 | 296.88 |
| 4 | R&M Expenses | 30.57 | 13.47 | 16.59 | 30.06 |
| 5 | A&G Expenses | 10.12 | 6.08 | 5.76 | 11.84 |
| 6 | Depreciation | 64.16 | 36.73 | 36.73 | 73.46 |
| 7 | Interest on Loan | 74.04 | 24.72 | 24.72 | 49.44 |
| 8 | Interest on Consumer Security Deposit | 6.93 | 8.20 | 6.21 | 14.42 |
| 9 | Interest on Working Capital | 9.90 | 5.81 | 5.81 | 11.62 |
| 10 | Return on Equity | 58.33 | 30.31 | 30.31 | 60.62 |
| 11 | Provision for Bad Debit | - | - | - | - |
| 12 | Provision for DSM Expenses | 3.41 | 1.71 | 1.71 | 3.41 |
| 13 | Total Revenue Requirement | 1,852.06 | 856.27 | 911.79 | 1,768.06 |
| 14 | Less: Non-Tariff Income | 6.74 | 14.07 | 14.07 | 28.14 |
| 15 | Net Revenue Requirement | 1,845.32 | 842.20 | 897.72 | 1,739.92 |

6.16.2 The Hon'ble Commission is requested to approve the net ARR of FY 2017-18 computed at Rs. **1,739.92** Crores as per revised projections.

Table 6-30: Revenue Gap for FY 2017-18 - Rs.Crs

| Sl.No. | Particulars | Approved in Order dated 23.05.17 | FY17-18 H1 | FY17-18 H2 | FY17-18 Estimated |
|----------|--------------------------------|----------------------------------|----------------|--------------|-------------------|
| 1 | Net Revenue Requirement | 1,845.32 | 842.20 | 897.72 | 1,739.92 |
| 2 | Revenue from Sale of Power | 1,563.67 | 885.50 | 819.48 | 1,704.98 |
| 3 | Net Gap During the Year | 281.65 | - 43.30 | 78.24 | 34.94 |

6.16.3 EDG submits that the Revenue gap of Rs. **34.94** Crores is carried forward to next year for appropriate treatment.

CHAPTER 7. ARR FOR FY 2018-19

7.1 Preamble

7.1.1 The Joint Electricity Regulatory Commission (JERC) has notified the Regulations, JERC (Multi Year Distribution Tariff) Regulations, 2014 on 29th May 2014 for the determination of tariff for the first control period based on certain norms of operation and financial parameters.

7.2 Principles for determination of ARR

7.2.1 The Annual Revenue Requirement for the FY 2018-19 is considered as approved by the Hon'ble Commission in the MYT / Tariff Order dated 18th April, 2016.

7.3 Sales, Connected Load and Number of Consumers for FY 2018-19

7.3.1 The Sales, Connected Load and number of consumers as approved by the Hon'ble Commission in Tariff Order dated 18th April, 2016 is considered for FY 2018-19 and is tabulated below.

Table 7-1: Sales, Connected Load and Number of Consumers for FY 2018-19

| S. No. | Particulars | Sales (MUs) | | Consumers (No.) | | Connected Load (kW) | |
|--------|---|----------------|----------------|-----------------|---------------|---------------------|----------------|
| | | Submitted | Approved | Submitted | Approved | Submitted | Approved |
| 1 | Domestic | | | | | | |
| | Low Tension-D/LT-D | 984.51 | 984.51 | 496725 | 496725 | 1429335.95 | 1429335.55 |
| | Low Tension-LIG/LT-LIG | 1.10 | 1.10 | 3049 | 3049 | 338.01 | 338.01 |
| | Low Tension-DM/LT-DM | 14.84 | 14.84 | 4399 | 4399 | 13044 | 13044 |
| | High Tension-D/HT-D | 0.25 | 0.28 | 2 | 2 | 392.88 | 192.88 |
| 2 | COMMERCIAL | | | | | | |
| | Low Tension-C/LT-C | 325.42 | 325.42 | 92869 | 92869 | 282940.84 | 282940.84 |
| | High Tension-C/HT-C | 69.90 | 79.05 | 118 | 117 | 83455.93 | 42566.93 |
| 3 | INDUSTRIAL | | | | | | |
| | Low Tension-I/LT-I | 137.42 | 137.42 | 6466 | 6466 | 115579.85 | 115579.85 |
| | Low Tension-Mixed/LT-P (Hotel Industries) | 5.31 | 5.31 | 233 | 233 | 4284.78 | 4284.78 |
| | High Tension-I/HT-I | 1477.42 | 1398.09 | 770 | 650 | 417220.18 | 417220.18 |
| | High Tension-Ferro/SM/PI/SR | 582.70 | 582.70 | 37 | 37 | 114756 | 114756 |
| 4 | AGRICULTURAL | | | | | | |
| | Low Tension-AG/LT-AG | 23.86 | 23.86 | 10821 | 10821 | 34481.27 | 34481.27 |
| | High Tension-AG/HT-AG | 6.08 | 6.08 | 41 | 41 | 8378 | 8378 |
| 5 | MILITARY ENGINEERING SERVICES/DEFENSE ESTABLISHMENTS | | | | | | |
| | All Units | 26.89 | 26.89 | 12 | 12 | 7080 | 7080 |
| 6 | PUBLIC LIGHTING | | | | | | |
| | All Units | 36.95 | 36.95 | 2740 | 2740 | 9597.85 | 9597.85 |
| 7 | HOARDINGS/SIGNBOARDS | | | | | | |
| | All Units | 0.35 | 0.35 | 104 | 104 | 35 | 35 |
| 8 | TEMPORARY SUPPLY | | | | | | |
| | LT Temporary | 22.08 | 22.08 | 2581 | 2581 | 1097.61 | 1097.61 |
| 9 | Overall LT Sales | 1551.84 | 1551.84 | 619987 | 619988 | 1890735 | 1890735 |
| 10 | Overall HT Sales | 2163.24 | 2093.09 | 980 | 860 | 631283 | 590194 |
| 11 | Total Sales | 3715.08 | 3644.93 | 620967 | 620848 | 2522019 | 2480929 |

7.3.2 The Hon'ble Commission had approved 3644.93 MUs as sales, 6.20 lakhs consumers

and 24.81 Lakhs kW as connected load for FY 2018-19.

7.4 Intra-State Transmission and Distribution Losses, Inter-State Transmission Losses and Energy Efficiency

7.4.1 EDG has been making efforts to reduce its intra state transmission losses and as per the Tariff Order dated 18th April, 2016, the Hon'ble Commission has approved 10.75% Intra-state losses for FY 2018-19. EDG has considered the same for the present filing.

7.4.2 The Hon'ble Commission has also approved inter-state transmission losses at 4.11% in above mentioned tariff order.

7.4.3 The Hon'ble Commission has also approved MUs as energy savings annually due to implementation of DSM based efficient lighting programme (DELP) under DSM programme in the State of Goa.

Table 7-2: T&D Loss and Energy savings under DELP

| Particulars | Approved |
|-----------------------------------|----------|
| Intra-state T&D Loss (%) | 10.75% |
| Inter-state transmission loss (%) | 4.11% |
| Energy Savings -DELP (MUs) | 78.60 |

7.5 Energy Balance

7.5.1 Based on the approved Sales and distribution loss for FY 2018-19, the energy requirement approved by the Hon'ble Commission is shown in the following table:

Table 7-3: Energy Requirement approved for FY 2018-19

| S.No. | Particulars | FY 2018-19 |
|-----------|---|----------------|
| 1 | Sales within UT (MUs) | 3644.93 |
| 2 | Savings under DELP (MUs) | 78.60 |
| 3 | Total Sales | 3566.33 |
| 4 | Intra State Transmission Loss (%) | 10.75% |
| | Intra State Transmission Loss (MUs) | 429.55 |
| 5 | Sales to common pool consumers/Banking return | 0.00 |
| 6 | Energy requiremnt at periphery(MUs) | 3995.88 |
| 7 | Inter State Transmission Loss (%) | 4.11% |
| | Inter State Transmission Loss (MUs) | 164.30 |
| 8 | Energy Required at Generator End | 4160.18 |
| 9 | GROSS AVAILABILITY (MUs) | |
| | Co-generation (within State) | 167.24 |
| | Power purchase from R.E. Sources -Solar | 50.56 |
| | Power purchase from R.E. Sources -Non Solar | 34.69 |
| | NPCIL | 188.20 |
| | New Hydro Stations | 55.18 |
| | NTPC and Other Stations | 3664.33 |
| 10 | PXIL (Buy) to match the Energy Requirement | 0.00 |
| 11 | Net power purchase (in MUs) | 4160.19 |
| 12 | Gross Purchase including PXIL (in MUs) | 4160.19 |

7.6 Power Purchase Cost for FY 2018-19

7.6.1 Based on the share allocation and power availability from various plants, the Hon'ble Commission had approved power purchase quantum and power purchase cost for the FY 2018-19 in its tariff order dated 18th April 2016. The comparison between the power purchase projected and approved by the Hon'ble Commission in the said order is furnished below.

Table 7-4: Power Purchase Quantum and Cost for FY 2018-19

| Sources | Submitted | | Approved | |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| | Power Purchase Quantum (MUs) | Power Purchase Cost (Rs Crs) | Power Purchase Quantum (MUs) | Power Purchase Cost (Rs Crs) |
| NTPC | 3,763 | 1,076.10 | 3624 | 960.6 |
| NPCIL | 203 | 62.9 | 188.2 | 48.59 |
| Hydro Power | 25 | - | 89.87 | 37.65 |
| Renewable Power | 77 | 54.62 | 50.57 | 30.25 |
| Traders/ Open Market | 47 | 13.97 | | |
| Co-generation | 167 | 40.26 | 167.24 | 40.13 |
| Transmission Charges | | 237.37 | 0 | 300.68 |
| Total | 4283 | 1485.23 | 4119.86 | 1417.89 |
| Average Cost (Rs/kWh) | | 3.47 | | 3.44 |

7.7 ARR for FY 2018-19

7.7.1 The annual revenue requirement approved by the Hon'ble Commission for the FY 2018-19 is tabulated below.

Table 7-5: ARR for the FY 2018-19 – Rs. Crs

| S. No. | Particulars | Submitted | Approved |
|-----------|--|----------------|----------------|
| 1 | Cost of power purchase | 1485.21 | 1417.92 |
| 2 | Provision for RPO Compliance | | 15.17 |
| 3 | Employee Costs | 265.54 | 270.41 |
| 4 | R&M expenses | 71.21 | 10.81 |
| 5 | A&G Expenses | 13.96 | 45.6 |
| 6 | Depreciation | 84.35 | 91.59 |
| 7 | Interest on loan | 107.86 | 107.19 |
| 8 | Interest on Working Capital | 9.11 | 7.02 |
| 9 | Interest on Security Deposit | 7.80 | 12.36 |
| 10 | Return on NFA/ Equity | 73.27 | 83.27 |
| 11 | Provision for Bad Debt | - | 0 |
| 12 | Provision for DSM Expenses | 3.84 | 3.03 |
| 13 | Total Revenue Requirement | 2122.15 | 2064.37 |
| 14 | Less: Non- Tariff Income | 6.74 | 6.74 |
| 15 | Net Aggregate Revenue Requirement | 2115.41 | 2057.63 |

7.8 Revenue from Sale of Power at Existing Tariff

7.8.1 The Revenue from sale of power at existing tariff for FY 2018-19 is outlined below for

assessing the Revenue gap / (surplus) for the ensuing year.

Table 7-6: Revenue from Sale of Power for FY 2018-19

| S. No. | Particulars | Sales (MUs) | Revenue (Rs.Crs) |
|----------|--|----------------|------------------|
| A | DOMESTIC | | |
| 1 | Low Tension-D/LT-D | 984.51 | 288.56 |
| 2 | Low Tension-LIG/LT-LIG | 1.10 | 0.11 |
| 3 | High Tension-D/HT-D | 0.28 | 0.16 |
| 4 | Sub-total Domestic -Overall | 1.10 | 0.11 |
| B | COMMERCIAL | | |
| 5 | Low Tension-C/LT-C | 340.26 | 132.24 |
| 6 | High Tension-C/HT-C | 79.05 | 56.25 |
| 7 | Sub-total Commercial -Overall | 0.00 | 0.00 |
| C | INDUSTRIAL | | |
| 8 | Low Tension-I/LT-I | 137.42 | 51.97 |
| 9 | Low Tension-Mixed/LT-P (Hotel Industries) | 5.31 | 2.54 |
| 10 | High Tension-I/HT-I | 1398.09 | 724.87 |
| 11 | High Tension-Ferro/SM/PI/SR | 582.70 | 284.99 |
| 12 | Sub-total Industrial -Overall | 0.00 | 0.00 |
| D | Agricultural | | |
| 13 | Low Tension-AG/LT-AG | 23.86 | 3.69 |
| 14 | High Tension-AG/HT-AG | 6.08 | 1.34 |
| 15 | Sub-total Agricultural -Overall | 0.00 | 0.00 |
| 16 | Military Engineering Services/Defense Establishments | 26.89 | 14.93 |
| E | Public Lighting | 36.95 | 14.87 |
| 18 | Sub-total Public Lighting -Overall | 0.00 | 0.00 |
| F | Hoardings/Signboards | 0.35 | 0.35 |
| 19 | Sub-total Hoardings/Signboards -Overall | 0.00 | 0.00 |
| G | Temporary Supply | | |
| | LT Temporary Domestic | 17.47 | 12.29 |
| | LT Temporary Commercial | 4.61 | 4.60 |
| 20 | Sub-total Temporary -Overall | 22.08 | 16.89 |
| 21 | Overall LT Sales | 1551.84 | 511.21 |
| 22 | Overall HT Sales | 2093.09 | 1082.54 |
| 23 | Total Revenue from Sale of Power | 3644.93 | 1593.75 |

7.8.2 EDG hereby submits that the revenue as calculated above based on the existing tariff is without considering FPPCA Charges, as it is vary in nature, and consideration of FPPCA charges in revenue projection, may fluctuate drastically and it will have major deviation among projected and actual. Thus EDG submits that Revenue without FPPCA charges may be considered. Revenue from FPPCA charges may deal in the True up of FY 2018-19. In view of above, the Hon'ble Commission is requested to kindly allow Revenue at existing tariff as proposed above for FY 2018-19.

7.9 Revenue Gap for FY 2018-19

7.9.1 The revenue gap as calculated on the basis of the revenue at existing tariff for FY 2018-19 is shown in the table below:

Table 7-7: Revenue Gap for FY 2018-19 – Rs. Crs

| S. No. | Particulars | Claimed by Petitioner |
|---------------|---|----------------------------------|
| 1 | Aggregate Revenue Requirement | 2057.63 |
| 2 | Revenue from Sale of Power at existing tariff | 1593.75 |
| 3 | Revenue Gap/ (Surplus) | 463.88 |

7.9.2 In view of above, the Hon'ble Commission is requested to kindly approve the revenue gap of Rs. 463.88 Crs during FY 2018-19.

7.9.3 EDG in the subsequent chapters has proposed the required adjustment in tariff to consider the total gap accumulated from FY 2013-14, FY 2016-17 and FY 2018-19.

CHAPTER 8. ADDITIONAL CLAIM AND PROPOSAL TO MEET ARR AND REVENUE GAP OF FY 2018-19

8.1 Preamble

- 8.1.1 EDG in determining the ARR and retail supply tariff for FY 2018-19 has been guided by the provisions of the Electricity Act 2003, National Tariff Policy, MYT Regulations 2014 and any other applicable law, enactments, Orders, etc as amended from time to time.
- 8.1.2 EDG submits that this section covers the additional claims apart from the revenue gap claimed while computing ARR of the respective years and the total revenue gap to be recovered in FY 2018-19.
- 8.1.3 This section overall provides a detailed overview of each and every claim considered in calculation of total revenue gap of EDG.

8.2 Additional Claim

- 8.2.1 EDG submits that in the previous tariff order dated 18th April 2016, apart from the approval of ARR for the Control Period, the Hon'ble Commission has also provisioned for interest on Security deposits to be paid to the consumers. In last Order dated 23rd May 2017 also Hon'ble Commission has reiterated that interest on Security deposits to be paid to the consumers in FY 2017-18
- 8.2.2 As per section 47(4) of the electricity Act 2003, the Electricity Department has to pay the interest to the consumers on security Deposit held by the Department with effect from financial year 2011-12 onwards by giving credit in their energy bills.
- 8.2.3 EDG has already started to credit the amount in energy bills of Consumers, Status of Interest on Security Deposit payable, payment made and balance payment are as under.

Table 8-1: Balance Interest on Consumer security deposit from FY 2011-12 to FY 2016-17

| Sr. No. | Particulars | Previous Years | | True Up | Approved | Approved | Provisional Actual | Current Year Provisional |
|---------|---|----------------|--------------|--------------|--------------|--------------|--------------------|--------------------------|
| | | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 |
| 1 | 2 | | | 3 | 4 | | | |
| 1 | Opening Security Deposit | 11.86 | 16.58 | 17.17 | 21.09 | 21.09 | 22.23 | 32.44 |
| 2 | Add: Deposits during the Year | 7.11 | 4.85 | 8.26 | - | 1.14 | 15.67 | 17.03 |
| 3 | Less: Deposits refunded | 2.38 | 4.27 | 4.33 | - | - | 3.91 | 1.91 |
| 4 | Less: Deposits in form of BG/FDR | - | - | - | - | - | - | 4.26 |
| 5 | Closing Security Deposit | 16.58 | 17.17 | 21.09 | 21.09 | 22.23 | 33.99 | 43.29 |
| 6 | Bank Rate | 8.50% | 8.50% | 8.50% | 8.50% | 0.00% | 7.75% | 7.75% |
| 7 | Interest on Security Deposit * | 1.21 | 1.43 | 1.63 | 6.82 | 7.43 | 2.12 | 2.93 |
| 8 | Cumulative Interest on Security Depsit of Past Years | 1.21 | 2.64 | 4.27 | 11.09 | 18.52 | 20.64 | 23.57 |
| 9 | Interest on Security Deposit Paid | | | | | | 0.37 | 8.20 |
| 10 | Balance Interest on Security Deposit to be Paid during control Period | | | | | | | 6.21 |

8.2.4 EDG has claimed Interest on security deposit based on the actual payment to the consumer. Therefore it is shown that Rs.8.20 Crore Interest has been paid in FY 2017-18 H1 and Rs. 6.21 Crores to be paid in FY 17-18 H2. Remaining amount from the interest on Security Deposit to be paid in FY 18-19.

8.2.5 In line with the above submission, EDG requests the Hon'ble Commission to allow the provision of unpaid security deposit of Rs. 9.15 Crores in FY 18-19. The amount as computed in line with the Regulations are claimed in ARR.

8.3 Cumulative Revenue Gap of FY 2018-19

8.3.1 It is submitted that revenue gap for past years i.e. from FY 2014-15 to FY 2016-17 is not being claimed as the audited accounts are yet to be finalized. The same would be claimed once financial statements are ready and separate true-up petition would be filed before JERC or may be merged in subsequent tariff filing petitions.

Table 8-2: Cumulative Revenue gap to be claimed in FY 2018-19

| Particulars | True Up | Approved | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
|---|------------|------------|------------|--------------------|--------------------------|--------------|
| | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| Net ARR | 1,373 | 1,360 | 1,324 | 1,782 | 1,740 | 2,058 |
| Less: Revenue at Existing Tariffs excluding Surcharge | 1,060 | 1,147 | 1,138 | 1,443 | 1,705 | 1,594 |
| Revenue Gap for the year | 313 | 212 | 185 | 339 | 35 | 464 |
| Opening Balance of Gap | | - | - | - | - | - |
| Add: Past Gap | | | | | | |
| <i>Gap for FY 2013-14</i> | 313 | | | | | |
| <i>Gap for FY 2014-15</i> | | 212 | | | | |
| <i>Gap for FY 2015-16</i> | | | 185 | | | |
| <i>Gap for FY 2016-17</i> | | | | 339 | | |
| <i>Gap for FY 2017-18</i> | | | | | 35 | |
| <i>Gap for FY 2018-19</i> | | | | | | 464 |
| Total Cumulative Gap for years | 313 | 212 | 185 | 339 | 35 | 464 |
| Less: Budgetary Support | 313 | | | | | |
| Gap to be recovered from Consumers | - | 212 | 185 | 339 | 35 | 464 |
| Less: To be addressed at the time of True-up | | 212 | 185 | 339 | 35 | |
| Balance Gap to be recovered | - | - | - | - | - | 464 |
| Less: Proposed recovery in FY 2018-19 | - | - | - | - | - | 464 |
| Balance Gap to be recovered | | - | - | - | - | - |
| Additional Past recoveries | | | | | | |
| Accumulated Interest on Security Deposit to be paid in MYT Period | | | | | | 9 |
| Balance Gap to be recovered from MYT Control Period | | | | | | 473 |
| Less: Budgetary Support from Government of Goa | | | | | | |
| Proposed Gap Recovery in FY 2018-19 | | | | | | 79 |
| Proposed Tariff hike from last year | | | | | | 5% |

8.3.2 As per Proposed tariff hike EDG like to get additional revenue of Rs.79 Crs over revenue as per existing tariff. Therefore the balance Revenue gap of Rs.394 Crores to be met through budgetary support from Government of Goa.

8.3.3 However EDG submits that pending finalization of audited accounts for relevant years under consideration, the revenue gap may be provisionally recognized by Hon'ble Commission and due treatment be given for recovery at a later date when petition for true-ups are filed based on actual accounts / figures of revenue gap.

CHAPTER 9. TARIFF PHILOSOPHY

9.1 Preamble

9.1.1 This section elucidates the proposed revision in the retail tariff and proposed amendments in the retail tariff schedule to be applicable for FY 2018-19. EDG prays the Hon'ble Commission to approve the revision of retail tariff for FY 2018-19 as proposed for different categories of consumers, applicable from April 1 '2018.

9.2 Tariff Design Principles

9.2.1 Over the years, Hon'ble Commission has been guided by the Electricity Act, 2003 and the National Tariff Policy while determining retail tariffs across the Goa. Hon'ble Commission has always laid emphasis on adoption of factors that encourages economy, efficiency, effective performance and improved conditions of supply. On these lines Hon'ble Commission, in this order too, may apply similar principles keeping in view the ground realities.

9.3 Philosophy of Tariff Design

9.3.1 EDG submits that gap of FY 2014-15 to FY 2017-18 to be addressed either through budgetary support or at the time of true up. Gap of the year FY 2018-19 to be recover partially through tariff hike and partially through budgetary support from Government of Goa. Revenue Gap for FY 2018-19 is computed based on Revenue as per existing tariff, Amount of revenue gap is of Rs.464 Crs for FY 2018-19 and overall gap is ~Rs. 473 Crs. The gap is to be met partially through tariff hike and the balance through budgetary support. The Overall Tariff hike proposed is 4.95% .

9.3.2 Accordingly, EDG proposes the below proposed tariff for FY 2018-19 is highlighted below:

Table 9-1: Proposed Tariff Structure for FY 2018—19

Petition for True-up of FY 2013-14, APR for FY 2016-17 & FY 2017-18 and
Tariff Determination for FY 2018-19

| Sr. No | Category of Consumer | Fixed charge basis | Fixed Charge (Rs/kW, Rs/kVA Rs/BHP Rs/Month/ | Energy Charge (Rs/kWh) | Fixed Charge (Rs/kW, Rs/kVA Rs/BHP Rs/Month/ | Energy Charge (Rs/kWh) | |
|-------------|---|-------------------------------|---|--------------------------------|---|---------------------------|------|
| | | | Existing Tariff for FY 2017-18 | Proposed Tariff for FY 2018-19 | | | |
| A | Low Tension Supply | | | | | | |
| 1 | Tariff LTD/Domestic and Non-Commercial | | | | | | |
| 1(a) | 0-100 units | Rs/Conn/ Month - Single Phase | 20 | 1.30 | 25 | 1.40 | |
| 1(b) | 101-200 units | | 20 | 1.90 | 25 | 2.00 | |
| 1(c) | 201 to 300 units | | Rs/Conn/ Month - Three Phase | 45 | 2.40 | 80 | 2.60 |
| 1(d) | 301 to 400 units | | | 45 | 3.10 | 80 | 3.30 |
| 1(e) | Above 400 units | | | 45 | 3.60 | 80 | 3.80 |
| 2 | Tariff LTD/Low Income Group | Rs/Conn/ Month | 30 | - | 40 | | |
| 3 | Tariff-LTC/Commercial | | | | | | |
| | <u>0-20 KW/Commercial Consumers</u> | | | | | | |
| | 1-100 Units | Rs/Conn/ Month | 50 | 3.25 | 60 | 3.30 | |
| | 101-200 units | | 50 | 3.90 | 60 | 4.00 | |
| | 201-400 Units | | 50 | 4.30 | 60 | 4.80 | |
| | Above 400 units | | 50 | 4.70 | 60 | 5.20 | |
| | <u>>20-90Kw Commercial Consumers</u> | | | | | | |
| | 1-100 Units | Rs/Conn/ Month | 50 | 3.25 | 90 | 3.30 | |
| | 101-200 units | | 50 | 3.90 | 90 | 4.00 | |
| | 201-400 Units | | 50 | 4.30 | 90 | 4.80 | |
| | Above 400 units | | 50 | 4.70 | 90 | 5.20 | |
| 4 | LTI-Industry | | | | | | |
| | 0-500 Units | Rs/HP/ Month | 30 | 3.10 | 35 | 3.30 | |
| | Above 500 units | Rs/HP/ Month | 30 | 3.50 | 35 | 3.80 | |
| 5 | Tariff-LTP/Mixed (Hotel Industries) | Rs/kW/ Month | 30 | 4.50 | 35 | 4.60 | |
| 6 | LT-Agriculture | | | | | | |
| | Tariff-LTAG/Agriculture (Pump Sets/Irrigation) (A) | Rs/HP/ Month | 12 | 1.30 | 15 | 1.50 | |
| | Tariff-LTAG/Agriculture Allied (B) | Rs/HP/ Month | 20 | 1.60 | 20 | 1.80 | |
| 7 | Tariff-LTPL/Public Lighting | Rs/kW/ Month | 40 | 3.90 | 40 | 3.90 | |
| 8 | Tariff-LT Hoarding and SignBoard | Rs/kVA/ Month | 60 | 9.90 | 60 | 9.90 | |
| B | High Tension Supply | | | | | | |
| 9 | Tariff HTD/Domestic | Rs/kVA/ Month | 150 | 4.40 | 160 | 4.60 | |
| 10 | Tariff HT-Commercial | Rs/kVA/ Month | 250 | 5.50 | 250 | 5.50 | |
| 11 | Tariff HTI/Industrial | | | | | | |
| | Connected at 11/33 kV | Rs/kVA/ Month | 250 | 4.30 | 250 | 4.50 | |
| | Connected at 110 kV | Rs/kVA/ Month | 250 | 4.20 | 250 | 4.50 | |
| 12 | H.T.Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive) | Rs/kVA/ Month | 250 | 4.30 | 250 | 4.50 | |
| 13 | HT-Agriculture | | | | | | |
| | Tariff-HTAG/Agriculture (Pump Sets/Irrigation) (A) | Rs/kVA/ Month | 35 | 1.40 | 35 | 1.50 | |
| | Tariff-HTAG/Agriculture (Allied Activities) (B) | Rs/kVA/ Month | 50 | 1.80 | 60 | 2.00 | |
| 14 | H.T. MES/Defence Establishments | Rs/kVA/ Month | 175 | 5.00 | 175 | 5.00 | |
| C | Temporary Supply | | | | | | |
| 15 | Tariff-LT/Temporary Domestic | Rs/kW/ Month | 60 | 7.00 | 60 | 7.20 | |
| 16 | Tariff-LT/Temporary Commercial | Rs/kW/ Month | 100 | 9.90 | 120 | 9.90 | |
| 17 | Tariff-HTTS/Temporary Supply | Rs/kVA/ Month | 120 | 9.90 | 120 | 9.90 | |
| D | Single Point Supply | | | | | | |
| 18 | Residential Complexes | Rs/kVA/ Month | 100 | 3.10 | 100 | 3.30 | |
| 19 | Commercial Complexes | Rs/kVA/ Month | 200 | 4.30 | 200 | 4.30 | |
| 20 | Industrial Complexes | Rs/kVA/ Month | 200 | 3.90 | 200 | 4.10 | |

9.3.3 Along with tariff hike, EDG feel appropriate that applicability clause of some of the categories needed more clarity.

9.4 Tariff Rationalisation

9.4.1 Certain proposal in the clarification or changes in the applicability of the clause has been suggested keeping in mind the consumers suggestions and practices in neighbouring states.

9.4.2 EDG has modified / fine-tuned applicability clauses in some of the categories for clarity and better implementation. The changes proposed in the applicability are discussed detailed and highlighted in proposed LT & HT Tariff Schedule and the brief feature is highlighted below:

Table 9-2: Proposal for recovery of service charges to consumers availing power from MSEDCL

| Particulars | Units | Amount |
|---------------------------------|---------|---------|
| Employee Cost for FY 2018-19 | Rs. Crs | 270.41 |
| A&G cost for FY 2018-19 | Rs. Crs | 45.6 |
| Total O&M Cost excluding R&M | Rs. Crs | 316.01 |
| Approved Sales for FY 2018-19 | Mus | 3644.93 |
| Service Charge to be applicable | Rs./kWh | 0.87 |

* - R&M expenses not claimed as no distribution infrastructure of EDG exist

9.5 General Conditions and Definitions

- 1) These tariffs are proposed to be made applicable from 1st April 2018 and shall be subject to revision by the Regulatory Commission from time to time.
- 2) Tariffs are subject to revision and/or surcharge that may be levied by EDG from time to time as per the directives of the Commission.
- 3) The tariffs are exclusive of electricity duty and taxes levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.
- 4) Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.
- 5) Unless specifically stated to the contrary the figures of energy charges relate to rupee per unit (kWh) charge for energy consumed for a month.

- 6) If energy supplied for a specific purpose under a particular tariff is used for a different purpose, not contemplated in the contract for supply and / or for which higher tariff is applicable, it will be deemed as unauthorized use of electricity and shall be dealt with for assessment under the provisions of section 126 of the Electricity Act, 2003 and Supply Code Regulation 2010 notified by JERC.
- 7) If connected load of a domestic category is found to be at variance from the sanctioned/contracted load as a result of replacement of appliances such as lamps, fans, fuses, switches, low voltage domestic appliances, fittings, it shall not fall under Section 126 and Section 135 of the EA 2003.
- 8) Fixed charges, wherever applicable, will be charged on pro-rata basis from the date of release of connection. Fixed charges, wherever applicable, will be double as and when bi-monthly billing is carried out and will be proportionately calculated as per the no. of days of billing, Similarly slabs of energy consumption will also be considered accordingly in case of bi-monthly or periodic billing.
- 9) The consumption for factory lighting/pump house lighting will be billed as per respective main tariff category. A separate energy meter for recording energy consumed towards factory lighting for new installation need not be provided. For the existing installations, till the factory lighting meter's mains are shifted to main meter, the total energy consumption shall be arrived by adding the energy consumption of main energy meter and factory lighting meter.
- 10) LT Connection is applicable with Sanctioned Load of less than 80 KVA or 70 KW or 95 HP as the case may be and HT Connection is applicable with Contract Demand of 80kVA and above.
- 11) Supply of power in all cases shall be subject to the execution of Agreement between Electricity Department, Goa and consumers and as per JERC (Electricity Supply Code) Regulation 2010. The Other Conditions, definitions etc shall be applicable as per the Electricity Act 2003 and various JERC Regulations, such as Standards of performance, Supply Code, Conditions of Supply, Distribution Code etc., issued from time to time

12) Billing Demand and Billing of extra Demand :

The billing shall be on the maximum demand recorded during the month or 75% of contracted demand whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal energy rate.

The definition of the maximum demand would be in accordance with the provisions of the JERC (Electricity Supply Code) Regulations, 2010. If such over drawl is more than 20% of the contracted demand then the connection shall be disconnected immediately.

Explanation:

Assuming the contract demand as 100 kVA, maximum demand at 120 kVA and total energy consumption as 12000 units, then the consumption corresponding to the contract demand

will be 10,000 units (12000 X 100/ 120) and consumption corresponding to the excess demand will be 2000 units. This excess demand of 20 kVA and excess consumption of 2000 units will be billed at twice the respective normal rate.

E.g. in case of HTI/Industrial category, excess demand and consumption will be billed at the rate of Rs 500 per kVA per month and Rs 8.60/kWh respectively. Connections drawing more than 120 kVA shall be disconnected immediately.

9.6 Miscellaneous and General Charges

9.6.1 Fuel & Power Purchase Cost Adjustment (FPPCA) Formula

The FPPCA charge will be determined based on the formula approved by Hon'ble Commission vide order dated 27th June 2012 and relevant directions, as may be given by the Hon'ble Commission from time to time and will be applicable to all consumer categories except for Below Poverty Line (BPL) and Agriculture consumers for their consumption.

The details for each month/ quarter shall be available on Electricity Department, Government of Goa website at <http://www.goaelectricity.gov.in/>

The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in the respective Tariff Order. FPPCA charges so worked out shall be recovered/ refunded in accordance with the terms and conditions specified in the FPPCA formula.

9.6.2 Electricity Duty

The Electricity Duty will be charged as per Government guidelines from time to time in addition to charges as per the Commission approved tariffs mentioned hereunder. However, the rate and the reference number of the Government Resolution/ Order vide which the Electricity Duty is made effective, shall be stated in the bill. A copy of the said Resolution/Order shall be made available on Electricity Department, Government of Goa website at <http://www.goaelectricity.gov.in/>

9.6.3 Power Factor Calculation

(Applicable for all HT categories and LT categories wherever approved by Commission)

Wherever, the average power factor measurement is not possible through the installed meter, the following method for calculating the average power factor during the billing period shall be adopted-

$$\text{Average Power Factor} = \frac{\text{Total (kWh)}}{\text{Total (kVAh)}}$$

$$\text{Wherein the kVAh is} = \sqrt{\sum (\text{kWh})^2 + \sum (\text{RkVAh})^2}$$

(i.e., Square Root of the summation of the squares of kWh and RkVAh)

9.6.4 Power Factor Penalty

(Applicable for all HT categories and LT categories wherever approved by Commission)

The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 0.9 (lagging), such consumer shall pay a surcharge in addition to his normal tariff as 1 % of monthly bill including energy charges, FPPCA, and fixed/ Demand Charges but excluding Taxes and duties for each fall of 0.01 in power factor upto 0.7 (lagging).

EDG also proposes that if monthly average power factor falls below 0.7 (lagging), then for each fall in 0.01 in power factor, such consumer shall pay a surcharge in addition to his normal tariff as 2 % of monthly bill including energy charges, FPPCA, and fixed/ Demand Charges but excluding Taxes and duties.

If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.

The power factor shall be rounded off to two decimal places. For example, 0.886 shall be treated as 0.89 and 0.884 shall be treated as 0.88.

9.6.5 Power Factor Incentive

(Applicable for all HT categories and LT categories wherever approved by Commission)

In case the monthly average power factor of the consumer is more than 0.95 (lagging), a power factor incentive shall be given to the consumer as 1 % of monthly bill including energy charges, FPPCA, and fixed/ Demand Charges but excluding Taxes and duties for each increase of 0.01 in power factor above 0.95(lagging)

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

9.6.6 Payment Rebates:

Advance Payment Rebate: If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit, taxes and duties) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.

If payment is made in advance along with prior declaration of premises to be closed for a certain period of time, a rebate of 1% per month shall be given on the amount (excluding security deposit, taxes and duties) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.

EDG Proposal:

EDG submits that for advance payment rebate, two conditions is required to be satisfied i.e. Payment before commencement of consumption period and with the licensee for 1 month period. However it is observed that in certain cases, the advance payment is made alongwith the due-date of the last bill and the next payment is made within less than 30 days as the payment is made before due-date for second bill. In the said case, both the conditions are not satisfied and still consumers seeks Advance Payment Rebate. Therefore EDG propose that in the said case, either the Advance Payment Rebate may not be applicable to the said consumers or 1% rebate to be provided on a pro-rata basis for the number of days for which the money remained with licensee.

Prompt Payment Rebate: If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount (excluding taxes and duties) shall be given. Those consumers having arrears shall not be entitled for such rebate and the amount paid will first be used to set off past liabilities.

EDG Proposal:

EDG propose that in case the payment is made by cheque, the prompt payment discount will be applicable only if the payment by cheque is made 2 days prior to date of availing the prompt payment discount i.e. before 5 days of the due date of payment a rebate.

9.6.7 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 day's 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.

9.6.8 Time of Day tariff (ToD):

- i) Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.
- ii) The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

| Time of use | Demand Charges | Energy Charges |
|---|----------------|---------------------------------------|
| Normal period (7:00 a.m. to 6:00 p.m) | Normal Rate | Normal rate of energy charges |
| Evening peak load period (6:00 p.m to 11.00 p.m) | Normal Rate | 120% of normal rate of energy charges |
| Off-peak load period (11:00 p.m to 7:00 a.m) | Normal Rate | 90% of normal rate of energy charges |

- iii) Applicability and Terms and Conditions of TOD tariff:
 - a) TOD tariff is mandatory for HT/EHT consumers and shall be optional for LT industrial and commercial consumers.
 - b) The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from sources other than EDG through wheeling of power.
 - c) The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff
 - d) In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.

9.7 Schedule of Miscellaneous Charges

9.7.1 There is no change proposed in Schedule of General & Miscellaneous charges for FY 2018-19 and are proposed to be retained at existing level.

Table 9-3: Existing and Proposed Schedule of Miscellaneous Charges

| Description | Existing / Proposed Charge |
|---|---|
| 1) Monthly Meter Rental Charges(as per provisions of Regulation 7.3 (1) of JERC (Electricity Supply Code) Regulations 2010) | |
| Single Phase LT meter | Rs.10/month |
| Three Phase LT meter | Rs.20/month |
| Three Phase LT meter with CTs | Rs.50/month |
| LT Meter with MD Indicator | Rs.30/month |
| Tri-vector Meter | Rs.1000/month |
| Temporary Supply | Shall be twice as applicable in above meter types |
| Changing or moving a Meter board | Actual Cost + 15% |
| Note: | |
| (a) For all domestic and other LT loads less than 50 kW loads in Urban and Rural areas - Static single phase / three phase meters | |
| (b) For LT (contracted load \geq 50 KW) / HT / EHT consumer – Static, 3 Phase Tri-vector meters with MDI (MD Display) | |
| 2) Reconnection Charges | |
| (as per provisions of Regulation 9.3 (c) of JERC (Electricity Supply Code) Regulations 2010 | |
| LT Services – At Cut outs | |
| · Single Phase | Rs.25/- |
| · Three Phase | Rs.50/- |
| LT Services – At Overhead Mains | |
| · Single Phase | Rs.30/- |
| · Three Phase | Rs.50/- |
| LT Services – At Underground Mains | |
| · Single Phase | Rs.75/- |
| · Three Phase | Rs. 125/- |
| HT Services | Rs.200/- |
| Note: | |
| If the same consumer seeks reconnection within 12 months from the date of reconnection or disconnection, 50% will be added to above charges | |
| 3) Re-Rating of Installations | |
| Lighting Installation | Rs.25/- |
| Motive Power Installation | Rs.50/- |
| 4) Testing Fee for Various Metering Equipments | |
| (as per provisions of Regulation 7.4 of JERC (Electricity Supply Code) Regulations 2010 | |
| Single phase LT | Rs.25/energy meter |
| Poly Phase LT without CT | Rs.50/energy meter |
| L.T. meter with CTs/Demand or Special Type Meters | Rs.150/energy meter |
| H.T & E.H.T. metering equipment | Rs 10000/- at site |
| Transformer Oil | Rs.200/- per sample |
| 3 – \emptyset Phase Tri-vector Meter Industrial LT Consumer | Rs.1000/- for laboratory testing |

| Description | Existing / Proposed Charge |
|---|----------------------------|
| 3 – Ø Phase Tri-vector Meter 11 KV& 33kV HT Consumer | Rs.5000/- at site |
| Three Phase Tri-Vector Meter 110 KV EHT Consumers | RS.1000/-at site |
| Combined CTPT Unit for 11kV & 33kV Consumer | Rs 2500/- |
| 110KV CT / PT Unit | Rs10000/- |
| Single Phase CT | Rs.150/ unit |
| Three Phase TT Block | Rs 500/unit |
| Distribution Transformer Testing (HT con.) | Rs.6000 |
| Power Transformer Testing (EHT consumer) | Rs.20000 |
| 5) Service Connection Charges | |
| (as per provisions of Regulation 3.3 (3) of JERC (Electricity Supply Code) Regulations 2010 | |
| Single Phase 1 φ | Rs.250 |
| Three Phase 3 φ | Rs.500 to Rs.1200 |
| HT (First 500 KVA) | Rs.10000 |
| HT (Beyond 500 KVA) | Rs.20000 |
| Extra Length for 1 φ (beyond 30 metres) | Rs.50 /meter |
| Extra Length for 1 φ for agricultural consumers (beyond 300 metres) | Rs.50 /meter |
| Extra Length for 3 φ (beyond 30 metres) | Rs.100 /meter |
| Extra Length for 3 φ for agricultural consumers (beyond 300 metres) | Rs.100 /meter |
| 6) Testing Consumer's installation | |
| (as per provisions of Regulation 4.10 (6) of JERC (Electricity Supply Code) Regulations 2010 | |
| For first test of the new installation on or off an extension to an existing installation if the installation is found to be defective. | NIL |
| For Subsequent test of the new installation or of an existing installation if the installation is found to be defective | |
| • Single phase LT | Rs.100/- |
| • Three phase | Rs.200/- |
| • MS/BS loads upto70kW | Rs.4000 + ST |
| • LS/BS/RT (loads Above 70kW) | Rs.8000 + ST |
| 7) Changing the Meter or its position in the same premises at the request of the consumer when no additional material is required | |
| (as per provisions of Regulation 6.3 c) of JERC (Electricity Supply Code) Regulations 2010 | |
| Single phase | Rs.100/- |
| 3-phase without C.Ts | Rs.200/- |
| L.T. meter with C.T.s | Rs.500/- |
| H.T & E.H.T. metering equipment | Rs. 8000 + ST |
| 8) Re-sealing charges irrespective of the number of seals involved against each item below and where seals found to have been broken by the consumer | |
| Meter cupboard / Meter Cubical / Box | Rs.50/- |

| Description | Existing / Proposed Charge |
|--|--------------------------------------|
| Where cut-out is independently sealed | Rs.50/- |
| Meter cover or Meter Terminal cover | Rs.50/- |
| Meter cover of Meter Terminal cover (3 phase). | Rs.50/- |
| Maximum demand Indicator or C.T.s chamber | Rs.50/- |
| 9) Service Charges | |
| General Supply | |
| • Single Phase | Rs.10/- |
| • Three phase below 70kW | Rs.20/- |
| • Three phase above 70kW | Rs.50/- |
| Industrial/bulk/ agriculture /Street Lightning Supply | |
| • Upto70kW | Rs.25/- |
| • Above 70kW | Rs.50/- |
| 10) Replacement of broken glass | |
| Replacement of broken glass of meter cupboard (When there is default on Consumer Side) | Rs.50/- |
| Replacement of broken Glass of single phase meter if the consumer has broken or tamper and with meter. | Rs.50/- |
| Replacement of broken Glass of three phase meter if the consumer has broken or tamper and with meter | Rs.50/- |
| 11) Supply of duplicate copies of electricity bills | |
| Domestic Consumers | Rs.5 per bill or Rs.10 per statement |
| Non Domestic consumers | -do- |
| LT Industrial upto 20kW & AP Consumer | -do- |
| H.T Industrial & Bulk supply consumer | Rs.5 per bill or Rs.10 per statement |

9.7.2 It is submitted that under the head “Service Connection Charges”, Rs. 20,000 is charged for the HT connection beyond 500 KVA. However, there is no clarity on release of any additional load later on. For example, if there is original load sanction of 1000 KVA for which Rs. 20000 is already charges, what will be the charges, if there is request of increase in load by 200 KVA. Therefore, EDG proposes, that for any incremental load above 1000 KVA, Rs. 2000 will be charged for every release of 100 KVA. The same is proposed as under:

Table 9-4: Proposal for Service Connection charges on incremental load

| Description | Existing / Proposed Charge |
|--|----------------------------|
| 5) Service Connection Charges - (as per provisions of Regulation 3.3 (3) of JERC (Electricity Supply Code) Regulations 2010 | |
| HT (First 500 KVA) | Rs.10000 |
| HT (Beyond 500 KVA) | Rs.20000 |
| HT (Incremental Load for every 100 KVA) | Rs. 2000 |

9.7.3 EDG also submits that there are no charges specified for Re-rating charges like Change of Name, Increase/Decrease of load etc which also comes under the services which are

provided to the consumers by EDG. Therefore, EDG proposes following charges for such re-rating services in line with MERC approved rates:

Table 9-5: Proposal for Re-rating charges

| Description | Existing / Proposed Charge |
|---|----------------------------|
| 5) Service Connection Charges - (as per provisions of Regulation 4.13 (2), 6.1, 6.8 (5) of JERC (Electricity Supply Code) Regulations 2010 | |
| Change in Connected Load / Category / Name / address | |
| Single Phase | Rs. 50 per application |
| Three Phase | Rs. 100 per application |
| HT Supply | Rs. 1700 per application |
| EHT Supply | Rs. 3400 per application |

- 9.7.4 In case of bonafide agricultural pumping loads, the department shall provide overhead service lines at a free of cost upto 300 meters from the nearest distribution point i.e. existing rural transformer sub-station or from a service line already laid for supply to any other consumer, provided the latter has sufficient current carrying capacity. Any length in excess of the specified length shall be payable at a fixed cost of Rs.25 / metre for single phase and Rs.50/ meter for Three phase as approved under Schedule of General and Miscellaneous Charges.

CHAPTER 10. TARIFF SCHEDULE

This section highlights the tariff schedule with certain proposal in rationalisation of Tariff with proposed hike.

10.1 Tariff Schedule - LT Consumers

Low Tension Category-Applicable to Power Supply of Voltages at 230V and 440V Voltages when the Sanctioned Load is below 100 KVA/ 90 KW / 120 HP and power is supplied at single/ three phase

10.1.1 LT 1(A): Tariff LTD/Domestic

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| <p>This schedule shall apply to private residential houses, government residential quarters, charitable institutions or educational institutions aided by State /Central Board, colleges aided by Goa University and religious institutions etc for consumption of energy using normal domestic appliances.</p> <p>The Professionals i.e. individuals engaged in those activities involving services based on professional skills, like Lawyers, Doctors{only those using OPD/consultancy},Professional Engineers, Chartered Accountants, etc. may utilize the domestic connection at their residence for carrying out their professional work in the nature of consultancy without attracting commercial tariff for the electricity consumed, provided the area used for professional activity does not exceed the area permitted to be used for such activity in residential area as per the prevailing laws/notifications issued by Town and Country Planning Department/other concerned departments of Government of Goa in this regard.</p> | <p>No changes proposed</p> |

I. Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|------------------|-------------------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs.kWh) | Fixed Charges | Energy Charges (Rs.kWh) |
| 0-100 units | Rs/Conn/ Month - Single Phase | 20 | 1.30 | 25 | 1.40 |
| 101-200 units | | 20 | 1.90 | 25 | 2.00 |
| 201 to 300 units | Rs/Conn/ Month - Three Phase | 45 | 2.40 | 80 | 2.60 |
| 301 to 400 units | | 45 | 3.10 | 80 | 3.30 |
| Above 400 units | | 45 | 3.60 | 80 | 3.80 |

Note - The premises or flats which are closed or locked for continuous period of more than three months and having sanctioned / connected load more than 10 kW, the monthly minimum charges would be Rs.1000/-.

10.1.2 LT 1(B): Tariff LTLIG/Low Income Group

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| This schedule shall apply to consumers of low Income Group who have a sanctioned load of up to 0.1 kW (primarily 2 points with 2 x 40 watts) and who consume upto 30 units per month only. | No change Proposed |

I. Tariff:

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|---------------------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Consumption up to 30 Units P.m. | Rs/Conn/ Month | 30 | - | 40 | - |

Note: The applicability of the Low Income Group category will be assessed at the end of each month and in case the consumption exceeds above 30 units per month then entire such consumption would be billed at the rate of LTD-/Domestic for that particular month.

10.1.3 LT II: LTC/Commercial

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| <p>This tariff is applicable to any activity not specifically covered in any other consumer categories, or although covered in another activity, the use is made for a commercial category. It would include electricity used in all non- residential, non-industrial premises and/or commercial premises for commercial consumption meant for operating various appliances. It would include the following categories but not limited to:</p> <ul style="list-style-type: none"> • Houses with rent back facilities • Government hospitals • Professionals not covered in domestic category. • Commercial Complexes and Business premises, including Shopping malls/show rooms, offices / shops; • Combined lighting and power services for Entertainment including film studios, cinemas and theatres, including multiplexes, Race Course, Meeting/Town Halls, Clubs, all types of Guest houses; • Offices including Government Offices, Commercial Establishments; • Marriage Halls (including halls attached to religious places), • Hotels / Restaurants (without boarding facilities), Ice-cream parlours, Bakery, Coffee Shops, private hospitals, private messes, Internet / Cyber Cafes, Mobile Towers, Microwave Towers, Satellite Antennas used for telecommunication activity, • Telephone Booths, Fax / Xerox Shops, X-ray installation, bars and cold drink houses, Tailoring Shops, Computer Training Schools, • Typing Institutes, Photo Laboratories, Photo Studio, Laundries, Beauty Parlour & Saloons, all types of nurseries, dry cleaners etc • Automobile and any other type of repair centres, Retail Gas Filling stations, Petrol Pumps & Service Stations including • Garages, Tyre Vulcanizing units, Battery Charging Units, Tyre vulcanizing centres etc; • Banks, Telephone Exchanges, TV Station, Micro Wave Stations, All India Radio (AIR) Stations, ATM Centres etc; | <p>No change Proposed</p> |

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| <ul style="list-style-type: none"> • For common facilities, like Water Pumping / Street Lighting / Lifts / Fire Fighting Pumps / Premises (Security) Lighting, etc. In Commercial Complexes; • Sports Club, Health Club, Gymnasium, Swimming Pool; • Research & Development units situated outside Industrial premises; • Airports, Railways, Railway Station, Bus stand of KTC etc; | |

I. Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|------------------|-----------------------|--|-------------------------|--|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| 1-100 Units | Rs/Conn/ Month | 0-20 kW- Rs.50/Conn/Month Above 20kW-90 kW Rs. 50/Conn/month + additional Rs.55/kW for every kW increase above 20 kW | 3.25 | 0-20 kW- Rs.60/Conn/Month Above 20kW-90 kW Rs. 60/Conn/month + additional Rs.65/kW for every kW increase above 20 kW | 3.30 |
| 101-200 units | | | 3.90 | | 4.00 |
| 201-400 Units | | | 4.30 | | 4.80 |
| Above 400 units | | | 4.70 | | 5.20 |

Note - Cold Storages which are solely attached to Agriculture and its allied activities shall be charged tariff of Agriculture Allied activities. All other cold storages which are partly or not attached with Agriculture and Allied activities shall be charged commercial tariff.

10.1.4 LT III: LTI/Industry

| Existing Applicability Clause | Proposed Applicability Clause |
|---|-------------------------------|
| <p>This tariff shall apply to consumers as industrial units engaged in industrial activities, manufacturing process etc. It would include the following categories but not limited to:</p> <ul style="list-style-type: none"> • Flour Mills, wet grinding, Dal Mills, Rice Mills, Poha Mills, Masala Mills, Saw Mills, Power looms including other allied activities like Warping, Doubling, Twisting, etc. • Ice Factory, Ice Cream Manufacturing units/ Plants, Dairy Testing Process, Milk Diaries, Milk Processing / Chilling Plants (Dairy) etc; • Engineering workshops, Engineering Goods Manufacturing units, Printing Press, Transformer repairing Workshops, Tyre retreading units, Motive Power Load etc; • Mining, Quarry & Stone Crushing units etc; • Garment Manufacturing units, • LPG/ CNG Bottling plants etc; • Sewage Water Treatment Plant/ Common Effluent Treatment Plant owned, operated and managed by Industrial Association and situated within industrial area. • Pumping of water for public water supply, Sewage Treatment Plants, activities related with public water Supply Schemes and Sewage Pumping Stations. • Use of electricity / power supply for activities/ facilities exclusively meant for employees of the industry within the premises of the Industry. • IT Industry, IT parks etc | <p>No changes Proposed</p> |

I. Tariff:

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| 0-500 Units | Rs/HP/ Month | 30 | 3.10 | 35 | 3.30 |
| Above 500 units | Rs/HP/ Month | 30 | 3.50 | 35 | 3.80 |

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

10.1.5 LT IV: LTP Mixed (Hotel Industries)

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| <p>Hotel Industry consumers intending to avail the facility of this tariff should produce a certificate from the Tourism Department stating that the intending applicant is registered under Goa Registration of Tourist Trade Act, 1982 and in the Hotel business on a regular basis. On receipt of the certificate, such tariff shall be made effective from the date of original validity of the certificate. In case of failure to produce the certificate, the same shall be considered under Commercial category.</p> <p>▪</p> | <p>▪ No changes proposed</p> |

I. Tariff:

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Total consumption | Rs/kW/ Month | 30 | 4.50 | 35 | 4.60 |

10.1.6 LT V: LTAG/Agriculture and other Allied Activities

a. LT-Agriculture Pump Sets (A)

| Existing Applicability Clause | Proposed Applicability Clause |
|---|-------------------------------|
| <ul style="list-style-type: none"> This schedule shall apply to establishments for Irrigation pumping, Dewatering and Lift Irrigation for cultivation of food crops such as cereals, pulses, vegetables and fruits etc and Cane crusher and/or fodder cutter for self-use for Agricultural purposes. | No changes Proposed |

I. Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Total consumption | Rs/HP/ Month | 12 | 1.30 | 15 | 1.50 |

Note: This tariff shall be applicable from the date of production of a certificate from the Directorate of Animal Husbandry or Agriculture Department of Government of Goa to the effect that the consumer carried on the said activity on regular basis. In case of failure to produce the certificate, the same shall be considered under Commercial category.

b. LT-Agriculture Allied Activities (B)

| Existing Applicability Clause | Proposed Applicability Clause |
|---|-------------------------------|
| This schedule shall apply to establishments for other allied activities related to Agriculture and shall include but not limited to: <ul style="list-style-type: none"> Poultry farms, Livestock farms, Combination of livestock farms with dairy, Piggery etc Horticulture, Green Houses, Plantations etc Fish farms including ornamental fish farms, prawn farms, other aqua farms etc | No changes Proposed |

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| <ul style="list-style-type: none"> ▪ Tissue culture, Mushroom activities, Aquaculture, Floriculture, Fisheries, Sericulture, Floricultural nurseries, hatcheries etc ▪ Any other agricultural activity not falling under HT-Agriculture (A) shall be covered under this category | |

I. Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Total consumption | Rs/HP/ Month | 20 | 1.60 | 20 | 1.80 |

Note: 1. this tariff shall be applicable from the date of production of a certificate from the Directorate of Animal Husbandry or Agriculture Department of Government of Goa to the effect that the consumer carried on the said activity on regular basis. In case of failure to produce the certificate, the same shall be considered under Commercial category.

2. Cold Storages which are solely attached to Agriculture and its allied activities shall be charged tariff of Agriculture allied activities. All other cold storages which are partly or not attached with Agriculture and Allied activities shall be charged Commercial Tariff.

10.1.7 Public Lighting

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| <p>This schedule shall apply to public lighting systems. It would include the following categories but not limited to:</p> <ul style="list-style-type: none"> ▪ Market Places Road, Pathways and Parking Lighting belonging to local authorities such as Municipality/ Panchayats/ Government; ▪ Lighting in Public Garden; ▪ Traffic Signals and Traffic Islands; ▪ State Transport Bus Shelters; | No changes Proposed |

| Existing Applicability Clause | Proposed Applicability Clause |
|---|-------------------------------|
| <ul style="list-style-type: none"> ▪ Public Sanitary Conveniences; and ▪ Public Water Fountain and such other Public Places open for general public free of charge. ▪ Street lighting in the colony of a factory which is situated separately from the main factory. ▪ This shall also be applicable to public lighting of Government/ Semi-Government Establishments but shall not be applicable in case of private establishment. | |

I. Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Total consumption | Rs/kW/ Month | 40 | 3.90 | 40 | 3.90 |

10.1.8 Hoarding & Sign Boards

| Existing Applicability Clause | Proposed Applicability Clause |
|---|-------------------------------|
| <p>This schedule shall apply for lighting advertisements, hoardings and displays at departments stores, malls, multiplexes, theatres, clubs, hotels, bus shelters, Railway Stations etc and shall be separately metered and charged at the tariff applicable for “Hoardings / Sign Board” category. However use of electricity for displays for the purpose of indicating / displaying the name and other details of the shop, on commercial premises itself, shall be covered under the prevailing tariff for such shops or commercial premises.</p> | No changes Proposed |

I. Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Total consumption | Rs/kVA/ Month | 60 | 9.90 | 60 | 9.90 |

10.1.9 LT VIII: LTTS/ Temporary Supply

| Existing Applicability Clause | Proposed Applicability Clause |
|--|--------------------------------|
| <p>a) LT Temporary Domestic: This schedule shall apply to usage of electricity for all religious purposes or public functions for non-commercial purposes. It shall also apply for construction of own house by an individual with single tenement</p> <p>LT Temporary Commercial: This schedule shall apply to usage of electricity for any of the activities not covered under LT Temporary Domestic. It would include but not limited to:</p> <ul style="list-style-type: none"> All other Constructions including renovation, of all type of structure/ infrastructure, including buildings, bridge, flyover, dam, power stations, road, aerodrome, tunnels laying of pipe line for all purpose | <p>No changes Proposed</p> |

I. Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|----------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Temporary Domestic | Rs/kW/ Month | 60 | 7.00 | 60 | 7.20 |
| Temporary Commercial | Rs/kW/ Month | 100 | 9.90 | 120 | 9.90 |

Note: -

- (i) The above temporary connection shall be released through a proper meter
- (ii) The above temporary tariffs are applicable for temporary supply for a period not exceeding three month which may be extended beyond that period only with the prior permission of the Chief Electrical Engineer, up to a maximum period of six months for general purpose and two years for construction activities.

(iii) Security deposit shall be collected in advance for an assessed 3 months billing.

10.2 Tariff Schedule – HT Consumers

High Tension/ Extra High Tension Category - Applicable to Power Supply of Voltages at 11KV/ 33KV/ 110KV i.e High/Extra High Voltages when the Contracted Demand is above 100 KVA/ 90 KW / 120 HP and power is supplied at three phase

10.2.1 HT VI: HTD/Domestic

| Existing Applicability Clause | Proposed Applicability Clause |
|---|-------------------------------|
| This schedule shall apply to individual residential consumers of Bungalows, Villas, Cottages, etc. using normal domestic appliances and whose contract demand falls within the threshold limit of HT category.. | No changes proposed |

- Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Total consumption | Rs/kVA/ Month | 150 | 4.40 | 160 | 4.60 |

10.2.2 HT I: HTI / Industrial

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| This schedule shall apply to consumers taking electricity supply for Industrial purpose. It shall also include the following categories: <ul style="list-style-type: none"> ▪ Bulk Supply of power at 11 KV, 33 kV /110 KV and above for industries, factories and other industrial purposes. ▪ Bulk supply of power at 11 KV and above for educational institutions owned or aided by Government, non-industrial establishment, ▪ Industrial units engaged in Ice Manufacturing Units; | No changes proposed |

| Existing Applicability Clause | Proposed Applicability Clause |
|---|-------------------------------|
| <ul style="list-style-type: none"> ▪ Hotels with lodging and boarding facilities etc ▪ Use of electricity / power supply by an establishment such as IT Industries, IT Parks, IT Units ▪ Pumping of water, public water supply, public water treatment plant, activities related with Supply Schemes and Sewage Treatment Plants, Sewage Pumping Stations etc. | |

I. Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| 11/33 kV | Rs/kVA/ Month | 250 | 4.30 | 250 | 4.50 |
| 110 kV | Rs/kVA/ Month | 250 | 4.20 | 250 | 4.50 |

10.2.3 HT IV - Ferro Metallurgical /Steel Rolling/Steel Melting/Power Intensive

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| This schedule shall apply to supply of power having a Contract Demand from 100 KVA up to 1000 KVA at 11 KV and above 1000 KVA at 33 KV for Steel rolling industry and Metal Alloy, Steel Melting, Ferro Alloy, and Ferro metallurgical industries all types of Ferro alloy units where melting is involved using electric power. | No changes Proposed |

I. Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Total Consumption | Rs/kVA/ Month | 250 | 4.30 | 250 | 4.50 |

10.2.4 HT III: HTC/ Commercial

| Existing Applicability Clause | Proposed Applicability Clause |
|---|-------------------------------|
| <p>This tariff is applicable to any HT supply activity not specifically covered in any other HT consumer categories or although covered in another activity, the use is made for a commercial category. It would include electricity used in all non-residential, non-industrial premises and/or commercial premises for commercial consumption meant for operating various appliances. It would include the following categories but not limited to:</p> <ul style="list-style-type: none"> • Houses with rent back facilities • Government hospitals • Professionals not covered in domestic category. • Commercial Complexes and Business premises, including Shopping malls/show rooms, offices / shops; • Combined lighting and power services for Entertainment including film studios, cinemas and theatres, including multiplexes, Race Course, Meeting/Town Halls, Clubs, all types of Guest houses; • Offices including Government Offices, Commercial Establishments; • Marriage Halls (including halls attached to religious places), • Hotels / Restaurants (without boarding facilities), Ice-cream parlours, Bakery, Coffee Shops, private hospitals, private messes, Internet / Cyber Cafes, Mobile Towers, Microwave Towers, Satellite Antennas used for telecommunication activity, • Telephone Booths, Fax / Xerox Shops, X-ray installation, bars and cold drink houses, Tailoring Shops, Computer Training Schools, • Typing Institutes, Photo Laboratories, Photo Studio, Laundries, Beauty Parlour & Saloons, all types of nurseries, dry cleaners etc • Automobile and any other type of repair centres, Retail Gas Filling stations, Petrol Pumps & Service Stations including • Garages, Tyre Vulcanizing units, Battery Charging Units, Tyre vulcanizing centres etc; • Banks, Telephone Exchanges, TV Station, Micro Wave Stations, All India Radio (AIR) Stations, ATM Centres etc; • For common facilities, like Water Pumping / Street Lighting / Lifts / Fire Fighting Pumps / Premises (Security) Lighting, etc. in • Commercial Complexes; Sports Club, Health Club, Gymnasium, Swimming Pool; | <p>No changes Proposed</p> |

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| <ul style="list-style-type: none"> • Research & Development units situated outside Industrial premises; • Airports, Railways, Railway Station, Bus stand of KTC etc; | |

I. Tariff

| | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Total Consumption | <i>Rs/kVA/ Month</i> | 250 | 5.50 | 250 | 5.50 |

Note - Cold Storages which are solely attached to Agriculture and its allied activities shall be charged tariff of Agriculture Allied activities. All other cold storages which are partly or not attached with Agriculture and Allied activities shall be charged commercial tariff.

10.2.5 HT II: MES/Defence Establishments:

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| This schedule shall apply to supply of power for defence installation establishments, having mixed load with predominantly lighting or non-industrial load of more than 50% of connected load. | No changes Proposed |

I. Tariff

| | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Total Consumption | <i>Rs/kVA/ Month</i> | 175 | 5.00 | 175 | 5.00 |

10.2.6 HT V: HTAG / Agriculture and other Allied Activities

a. HT-Agriculture Pump Sets (A)

| Existing Applicability Clause | Proposed Applicability Clause |
|---|-------------------------------|
| <ul style="list-style-type: none"> This schedule shall apply to establishments for Irrigation pumping, Dewatering and Lift Irrigation for cultivation of food crops such as cereals, pulses, vegetables and fruits etc and Cane crusher and/or fodder cutter for self-use for Agricultural purposes. | No changes Proposed |

II. Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Total Consumption | Rs/kVA/ Month | 35 | 1.40 | 35 | 1.50 |

Note:1. This tariff shall be applicable from the date of production of a certificate from the Directorate of Animal Husbandry or Agriculture Department of Government of Goa to the effect that the consumer carried on the said activity on regular basis. In case of failure to produce the certificate, the same shall be considered under Commercial category.

b. HT-Agriculture Allied Activities (B)

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| <p>This schedule shall apply to establishments for other allied activities related to Agriculture and shall include but not limited to:</p> <ul style="list-style-type: none"> Poultry farms, Livestock farms, Combination of livestock farms with dairy, Piggery etc Horticulture, Green Houses, Plantations etc Fish farms including ornamental fish farms, prawn farms, other aqua farms etc Tissue culture, Mushroom activities, Aquaculture, Floriculture, Fisheries, Sericulture, Floricultural nurseries, hatcheries etc Any other agricultural activity not falling under HT-Agriculture (A) shall be covered under this category | No changes Proposed |

II. Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Total Consumption | Rs/kVA/ Month | 50 | 1.80 | 60 | 2.00 |

Note: 1. This tariff shall be applicable from the date of production of a certificate from the Directorate of Animal Husbandry or Agriculture Department of Government of Goa to the effect that the consumer carried on the said activity on regular basis. In case of failure to produce the certificate, the same shall be considered under Commercial category.

2. Cold Storages which are solely attached to Agriculture and its allied activities shall be charged tariff of Agriculture allied activities. All other cold storages which are partly or not attached with Agriculture and Allied activities shall be charged Commercial Tariff.

10.2.7 HT VII: HTTS/ Temporary Supply

| Existing Applicability Clause | Proposed Applicability Clause |
|---|-------------------------------|
| This schedule shall apply to usage of electricity for all temporary purposes. | No Proposed Change |

I. Tariff

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Total Consumption | Rs/kVA/ Month | 120 | 9.90 | 120 | 9.90 |

Note: -

- (i) The above temporary connection shall be released through a proper meter

- (ii) The above temporary tariffs are applicable for temporary supply at high voltage for a period not exceeding three months which may be extended with prior permission of the Chief Electrical Engineer, up to a maximum period of six months for general purpose and two years for construction activities.
- (iii) Security deposit shall be collected in advance for an assessed 3 months billing.

10.2.8 HT VIII: HT SPS Single Point Supply

| Existing Applicability Clause | Proposed Applicability Clause |
|--|-------------------------------|
| This schedule shall apply to a group of consumers who desire to take a HT connection at single point for consumption of energy within a Residential Complex – Group Housing Societies, Residential Housing Colonies, Cooperative Group Housing Societies, Township Area; Commercial Complexes, including Malls; Industrial Complexes, including IT Park, Bio-Parks or other entities classified as industries by Government of Goa | No changes Proposed |

Note: In case of a dispute on whether the complex can be classified as an industrial complex, a certificate from Industries Department, Government of Goa will be required.

The following shall be the different combinations for SPS in a defined area:

- (i) An all LT consumer mix area
- (ii) All HT consumer mix area
- (iii) HT+LT consumer mix area

I. Tariff

The SPS applicant shall pay to EDG the tariff as mentioned below, corresponding to the demand¹ and the input energy at the HT end of such supply:

¹ Billing Demand would be as per pt 12) of ‘General Conditions and Definitions’ in the Chapter 9.5 of the Petition

| Consumption Slab | Basis of Fixed charge | Existing Tariff FY 2017-18 | | Proposed Tariff for FY 2018-19 | |
|-----------------------|-----------------------|----------------------------|-------------------------|--------------------------------|-------------------------|
| | | Fixed Charges | Energy Charges (Rs/kWh) | Fixed Charges | Energy Charges (Rs/kWh) |
| Residential Complexes | Rs/kVA/ Month | 100 | 3.10 | 100 | 3.30 |
| Commercial Complexes | Rs/kVA/ Month | 200 | 4.30 | 200 | 4.30 |
| Industrial Complexes | Rs/kVA/ Month | 200 | 3.90 | 200 | 4.10 |

Note:

- a) The General Conditions, Miscellaneous & General Charges would also be applicable for all SPS categories.
- b) Based on technical and administrative feasibility, the EDG may consider providing SPS power supply at HV/ EHV level to a complex at a mutually agreed injection point.
- c) The SPS arrangement would be applicable for the application received from a Residential complex² / Association of Persons (AOP) / Developer of the complex or any other such similar person.
- d) The SPS arrangement would be considered by EDG only if the minimum sanctioned cumulative contracted demand of the complex (group of consumers) is 1.15 MVA/ 1 MW.
- e) The complete cost of erection and O&M for the sub-transmission and distribution infrastructure within such complex would need to be borne by the said SPS applicant.
- f) The SPS applicant would be required to develop and maintain an efficient, co-ordinated and quality sub-transmission and distribution system in its area of electricity supply. Further, the applicant would be responsible to comply with Standards of Performance and Supply Code Regulation as laid down under JERC Regulations and guidelines of Goa Electricity Department, if any. The network within the complex will need to be certified by the Chief Electrical Inspector.
- g) For Residential Complexes, SPS application shall be entertained for group of LT consumers only. The loads of common amenities for such group may include pumps for pumping water supply, lifts and lighting of common area. However, the consumption of energy for common services shall be separately metered with meters installed by the consumer and tested and sealed by licensee. The consumption of such energy over and above 10% of the total consumption of energy shall be billed at LT Commercial Tariff. The user shall inform the details of every non-domestic activity, such as commercial complex, industrial activity, and recreation club, along with the connected load to the licensee at the time of seeking

² Once the society is formed, the developer has to change the applicant's name in favour of the society

connection or at the time of enhancement in contract demand and shall seek a separate connection for the same in case the common load is more than 10%.

- h) Individual Domestic HT consumers in a residential complex that opts for SPS shall need to apply separately under HT Domestic category.
- i) The SPS applicant shall not charge tariff to the downstream consumers higher than stipulated above.
- j) The applicant shall be obliged to pay the total tariff (total billed amount) due to EDG, as measured at HT end of SPS. However, to cover energy transformation losses and other O&M expenses, such applicant would be eligible to get rebates from EDG on full bill payment, within the due time:
 - i. 5% on the overall billed amount in all cases of LT & HT consumers.
 - ii. Any other loss would be to account of the applicant.
- k) For CC and IC applicant, any LT / HT Consumer in the area should have minimum 80% pre-dominant load of their appropriate category i.e. mix load is allowed only upto 20%. For e.g. If a HT/ LT Industry Consumer has Factory, Residential Colony for its workers and also some Commercial facilities for his staff and the total of Residential & Commercial load is say around 30%, then separate Individual SPD connection may be taken for each such group as per activity.
- l) The implementation of SPS arrangement should be in accordance with the Electricity Act, 2003 and APTEL judgements in this regard.

¹ Once the society is formed, the developer has to change the applicant's name in favour of the society

CHAPTER 11. SEGREGATION OF WHEELING AND SUPPLY BUSINESS

11.1 Allocation Policy

11.1.1 EDG submits the bifurcation of all expenses between the functions of wheeling business (wire business) and retail supply business based on the allocation matrix approved by the Hon'ble Commission in the Tariff Order dated 18th April 2016. The summary of the allocation statement and the segregation of ARR into wheeling and retail supply business is given in the table below:

Table 11-1: Allocation Statement Wheeling and Retail Supply

| Sr. No. | Item of expense | Wire Business | Supply Business | Wire Business | Supply Business | Total |
|---------|--|---------------|-----------------|---------------|-----------------|-----------------|
| | | % | % | FY 2018-19 | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | Cost of fuel | | | | | |
| 2 | Cost of power purchase | 0% | 100% | - | 1,417.92 | 1,417.92 |
| 3 | Provision for RPO Compliance | 0% | 100% | - | 15.17 | 15.17 |
| 4 | Employee costs | 70% | 30% | 189.29 | 81.12 | 270.41 |
| 5 | R&M expenses | 50% | 50% | 22.80 | 22.80 | 45.60 |
| 6 | Administration and General expenses | 90% | 10% | 9.73 | 1.08 | 10.81 |
| 7 | Depreciation | 90% | 10% | 82.43 | 9.16 | 91.59 |
| 8 | Interest & Financial charges | 90% | 10% | 96.47 | 10.72 | 107.19 |
| 9 | Interest on Working Capital | 22% | 78% | 2.72 | 9.64 | 12.36 |
| 10 | Return on NFA /Equity | 90% | 10% | 74.94 | 8.33 | 83.27 |
| 11 | Provision for Bad Debt | 0% | 100% | - | - | - |
| 12 | Provision for DSM Expenses | 0% | 100% | - | 3.03 | 3.03 |
| 13 | Interest on Consumer Security Deposit | 0% | 100% | - | 7.02 | 7.02 |
| 14 | Total Revenue Requirement | | | 478.38 | 1,585.99 | 2,064.37 |
| 15 | Less: Non Tariff Income | 0% | 100% | - | 6.74 | 6.74 |
| 16 | Net Revenue Requirement (12-13) | | | 478.38 | 1,579.25 | 2,057.63 |

11.1.2 The Hon'ble Commission is requested to approve the segregation of ARR into wheeling & retail supply business for the control period as per above table.

CHAPTER 12. OPEN ACCESS CHARGES FOR FY 2018-19

12.1 Approach for computation of open access charges

12.1.1 EDG submits that as per Regulation 36 of MYT Regulations, 2014 category wise cost of supply needs to be computed for facilitating determination of tariff and for gradual reduction of cross subsidy. Cost of supply study also facilitates determination of cross subsidy surcharge. However the cost of supply methodology suggested by APTEL is based on voltage wise segregation.

12.1.2 In absence of relevant data for computation of open access charges, EDG requests Hon'ble Commission to consider the same approach as approved in Tariff Order FY 2018-19.

12.1.3 Accordingly, EDG has computed open access charges considering the following wheeling losses for HT & EHT and allocation % for wheeling cost between HT & LT as approved in Tariff Order FY 2017-18.

- Wheeling Loss at HT & EHT Level - 3.636% (balance losses attributable to LT Level)

12.2 Computation of Wheeling Charge and losses

12.2.1 Based on above mentioned and the projections for Sales and Wheeling ARR for FY 2018-19, the wheeling charges for HT/EHT & LT are determined.

12.2.2 The input energy at each level has been arrived to determine the network usage at HT/EHT and LT level. Based on the ratio of network usage at HT/EHT and LT level, the wheeling charge has been determined as shown below.

Table 12-1: Determination of input energy for network usage percentage

| S. No. | Particulars | UoM | Amount |
|--------|---|-----|---------|
| 1 | Sales at 11 kV and above (HT/EHT Level) | MU | 2093.09 |
| 2 | Losses in % for HT/EHT Network | % | 3.64% |
| 3 | Input required for sales at 11 kV and above | MU | 2172.07 |
| 4 | Projected total input | MU | 3995.88 |
| 5 | Projection of HT/EHT network usage | % | 54.36% |
| 6 | Balance proportion of LT network usage | % | 45.64% |

Table 12-2: Wheeling Charge for FY 2018-19

| S. No. | Particulars | UoM | Formulae | Amount |
|--------|---|---------|------------|---------|
| 1 | Wheeling Cost | Rs Crs | A | 477.21 |
| 2 | Wheeling Cost for HT/EHT network | Rs Crs | B=A*54.36% | 259.40 |
| 3 | Input required for sales at 11 kV and above | MUs | C | 2172.07 |
| 4 | Wheeling charges for HT/EHT network usage | Rs./kWh | D=B/C*10 | 1.19 |
| 5 | Wheeling cost for LT network | Rs Crs | E=A*45.64% | 217.81 |
| 6 | Input required for sales at LT level MU | MUs | F | 1757.50 |
| 7 | Wheeling charges for LT network usage | Rs./kWh | G=E/F*10 | 1.24 |

12.2.3 Therefore, EDG requests the Hon'ble Commission to approve wheeling charge for HT/EHT category as Rs 1.19/kWh and for LT category as Rs 1.24/kWh for FY 2018-19.

12.3 Computation of Cross Subsidy Surcharge

12.3.1 The National Electricity Policy as stipulated by the Central Government provides that – Under sub – section (2) of Section 42 of the Act, a surcharge is to be levied by the respective State Commissions on consumers switching to alternate supplies under open access. This is to compensate the host distribution licensee serving such consumers who are permitted Open Access under Section 42 (2), for loss of cross subsidy element built into the tariff of such consumers. An additional surcharge may also be levied under sub – section (4) of section 42 of the said Act for meeting the fixed cost of the distribution licensee arising out of obligation to supply in cases where consumers are allowed open access.

12.3.2 The Government of India has notified the National Tariff Policy, 2016 on 28th January 2016. The Cross subsidy surcharge is based on the following formula given in the Tariff Policy, 2016 which is as follows:

$$S = T - [C / (1 - L/100) + D + R]$$

Where,

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation;

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation;

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the per unit cost of carrying regulatory assets.

12.3.3 The projected wheeling charges “D” as calculated above at the respective voltage level are used for calculation of Cross Subsidy Surcharge.

12.3.4 The Computation of cross subsidy surcharge for EHT/HT consumers getting supply above 11 KV voltage level is given below.

Table 12-3: Calculation of "T" Approved for FY 2018-19

| Particulars | Sales (MUs) | Revenue from Proposed tariff (Rs. Crs) | Average Tariff(Rs./kWh) |
|-------------|-------------|--|-------------------------|
| T | 2093.09 | 1123.74 | 5.37 |

Table 12-4: Calculation of "C" Approved for FY 2018-19

| Particulars | Quantum | Rs. Crs | Rs./kWh |
|--|---------|---------|---------|
| Power purchase at generator end excluding open access | 4119.86 | 1417.89 | 3.44 |
| Less: Interstate Losses | 164.30 | | |
| Total power purchase for the Distribution licensee - C | 3955.56 | 1417.89 | 3.58 |

Table 12-5: Cross-Subsidy Surcharge for FY 2018-19

| Cross Subsidy Surcharge | UoM | HT and EHT Industry |
|-------------------------|----------------|---------------------|
| T | Rs./kwh | 5.37 |
| C | Rs./kwh | 3.58 |
| D | Rs./kwh | 1.19 |
| L | % | 3.64% |
| R | Rs./kwh | 0 |
| Surcharge | Rs./kwh | 0.59 |

Therefore, EDG requests the Hon’ble Commission to approve the cross subsidy surcharge of Rs. 0.59/kWh for HT and EHT consumers in FY 2018-19.

CHAPTER 13. COMPLIANCE OF DIRECTIONS

The Hon'ble Commission in its Tariff Order for FY 2017-18 had laid down certain directives to be complied by EDG. The directives as provided by the Hon'ble Commission and the status of the said directives are replied as below:

13.1 Status of Compliance of Directives issued in tariff order dated 23rd May 2017

| Sr. No. | Directives | Hon'ble Commission Observation made in the Tariff Order dated 23 rd May 2017 | Compliance by the Electricity Department Goa |
|---------|-------------------------------------|--|--|
| 1 | Annual Statement of Accounts | <p><i>The Commission appreciates the effort undertaken by the Petitioner for the preparation of audited accounts on commercial principles. However, the Commission is of the view that while the Commission has undertaken the True-up for the FY 2011-12 and FY 2012-13 in this Order, in normal course and as per the provisions of Tariff Regulations 2009, the True-up upto FY 2015-16 should have been done in this Order. The Commission has taken a serious note of this and directs the Petitioner to undertake necessary actions on priority so as to ensure that all the True-ups of FY 2013-14 to FY 2016-17 (along with audited accounts) are submitted with the Tariff Petition of FY 2018-19. The Commission shall be constrained to take appropriate action against the Petitioner in case of further non-compliance.</i></p> | <ul style="list-style-type: none"> • Financial statements for FY 2013-14 are completed and audit has been undertaken. Awaiting for CAG Certificate. • Financial statements for FY 2014-15 are completed and submitted to CAG for conducting Audit. • Preparation of Financial Statements for FY 2015-16 and 2016-17, are under process. |
| 2 | Preparation of Fixed Asset Register | <p><i>Further, the Petitioner has not given any reason for delay in completion of GIS Mapping. The Commission would like the Petitioner to take note of the fact that such submissions without any justifications are not appreciated by the Commission. The Commission now direct the Petitioner to submit action plan along with timelines for preparation of Fixed Assets and Depreciation Register for previous years within 1 month of issuance of this Order. The Commission will be constrained to take appropriate action in case of further non-compliance by the Petitioner.</i></p> | <ul style="list-style-type: none"> • FAR for FY 2013-14 and 2014-15 have been completed. • FAR for FY 2015-16 and FY 2016-17, are under process. |
| 3 | Energy Audit Report | <p><i>The Commission has noted with serious concern that the Petitioner is yet to submit the Energy Audit Reports for previous years. The Commission now direct the Petitioner to submit action plan along with timelines for</i></p> | <p>DTC metering is not yet completed and still in progress. Only on completion of the same, the Energy Audit Report will be initiated.</p> |

| Sr. No. | Directives | Hon'ble Commission Observation made in the Tariff Order dated 23 rd May 2017 | Compliance by the Electricity Department Goa |
|---------|---|--|---|
| | | <i>preparation of Energy Audit Report within 1 month of issuance of this Order. The Commission will be constrained to take appropriate action in case of further non-compliance by the Petitioner</i> | |
| 4 | Manpower Study | <i>The Commission has noted with serious concern that the Petitioner is yet to submit a systematic manpower study report with a specific focus on manpower rationalization. The Commission now direct the Petitioner to submit action plan along with timelines for preparation of a systematic manpower study report with a specific focus on manpower rationalization within 2 months of issuance of this Order. The Commission will be constrained to take appropriate action in case of further non-compliance by the Petitioner.</i> | The report has been furnished by consultant. However EDG is required to scrutinise further and subsequently will be submitted to State Government for decision. Post decision from State Government, the report will be submitted to the Hon'ble Commission |
| 5 | Consumer Security Deposit | <i>The Commission observes that while the Petitioner has undertaken some efforts towards compliance of this directive, still substantial payment is yet to be done by the Petitioner. The Commission is of the view that substantial time has already been given to the Petitioner. The Commission now directs the Petitioner to compute the quantum of backlog and ensure payment of balance security deposit pertaining to previous years before 31st August 2017. No further extension will be entertained by the Commission in this matter and in case of further non-compliance, the Commission will be constrained to take appropriate action under Section 142 of the Electricity Act 2003.</i> | <ul style="list-style-type: none"> • As on date an amount of Rs. 14.79 Cr was allotted for payment of interest on consumer security deposit, out of which an amount of Rs.8.58 Cr has been credited to consumer account and the balance amount will be credited before the end of the financial year. • Further, for FY 2018-19 an amount of Rs. 6.47 Cr has been proposed for allotment. |
| 6 | Unbundling of Electricity Department | <i>The Commission has noted the submission of the Petitioner. The Commission directs the Petitioner to actively pursue the unbundling of the Department with the Government of Goa and submit quarterly progress reports in this regard.</i> | It is requested to the Hon'ble Commission that there is no specific directive for unbundling of EDG from the state Government and therefore the said directive may be dropped. |
| 7 | Sub Divisions as Strategic Business Units | <i>The Commission does not accept the submission of the Petitioner. The Commission directs the Petitioner to submit the sub-division wise status report of readiness of all the sub-divisions towards introduction of the system of Cost-Revenue Centre Oriented Sub Divisions within 2 months of issuance of this Order.</i> | As a pilot project, one of the sub division under division VI Mapusa has been taken for that purpose. |

| Sr. No. | Directives | Hon'ble Commission Observation made in the Tariff Order dated 23 rd May 2017 | Compliance by the Electricity Department Goa |
|---------|---|--|--|
| 8 | Installation of Pre Paid Meters | <p><i>The Commission would like to highlight the Petitioner has long history of issues related to billing and collection. The pre-paid meters, though being costly as compared to conventional meters, will be cost effective in longer run. Further, GoI is already focusing on installation of smart meters.</i></p> <p><i>Thus, the Commission now directs the Petitioner to finalize and submit a proposal for installation of smart meters for following consumers:</i></p> <ol style="list-style-type: none"> <i>1. All HT and EHT Consumers</i> <i>2. LT Industries and Hotel Industries</i> <i>3. All Government Connections</i> <i>4. All connections whose premises remain locked for 3 or more months in a year.</i> <p><i>The Petitioner is directed to submit this proposal within 4 months of issuance of this Order failing which the Commission will be constrained to take appropriate action against the Petitioner.</i></p> | <p>As a pilot project under smart city mission, Government has considered installation of Smart Meters for Panaji and surrounding areas at a cost of Rs.70 Crores.</p> <p>Thereafter as directed, the Smart meters will be taken up for (1) All HT and EHT Consumers (2) LT Industries and hotel Industries (3) All Government connections (4) All Connections whose premise remain locked for 3 or more months in a year.</p> |
| 9 | Renewable Energy Obligation | <p><i>The Commission has noted the submission of the Petitioner. However, the Commission directs the Petitioner to submit the status of finalization of Solar Policy within 1 month of issuance of this Order</i></p> | <p>Solar Policy has been approved by Government of Goa and the same is being put in Public domain.</p> |
| 10 | Management Information System (MIS) and Database Management System DBMS | <p><i>The Commission has noted that the Petitioner is yet to comply with this directive.</i></p> <p><i>The Commission now directs the Petitioner to submit action plan along with timelines for implementation of MIS and DBMS within 2 months of issuance of this Order.</i></p> | <p>Management Information System (MIS) and Database Management System DBMS has been implemented under APDRP part A Project.</p> |
| 11 | Street Lights switching 'on ' and 'off | <p><i>The Commission has noted the submission of the Petitioner and directs it to submit quarterly progress reports to the Commission.</i></p> | <p>The Centralised Control and Monitoring system is in process of installation and is expected to be completed by end of December 2017.</p> |
| 12 | Billing and Collection Efficiency | <p><i>The Commission notes with serious concern the state of affairs of operation of the department. The Commission directs the Petitioner to take all necessary actions on priority so as to resolve all the issues pertaining to billing and collection and report the status along with next Tariff Filing</i></p> | <p>Presently billing and collection efficiency is above 80%</p> |

CHAPTER 14. PRAYER'S TO THE COMMISSION

14.1 Prayer to the Hon'ble Commission

14.1.1 The Electricity Department, Government of Goa (EDG) respectfully prays to the Hon'ble Commission to:

- a) Accept and admit the petition for True-up of FY 2013-14, Provisional APR for FY 2016-17, APR for FY 2017-18 and Tariff Determination for FY 2018-19 which is in line with the principles laid by Joint Electricity Regulatory Commission contained in MYT Regulations 2014 and Tariff Regulations 2009;
- b) Approve the total recovery and revenue gap of Final True up of FY 2013-14, Provisional APR for FY 2016-17, APR for FY 2017-18 and Aggregate Revenue Requirement for FY 2018-19 and other claims as proposed by EDG.
- c) Approve the proposed cumulative Revenue Gap till FY 2018-19 amounting to Rs. **473 Crores** on provisional basis and the revenue gap as may be approved by the Hon'ble Commission during the process of finalising tariff petition is proposed to be met from the Budgetary support by Govt. of Goa. It is submitted that Budgetary Support is limited to this amount and any further revenue gap at a later date when petition for true-up is filed based on actual accounts / figures, it would be dealt appropriately at that time.
- d) To consider the Tariff Design Philosophy and approve the proposed changes in Tariff Schedule (rationalisation of tariff categories & changes in applicability clauses) for FY 2018-19.
- e) Approve the Expected Revenue from Charges (ERC) for FY 2018-19 and the consolidated gap till FY 2018-19.
- f) The delay in filing this MYT Petition may please be condoned and the Hon'ble Commission is requested to accept this Petition and process the same.
- g) Pass suitable orders with respect to True-up of FY 2013-14, Provisional APR for FY 2016-17, APR for FY 2017-18 and Tariff Determination for FY 2018-19 for the expenses to be incurred by ED - Goa for serving its consumers;
- h) To allow cost related to past interest on security deposit into ARR of FY 2018-19.
- i) Grant approval for the schedule of tariff, charges for services and schedule of charges as made in the petition for FY 2018-19.
- j) Grant any other relief as the Hon'ble Commission may consider appropriate.
- k) The petitioner craves leave of the Hon'ble Commission to allow further submission, addition and alteration to this petition as may be necessary from time to time.

- l) Condone any inadvertent omissions/errors/shortcomings and permit EDG to add/change/modify/alter this filing and make further submissions as may be required at a future date.

- m) To 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.

The petitioner declares that the subject matter of the petition has not been raised by the petitioner before any other competent forum, and that no other competent forum is currently seized of the matter or has passed any order in relation thereto.

Annexure 1: Tariff Formats

SUBMISSION to JOINT ELECTRICITY REGULATORY COMMISSION

ANNUAL REVENUE REQUIREMENT

Tariff Filing Formats

Electricity Department of Goa

**TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION
FOR FY 2018-19**

Tariff Filing Formats

Electricity Department - Goa
Goa

TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19

| Sr. No. | Title | Reference |
|---------|---|-----------|
| 1 | 2 | 3 |
| 1 | Energy Demand | Form 1 |
| 2 | AT & C Loss of Licensee | Form 2 |
| 3 | Energy Balance | Form 3 |
| 4 | Power Purchase Cost | Form 4 |
| 6 | Investment Plan | Form 5 |
| 7 | Capital Base & Return | Form 6 |
| 8 | Fixed Asset | Form 7 |
| 9 | Work in Progress | Form 8 |
| 10 | Interest Capitalised | Form 9 |
| 11 | Loan Details | Form 10 |
| 12 | Normative Interest Expenses | Form 10 A |
| 13 | Restructuring of Outstanding Loan | Form 11 |
| 14 | Asset & Depreciation | Form 12 |
| 15 | R&M Expense | Form 13 |
| 16 | No. of Employees | Form 14 |
| 17 | Employee Cost | Form 15 |
| 18 | A&G Expenses | Form 16 |
| 19 | Bad & Doubtful Debts | Form 17 |
| 20 | Working Capital | Form 18 |
| 21 | Security Deposit | Form 18 A |
| 22 | Provisions of Interest on Security Deposits from Consumers | Form 18 B |
| 23 | Foreign Exchange Rate Variation | Form 19 |
| 24 | Non Tariff Income | Form 20 |
| 25 | Revenue from other business | Form 21 |
| 26 | Lease Details | Form 22 |
| 27 | Wholesale Price Index | Form 23 |
| 28 | Equity & Loan | Form 24 |
| 29 | Annual Revenue Requirement | Form 25 |
| 30 | Regulatory Assets | Form 25A |
| 31 | Cumulative Gap | Form 25B |
| 32 | Revenue from Sale of Power for Previous Years and Current Years | Form 26 |
| 33 | Revenue from Sale of Power for MYT Control Period at Existing Tariffs | Form 26 A |
| 34 | Segregation of Wheeling Business and Retail Supply Business of Control Period | Form 27 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY
2018-19

SUMMARY OF ENERGY DEMAND
F.Y. 2013-14 to FY 2018-19

| Category of Consumer | FY 2013-14 (Audited) | | | FY 2014-15 (Approved) | | |
|------------------------------|----------------------|--|--------------|-----------------------|--|--------------|
| | Consumers [No] | Connected Load at the end of the Year (KW/kVA) | Sales [MUs] | Consumers [No] | Connected Load at the end of the Year (KW/kVA) | Sales [MUs] |
| LTD/Domestic | 4,20,855 | 11,27,149 | 844 | 4,78,893 | 16,34,435 | 728 |
| LTD/L.I.G. | 11,340 | 1,201 | 8 | 11,547 | 2,046 | 2 |
| LTD Domestic Mixed | 1,141 | 2,186 | 5 | 1,405 | 3,191 | 7 |
| LTC/Commercial | 84,872 | 3,33,665 | 281 | 89,081 | 2,77,265 | 268 |
| LTP Industries | 46,431 | 4,62,704 | 87 | 7,195 | 1,72,660 | 192 |
| Agriculture | 10,325 | 63,970 | 18 | 11,145 | 61,326 | 25 |
| LTPL (Public lighting) | 1,457 | 9,011 | 37 | 2,740 | 9,598 | 40 |
| Public Water works | 230 | 21,463 | 2 | 744 | 5,600 | 6 |
| Temporary | 4,557 | 16,316 | 18 | 5,033 | 8,025 | 38 |
| Total LT | 5,81,208 | 20,37,665 | 1,301 | 6,07,783 | 21,74,146 | 1,304 |
| Mixed | 176 | 67,716 | 118 | 168 | 74,767 | 134 |
| Domestic | | | | | | |
| Industrial | 426 | 5,27,223 | 1,279 | 438 | 4,04,047 | 1,347 |
| Agriculture | 41 | 8,211 | 6 | 41 | 8,258 | 6 |
| P.W.W. & Sewage system | 33 | 26,879 | 138 | 35 | 90,796 | 137 |
| M.E.'s Defence Estt. | 12 | 6,818 | 27 | 12 | 7,080 | 27 |
| Steel Rolling | 13 | 16,219 | 69 | - | - | - |
| IT High Tech | 40 | 5,164 | 66 | 12 | 6,658 | 21 |
| Ice Manufacturing | 2 | 364 | 1 | 2 | 364 | 2 |
| Sale to GSPL/GEPL/REL/MSEDCL | - | - | 9 | | | |
| Hotel Industry | 58 | - | 57 | 110 | 41,559 | 137 |
| Temporary | 1 | - | 0 | - | - | - |
| Total HT | 802 | 6,58,595 | 1,770 | 818 | 6,33,529 | 1,810 |
| Total metered | 5,82,010 | 26,96,260 | 3,071 | 6,08,601 | 28,07,675 | 3,114 |
| Total unmetered | | | | | | |
| Total | 5,82,010 | 26,96,260 | 3,071 | 6,08,601 | 28,07,675 | 3,114 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY
2018-19

SUMMARY OF ENERGY DEMAND
F.Y. 2013-14 to FY 2018-19

| Category of Consumer | FY 2015-16 (Approved) | | | FY 2016-17 (Actual) | | |
|------------------------------|-----------------------|--|--------------|---------------------|--|--------------|
| | Consumers [No] | Connected Load at the end of the Year (KW/kVA) | Sales [MUs] | Consumers [No] | Connected Load at the end of the Year (KW/kVA) | Sales [MUs] |
| LTD/Domestic | 4,88,471 | 16,42,607 | 764 | 4,63,272 | 11,52,770 | 804 |
| LTD/L.I.G. | 11,547 | 2,046 | 2 | 1,125 | 106 | 2 |
| LTD Domestic Mixed | 1,405 | 3,191 | 8 | | | |
| LTC/Commercial | 90,863 | 2,78,652 | 281 | 89,328 | 2,96,465 | 301 |
| LTP Industries | 7,275 | 1,72,660 | 201 | 6,119 | 1,11,270 | 84 |
| Agriculture | 11,145 | 61,326 | 25 | 11,306 | 43,021 | 14 |
| LTPL (Public lighting) | 2,740 | 9,598 | 40 | 3,042 | 11,840 | 37 |
| Public Water works | 744 | 5,600 | 6 | | | |
| Temporary | 5,032 | 8,025 | 38 | 4,286 | 15,926 | 16 |
| Total LT | 6,19,222 | 21,83,705 | 1,365 | 5,78,477 | 16,31,398 | 1,256 |
| Mixed | 168 | 74,767 | 136 | 192 | 69,245 | 103 |
| Domestic | | | | 3 | 300 | 0 |
| Industrial | 442 | 4,04,047 | 1,388 | 689 | 5,69,284 | 1,635 |
| Agriculture | 41 | 8,258 | 6 | 41 | 8,660 | 8 |
| P.W.W. & Sewage system | 36 | 30,796 | 144 | | | |
| M.E.'s Defence Estt. | 12 | 7,080 | 27 | 12 | 6,955 | 25 |
| Steel Rolling | | | | | | |
| IT High Tech | 13 | 6,658 | 21 | | | |
| Ice Manufacturing | 2 | 364 | 2 | | | |
| Sale to GSPL/GEPL/REL/MSEDCL | | | | | | |
| Hotel Industry | 111 | 41,559 | 143 | | | |
| Temporary | - | - | - | 1 | 350 | 0 |
| Total HT | 825 | 5,73,529 | 1,867 | 938 | 6,54,794 | 1,771 |
| Total metered | 6,20,047 | 27,57,234 | 3,233 | 5,79,415 | 22,86,192 | 3,027 |
| Total unmetered | | | | | | |
| Total | 6,20,047 | 27,57,234 | 3,233 | 5,79,415 | 22,86,192 | 3,027 |

ELECTRICITY DEPARTMENT - GOA

TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19

SUMMARY OF ENERGY DEMAND

F.Y. 2013-14 to FY 2018-19

| Category of Consumer | FY 2017-18 (H1 Actual) | | | FY 2017-18 (H2 Estimated) | | | FY 2017-18 (H1+H2) Estimated | | |
|------------------------------|------------------------|--|--------------|---------------------------|--|--------------|------------------------------|--|--------------|
| | Consumers [No] | Connected Load at the end of the Year (KW/kVA) | Sales [MUs] | Consumers [No] | Connected Load at the end of the Year (KW/kVA) | Sales [MUs] | Consumers [No] | Connected Load at the end of the Year (KW/kVA) | Sales [MUs] |
| LTD/Domestic | 4,89,358 | 12,60,724 | 589 | 4,89,358 | 12,60,724 | 400 | 4,89,358 | 12,60,724 | 988 |
| LTD/L.I.G. | 1,798 | 157 | 1 | 1,798 | 157 | 0 | 1,798 | 157 | 1 |
| LTD Domestic Mixed | | | | | | | - | - | - |
| LTC/Commercial | 94,727 | 3,08,058 | 238 | 94,727 | 3,08,058 | 166 | 94,727 | 3,08,058 | 404 |
| LTP Industries | 6,130 | 1,40,162 | 50 | 6,130 | 1,40,162 | 37 | 6,130 | 1,40,162 | 87 |
| Agriculture | 10,865 | 43,633 | 9 | 10,865 | 43,633 | 6 | 10,865 | 43,633 | 15 |
| LTPL (Public lighting) | 2,619 | 9,855 | 15 | 2,619 | 9,855 | 16 | 2,619 | 9,855 | 30 |
| Public Water works | | | | | | | - | - | - |
| Temporary | 4,440 | 17,883 | 11 | 4,440 | 17,883 | 10 | 4,440 | 17,883 | 20 |
| Total LT | 6,09,937 | 17,80,472 | 911 | 6,09,937 | 17,80,472 | 634 | 6,09,937 | 17,80,472 | 1,545 |
| Mixed | 201 | 76,077 | 55 | 201 | 76,077 | 61 | 201 | 76,077 | 116 |
| Domestic | 3 | 300 | 0 | 3 | 300 | 0 | 3 | 300 | 0 |
| Industrial | 708 | 5,89,837 | 888 | 708 | 5,89,837 | 997 | 708 | 5,89,837 | 1,886 |
| Agriculture | 42 | 8,860 | 4 | 42 | 8,860 | 6 | 42 | 8,860 | 10 |
| P.W.W. & Sewage system | | | | | | | - | - | - |
| M.E.'s Defence Estt. | 12 | 6,955 | 14 | 12 | 6,955 | 14 | 12 | 6,955 | 28 |
| Steel Rolling | | | | | | | - | - | - |
| IT High Tech | | | | | | | - | - | - |
| Ice Manufacturing | | | | | | | - | - | - |
| Sale to GSPL/GEPL/REL/MSEDCL | | | | | | | - | - | - |
| Hotel Industry | | | | | | | - | - | - |
| Temporary | 1 | 350 | 0 | 1 | 350 | 1 | 1 | 350 | 1 |
| Total HT | 967 | 6,82,379 | 962 | 967 | 6,82,379 | 1,079 | 967 | 6,82,379 | 2,041 |
| Total metered | 6,10,904 | 24,62,851 | 1,873 | 6,10,904 | 24,62,851 | 1,713 | 6,10,904 | 24,62,851 | 3,586 |
| Total unmetered | | | | | | | - | - | - |
| Total | 6,10,904 | 24,62,851 | 1,873 | 6,10,904 | 24,62,851 | 1,713 | 6,10,904 | 24,62,851 | 3,586 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND
TARIFF DETERMINATION FOR FY 2018-19

SUMMARY OF ENERGY DEMAND
F.Y. 2013-14 to FY 2018-19

| Category of Consumer | FY 2018-19 - Projections approved in Order | | |
|------------------------------|--|--|--------------|
| | Consumers [No] | Connected Load at the end of the Year (KW/kVA) | Sales [MUs] |
| LTD/Domestic | 4,96,725 | 14,29,336 | 985 |
| LTD/L.I.G. | 3,049 | 338 | 1 |
| LTD Domestic Mixed | - | - | - |
| LTC/Commercial | 97,268 | 2,95,985 | 340 |
| LTP Industries | 6,699 | 1,19,865 | 143 |
| Agriculture | 10,821 | 34,481 | 24 |
| LTPL (Public lighting) | 2,740 | 9,598 | 37 |
| Public Water works | | | |
| Temporary | 2,686 | 1,133 | 22 |
| Total LT | 6,19,988 | 18,90,735 | 1,552 |
| Mixed | 117 | 42,567 | 79 |
| Domestic | 2 | 193 | 0 |
| Industrial | 688 | 5,31,976 | 1,981 |
| Agriculture | 41 | 8,378 | 6 |
| P.W.W. & Sewage system | | | |
| M.E.'s Defence Estt. | 12 | 7,080 | 27 |
| Steel Rolling | | | |
| IT High Tech | | | |
| Ice Manufacturing | | | |
| Sale to GSPL/GEPL/REL/MSEDCL | | | |
| Hotel Industry | | | |
| Temporary | - | - | - |
| Total HT | 860 | 5,90,194 | 2,093 |
| Total metered | 6,20,848 | 24,80,929 | 3,645 |
| Total unmetered | | | |
| Total | 6,20,848 | 24,80,929 | 3,645 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
ENERGY DEMAND
YEAR 2013-14 (April 2013 to March 2014) - Audited

| Sr. No. | Category of Consumer | No. of Consumers at the end of the year (Nos.) | Connected Load at the end of the Year (KW/kVA) | Demand (in MW)* | | Energy Sale/ Demand (MUs) |
|-------------------------------|--|--|--|-----------------|------------|---------------------------|
| | | | | Unrestricted | Restricted | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| A. LOW TENSION SUPPLY | | | | | | |
| 1 | (a) LTD/Domestic | 4,20,855 | 11,27,149 | | | 844.23 |
| | (b) LTD/L.I.G. | 11,340 | 1,201 | | | 8.26 |
| | (c) LTD Domestic Mixed | 1,141 | 2,186 | | | 5.00 |
| 2 | LTC/Commercial | 84,872 | 3,33,665 | | | 280.97 |
| 3 | (a) LTP/Motive Power | 46,272 | 4,57,533 | | | 74.41 |
| | (b) LTP Mixed (Hotel Industries) | 122 | 3,298 | | | 4.73 |
| | (c) LTP Ice Manufacturing | 37 | 1,873 | | | 8.00 |
| 4 | LTAG/Agriculture | 10,325 | 63,970 | | | 17.76 |
| 5 | (a) LTPL (Public lighting) | 1,444 | 9,011 | | | 37.08 |
| 6 | (b) Arrears (Street light) | 13 | | | | 0.15 |
| 7 | LTPWW/Public Water works | 230 | 21,463 | | | 2 |
| | Total | 5,76,651 | 20,21,349 | - | - | 1,283 |
| B. HIGH TENSION SUPPLY | | | | | | |
| 8 | HT (Mixed) | 176 | 67,716 | | | 117.88 |
| 9 | HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive. | 24 | 93,316 | | | 517.37 |
| 10 | HTI Industrial | 397 | 3,57,311 | | | 619.33 |
| 11 | HTAG (Agriculture) | 41 | 8,211 | | | 6.09 |
| 12 | EHTI (Industrial) | 5 | 76,596 | | | 142.55 |
| 13 | HT P.W.W. & Sewage system | 33 | 26,879 | | | 138.12 |
| 14 | HT. M.E.'s Defence Estt. | 12 | 6,818 | | | 26.66 |
| 15 | HTI (Steel Rolling) | 13 | 16,219 | | | 69.02 |
| 16 | HTI / IT High Tech | 40 | 5,164 | | | 66.23 |
| 17 | HTI/Ice Manufacturing | 2 | 364 | | | 0.85 |
| 18 | (a) Sale from EDG to GSPL (Div. VII) | - | | | | 8.70 |
| 19 | HTI Hotel Industry | 58 | | | | 57.11 |
| | Total | 801 | 6,58,595 | - | - | 1,769.92 |
| C. TEMPORARY SUPPLY | | | | | | |
| 20 | (a) L.T. Temporary | 4,557 | 16,316 | | | 17.89 |
| 21 | (b) H.T. Temporary | 1 | | | | 0.06 |
| 22 | Arrears under RRC (with no. of cases) | - | | | | - |
| | Total | 4,558 | 16,316 | - | - | 17.95 |
| | Total | 5,82,010 | 26,96,260 | - | - | 3,071 |

FORMAT-1

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
ENERGY DEMAND
YEAR 2014-15 (April 2014 to March 2015) - Approved

| Sr. No. | Category of Consumer | No. of Consumers at the end of the year (Nos.) | Connected Load at the end of the Year (KW/kVA) | Demand (in MW)* | | Energy Sale/ Demand (MUs) |
|--------------------------------------|--|--|--|-----------------|------------|---------------------------|
| | | | | Unrestricted | Restricted | |
| <u>A. LOW TENSION SUPPLY</u> | | | | | | |
| 1 | (a) LTD/Domestic | 4,78,893 | 16,34,435 | | | 728 |
| | (b) LTD/L.I.G. | 11,547 | 2,046 | | | 2 |
| | (c) LTD Domestic Mixed | 1,405 | 3,191 | | | 7 |
| 2 | LTC/Commercial | 89,081 | 2,77,265 | | | 268 |
| 3 | (a) LTP/Motive Power | 6,981 | 1,65,019 | | | 179 |
| | (b) LTP Mixed (Hotel Industries) | 148 | 4,569 | | | 5 |
| | (c) LTP Ice Manufacturing | 66 | 3,072 | | | 8 |
| 4 | LTAG/Agriculture | 11,145 | 61,326 | | | 25 |
| 5 | (a) LTPL (Public lighting) | 2,740 | 9,598 | | | 40 |
| 6 | LTPWW/Public Water works | 744 | 5,600 | | | 6 |
| | Total | 6,02,750 | 21,66,121 | - | - | 1,266 |
| <u>B. HIGH TENSION SUPPLY</u> | | | | | | |
| 7 | HT (Mixed) | 168 | 74,767 | | | 134 |
| 8 | HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive. | 37 | 1,11,840 | | | 565 |
| 9 | HTI Industrial | 396 | 2,40,374 | | | 607 |
| 10 | HTAG (Agriculture) | 41 | 8,258 | | | 6 |
| 11 | EHTI (Industrial) | 5 | 51,833 | | | 175 |
| 12 | HT P.W.W. & Sewage system | 35 | 90,796 | | | 137 |
| 13 | HT. M.E.'s Defence Estt. | 12 | 7,080 | | | 27 |
| 14 | HTI (Steel Rolling) | - | | | | - |
| 15 | HTI / IT High Tech | 12 | 6,658 | | | 21 |
| 16 | HTI/Ice Manufacturing | 2 | 364 | | | 2 |
| 17 | HT Hotel Industries | 110 | 41,559 | - | - | 137 |
| | Total | 818 | 6,33,529 | - | - | 1,810 |
| <u>C. TEMPORARY SUPPLY</u> | | | | | | |
| 18 | (a) L.T. Temporary | 4,929 | 7,502 | | | 38 |
| | (b) H.T. Temporary | - | | | | - |
| 19 | Hoarding/Sign Board | 104 | 523 | | | 0 |
| | Total | 6,08,601 | 28,07,675 | - | - | 3,114 |

FORMAT-1

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
ENERGY DEMAND
YEAR 2015-16 (April 2015 to March 2016) - Approved

| Sr. No. | Category of Consumer | No. of Consumers at the end of the year (Nos.) | Connected Load at the end of the Year (KW/kVA) | Demand (in MW)* | | Energy Sale/ Demand (MUs) |
|-------------------------------|--|--|--|-----------------|------------|---------------------------|
| | | | | Unrestricted | Restricted | |
| A. LOW TENSION SUPPLY | | | | | | |
| 1 | (a) LTD/Domestic | 4,88,471 | 16,42,607 | | | 764 |
| | (b) LTD/L.I.G. | 11,547 | 2,046 | | | 2 |
| | (c) LTD Domestic Mixed | 1,405 | 3,191 | | | 8 |
| 2 | LTC/Commercial | 90,863 | 2,78,652 | | | 281 |
| 3 | (a) LTP/Motive Power | 7,051 | 1,65,019 | | | 188 |
| | (b) LTP Mixed (Hotel Industries) | 155 | 4,569 | | | 5 |
| | (c) LTP Ice Manufacturing | 69 | 3,072 | | | 8 |
| 4 | LTAG/Agriculture | 11,145 | 61,326 | | | 25 |
| 5 | (a) LTPL (Public lighting) | 2,740 | 9,598 | | | 40 |
| 6 | LTPWW/Public Water works | 744 | 5,600 | | | 6 |
| | Total | 6,14,190 | 21,75,680 | | | 1,327 |
| B. HIGH TENSION SUPPLY | | | | | | |
| 7 | HT (Mixed) | 168 | 74,767 | | | 136 |
| 8 | HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive. | 37 | 1,11,840 | | | 576 |
| 9 | HTI Industrial | 400 | 2,40,374 | | | 637 |
| 10 | HTAG (Agriculture) | 41 | 8,258 | | | 6 |
| 11 | EHTI (Industrial) | 5 | 51,833 | | | 175 |
| 12 | HT P.W.W. & Sewage system | 36 | 30,796 | | | 144 |
| 13 | HT. M.E.'s Defence Estt. | 12 | 7,080 | | | 27 |
| 14 | HTI / IT High Tech | 13 | 6,658 | | | 21 |
| 15 | HTI/Ice Manufacturing | 2 | 364 | | | 2 |
| 16 | HTI Hotel Industry | 111 | 41,559 | | | 143 |
| | Total | 825 | 5,73,529 | - | - | 1,867 |
| C. TEMPORARY SUPPLY | | | | | | |
| | | 4,929 | 7,502 | - | - | 38 |
| 17 | (a) L.T. Temporary | 4,929 | 7,502 | | | 38 |
| | (b) H.T. Temporary | - | | | | - |
| 18 | Hoarding/Sign Board | 104 | 523 | | | - |
| | Total | 6,20,047 | 27,57,234 | - | - | 3,233 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
ENERGY DEMAND
YEAR 2016-17 (April 16 to March 17) - Actual

| Sr. No. | Category of Consumer | No. of Consumers at the end of the year (Nos.) | Connected Load at the end of the Year (KW/kVA) | Demand (in MW)* | | Energy Sale/ Demand (MUs) |
|-------------------------------|--|--|--|-----------------|------------|---------------------------|
| | | | | Unrestricted | Restricted | |
| A. LOW TENSION SUPPLY | | | | | | |
| 1 | (a) LTD/Domestic | 4,63,272 | 11,52,770 | | | 804 |
| | (b) LTD/L.I.G. | 1,125 | 106 | | | 2 |
| | (c) LTD Domestic Mixed | | | | | |
| 2 | LTC/Commercial | 89,328 | 2,96,465 | | | 301 |
| 3 | (a) LTP/Motive Power | 6,010 | 1,09,195 | | | 79 |
| | (b) LTP Mixed (Hotel Industries) | 109 | 2,075 | | | 5 |
| 4 | LTAG/Agriculture | 11,306 | 43,021 | | | 14 |
| 5 | (a) LTPL (Public lighting) | 3,042 | 11,840 | | | 37 |
| 6 | LTH/ Hoardings & Signboards | 62 | 599 | | | 0 |
| | Total | 5,74,253 | 16,16,071 | - | - | 1,241 |
| B. HIGH TENSION SUPPLY | | | | | | |
| 7 | HTD/Domestic | 3 | 300 | | | 0 |
| 8 | HT Commercial | 191 | 65,210 | | | 98 |
| 9 | HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive. | 32 | 1,09,050 | | | 454 |
| 10 | HTI Industrial | 657 | 4,60,234 | | | 1,181 |
| 11 | HTAG (Agriculture) | 41 | 8,660 | | | 8 |
| 12 | HT. M.E.'s Defence Estt. | 12 | 6,955 | | | 25 |
| | Total | 936 | 6,50,409 | - | - | 1,766 |
| C. TEMPORARY SUPPLY | | | | | | |
| 13 | (a) L.T. Temporary | 4,224 | 15,327 | | | 15 |
| | (b) H.T. Temporary | 1 | 350 | | | 0 |
| D Single Point Supply | | | | | | |
| 14 | Residential Complexes | - | - | | | - |
| 15 | Commercial Complexes | 1 | 4,035 | | | 5 |
| 16 | Industrial Complexes | - | - | | | - |
| | Total | 5,79,415 | 22,86,192 | - | - | 3,027 |

FORMAT-1

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
ENERGY DEMAND
YEAR 2017-18 H1 (April 2017 to September 2017) - Actual

| Sr. No. | Category of Consumer | No. of Consumers at the end of the year (Nos.) | Connected Load at the end of the Year (KW/kVA) | Demand (in MW)* | | Energy Sale/ Demand (MUs) |
|-------------------------------|--|--|--|-----------------|------------|---------------------------|
| | | | | Unrestricted | Restricted | |
| A. LOW TENSION SUPPLY | | | | | | |
| 1 | (a) LTD/Domestic | 4,89,358 | 12,60,724 | | | 589 |
| | (b) LTD/L.I.G. | 1,798 | 157 | | | 1 |
| 2 | LTC/Commercial | 94,727 | 3,08,058 | | | 238 |
| 3 | (a) LTP/Motive Power | 5,995 | 1,37,396 | | | 47 |
| 4 | (b) LTP Mixed (Hotel Industries) | 135 | 2,766 | | | 3 |
| 5 | LTAG/Agriculture | 10,865 | 43,633 | | | 9 |
| 6 | LTPL (Public lighting) | 2,619 | 9,855 | | | 15 |
| 7 | Tariff-LT Hoarding and SignBoard | 66 | 619 | | | 0 |
| | Total | | | | | |
| B. HIGH TENSION SUPPLY | | | | | | |
| 8 | Tariff HTD/Domestic | 3 | 300 | | | 0 |
| 9 | HT Commercial | 200 | 72,042 | | | 53 |
| 10 | HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive. | 29 | 1,11,400 | | | 206 |
| 11 | HTI Industrial | 679 | 4,78,437 | | | 683 |
| 12 | HTAG (Agriculture) | 42 | 8,860 | | | 4 |
| 13 | HT. M.E.'s Defence Estt. | 12 | 6,955 | | | 14 |
| | Total | | | | | |
| C. TEMPORARY SUPPLY | | | | | | |
| 14 | (a) L.T. Temporary | 4,374 | 17,264 | | | 11 |
| 15 | (b) H.T. Temporary | 1 | 350 | | | 0 |
| Single Point Supply | | | | | | |
| 16 | Residential Complexes | - | - | | | - |
| 17 | Commercial Complexes | 1 | 4,035 | | | 2 |
| 18 | Industrial Complexes | - | - | | | - |
| | Total | 6,10,904 | 24,62,851 | | | 1,873 |

FORMAT-1

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
ENERGY DEMAND
YEAR 2017-18 H2 (October 2017 to March 2018) - Estimated

| Sr. No. | Category of Consumer | No. of Consumers at the end of the year (Nos.) | Connected Load at the end of the Year (KW/kVA) | Demand (in MW)* | | Energy Sale/ Demand (MUs) |
|--------------------------------------|--|--|--|-----------------|------------|---------------------------|
| | | | | Unrestricted | Restricted | |
| <u>A. LOW TENSION SUPPLY</u> | | | | | | |
| 1 | (a) LTD/Domestic | 4,89,358 | 12,60,724 | | | 400 |
| | (b) LTD/L.I.G. | 1,798 | 157 | | | 0 |
| 2 | LTC/Commercial | 94,727 | 3,08,058 | | | 166 |
| 3 | (a) LTP/Motive Power | 5,995 | 1,37,396 | | | 35 |
| 4 | (b) LTP Mixed (Hotel Industries) | 135 | 2,766 | | | 2 |
| 5 | LTAG/Agriculture | 10,865 | 43,633 | | | 6 |
| 6 | (a) LTPL (Public lighting) | 2,619 | 9,855 | | | 16 |
| 7 | Tariff-LT Hoarding and SignBoard | 66 | 619 | | | 0 |
| <u>B. HIGH TENSION SUPPLY</u> | | | | | | |
| 8 | Tariff HTD/Domestic | 3 | 300 | | | 0 |
| 9 | HT Commercial | 200 | 72,042 | | | 58 |
| 10 | HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive. | 29 | 1,11,400 | | | 164 |
| 11 | HTI Industrial | 679 | 4,78,437 | | | 834 |
| 12 | HTAG (Agriculture) | 42 | 8,860 | | | 6 |
| 13 | HT. M.E.'s Defence Estt. | 12 | 6,955 | | | 14 |
| <u>C. TEMPORARY SUPPLY</u> | | | | | | |
| 14 | (a) L.T. Temporary | 4,374 | 17,264 | | | 10 |
| 15 | (b) H.T. Temporary | 1 | 350 | | | 1 |
| Single Point Supply | | | | | | |
| 16 | Residential Complexes | - | - | | | - |
| 17 | Commercial Complexes | 1 | 4,035 | | | 3 |
| 18 | Industrial Complexes | - | - | | | - |
| | | 6,10,904 | 24,62,851 | | | 1,713 |

FORMAT-1

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
ENERGY DEMAND
YEAR 2017-18 (April 2017 to March 2018) - Estimated

| Sr. No. | Category of Consumer | No. of Consumers at the end of the year (Nos.) | Connected Load at the end of the Year (KW/kVA) | Demand (in MW)* | | Energy Sale/ Demand (MUs) |
|-------------------------------|--|--|--|-----------------|------------|---------------------------|
| | | | | Unrestricted | Restricted | |
| A. LOW TENSION SUPPLY | | | | | | |
| 1 | (a) LTD/Domestic | 4,89,358 | 12,60,724 | | | 988 |
| 2 | (b) LTD/L.I.G. | 1,798 | 157 | | | 1 |
| 3 | LTC/Commercial | 94,727 | 3,08,058 | | | 404 |
| 4 | (a) LTP/Motive Power | 5,995 | 1,37,396 | | | 82 |
| 5 | (b) LTP Mixed (Hotel Industries) | 135 | 2,766 | | | 5 |
| 6 | LTAG/Agriculture | 10,865 | 43,633 | | | 15 |
| 7 | (a) LTPL (Public lighting) | 2,619 | 9,855 | | | 30 |
| 8 | Tariff-LT Hoarding and SignBoard | 66 | 619 | | | 0 |
| B. HIGH TENSION SUPPLY | | | | | | |
| 9 | Tariff HTD/Domestic | 3 | 300 | | | 0 |
| 10 | HT Commercial | 200 | 72,042 | | | 110 |
| 11 | HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive. | 29 | 1,11,400 | | | 369 |
| 12 | HTI Industrial | 679 | 4,78,437 | | | 1,517 |
| 13 | HTAG (Agriculture) | 42 | 8,860 | | | 10 |
| 14 | HT. M.E.'s Defence Estt. | 12 | 6,955 | | | 28 |
| C. TEMPORARY SUPPLY | | | | | | |
| 15 | (a) L.T. Temporary | 4,374 | 17,264 | | | 20 |
| 16 | (b) H.T. Temporary | 1 | 350 | | | 1 |
| Single Point Supply | | | | | | |
| 17 | Residential Complexes | - | - | | | - |
| 18 | Commercial Complexes | 1 | 4,035 | | | 6 |
| 19 | Industrial Complexes | - | - | | | - |
| | | 6,10,904 | 24,62,851 | | | 3,586 |

FORMAT-1

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
ENERGY DEMAND
YEAR 2018-19 (April 2018 to March 2019) - Projections approved in Order

| Sr. No. | Category of Consumer | No. of Consumers at the end of the year (Nos.) | Connected Load at the end of the Year (KW/kVA) | Demand (in MW)* | | Energy Sale/ Demand (MUs) |
|-------------------------------|--|--|--|-----------------|------------|---------------------------|
| | | | | Unrestricted | Restricted | |
| 1 | 2 | 3 | 4 | 5 | 6 | 5 |
| A. LOW TENSION SUPPLY | | | | | | |
| 1 | (a) LTD/Domestic | 4,96,725 | 14,29,336 | | | 985 |
| | (b) LTD/L.I.G. | 3,049 | 338 | | | 1 |
| 2 | LTC/Commercial | 97,268 | 2,95,985 | | | 340 |
| 3 | (a) LTI/Industries | 6,466 | 1,15,580 | | | 137 |
| | (b) LTP Mixed (Hotel Industries) | 233 | 4,285 | | | 5 |
| 4 | LTAG/Agriculture | 10,821 | 34,481 | | | 24 |
| 5 | (a) LTPL (Public lighting) | 2,740 | 9,598 | | | 37 |
| 6 | Tariff-LT Hoarding and SignBoard | 104 | 35 | | | 0 |
| B. HIGH TENSION SUPPLY | | | | | | |
| 7 | HT/Domestic | 2 | 193 | | | 0 |
| 8 | HTI/Industries | 651 | 4,17,220 | | | 1,398 |
| 9 | HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive. | 37 | 1,14,756 | | | 583 |
| 10 | HTC/Commercial | 117 | 42,567 | | | 79 |
| 11 | HTAG (Agriculture) | 41 | 8,378 | | | 6 |
| 12 | HT. M.E.'s Defence Estt. | 12 | 7,080 | | | 27 |
| C. TEMPORARY SUPPLY | | | | | | |
| 13 | (a) L.T. Temporary | 2,582 | 1,098 | | | 22 |
| 14 | (b) H.T. Temporary | - | - | | | - |
| Total | | 6,20,848 | 24,80,929 | - | - | 3,645 |

Format-2
Information regarding Distribution Loss of Licensee
TRUE-UP FOR FY 11-12, 12-13, APR for FY 16-17 AND TARIFF DETERMINATION FOR FY 2017-18
Name of licensee Electricity Department - Goa

| S.No | Particulars | Calculation | Unit | True Up | Approved | Approved | Actual | Estimated | Ensuing Year |
|------|--|------------------------|-----------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|
| | | | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | Generation (own as well as any other connected generation net after deducting auxiliary consumption) within area of supply of DISCOM * | A | MU | | | | | | |
| 2 | Input energy (metered Import) received at interface points of DISCOM network. | B | MU | 3,456 | 3,519 | 3,840 | 3,883 | 4,025 | 4,330 |
| 3 | Input energy (metered Export) by the DISCOM at interface points of DISCOM network. | C | MU | | | | | | |
| 5 | Total energy available for sale within the licensed area to the consumers of the DISCOM | D=A+B+C | MU | 3,456 | 3,519 | 3,840 | 3,883 | 4,025 | 4,330 |
| 6 | Energy billed to metered consumers within the licensed area of the DISCOM | E | MU | 3,071 | 3,114 | 3,233 | 3,027 | 3,586 | 3,566 |
| 7 | Energy billed to un-metered consumers within the licensed area of the DISCOM ** | F | MU | | | | | | |
| 8 | Total energy billed | G=E+F | MU | 3,071 | 3,114 | 3,233.00 | 3,027.50 | 3,586.18 | 3,566.33 |
| 10 | Amount billed to consumer within the licensed area of DISCOM (incl FPPCA) | H | Rs.Crs | 1,060 | 1,077 | 1,322.62 | 1,443.08 | 1,704.98 | 1,593.75 |
| 11 | Amount realized by the DISCOM out of the amount Billed at H | I | Rs.Crs | 1,029 | 1,045 | 1,284 | 1,401 | 1,655 | 1,547 |
| 12 | Collection efficiency (%) (= Revenue realized/ Amount billed) | J=(I/H)x100 | % | 97% | 97% | 97.06% | 97.06% | 97.06% | 97.06% |
| 13 | Energy realized by the DISCOM | K=L x G | MU | 2,980 | 3,022 | 3,137.89 | 2,938.44 | 3,480.68 | 3,461.42 |
| 14 | Distribution loss (%) | L={(D-G)/D}x100 | % | 11.16% | 11.52% | 15.81% | 22.03% | 10.90% | 17.64% |
| 15 | AT&C Loss (%) | M={(D-K)/D}x100 | % | 13.78% | 14.12% | 18.28% | 24.33% | 13.52% | 20.07% |

FORMAT-3
ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19

ENERGY BALANCE
(All figures in MU)

| Sr. No. | Item | FY 2013-14 | | | FY 2014-15 | FY 2015-16 | FY 2016-17 | | |
|----------|---|--------------|--------------|---------------|---------------|---------------|--------------|--------------|---------------|
| | | WR | SR | Total | Total | Total | WR | SR | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | Energy Input at Goa Periphery | 2,640 | 627 | 3,267 | 3,382 | 3,654 | 3,076 | 630 | 3,706 |
| 2 | Total Power Scheduled/ Purchased at Goa Periphery | | | | | | | | |
| | Total Schedule Billed Drawal - CGS | 2,670 | 726 | 3,395 | 3,337 | 3,548 | 2,711 | 765 | 3,477 |
| | Add: Overdrawal | 101 | 6 | 107 | 100 | | 179 | 32.72 | 211 |
| | Add: Power purchase from NVVN / Banking | | | - | | 27 | 3.65 | | 4 |
| | Add: Power purchase from Traders/ Open Market | - | | - | 155 | 77 | 86 | | 86 |
| | Less: Underdrawal | 45 | 30 | 75 | 17 | | 19 | 7 | 26 |
| | Add: Renewable Power | | | - | 5 | | 138 | | 138 |
| | Less: Power diverted to Exchange | | | - | | | 125 | (125) | - |
| | | | | - | | | | | - |
| | Total | 2,726 | 701 | 3,428 | 3,580 | 3,653 | 3,224 | 667 | 3,890 |
| 3 | PGCIL Losses - MUs | 86.49 | 74.01 | 160.50 | 198 | 105.56 | 147 | 37 | 185 |
| | PGCIL Losses - % | | | 4.68% | 5.53% | 2.89% | 4.57% | 5.57% | 4.74% |
| 4 | Total Power Purchased within Goa State | | | | | | | | - |
| | Add: Co-generation | 74 | | 74 | 158 | 186 | 177 | | 177 |
| | Add: Independent Power Producers (IPP) | 115 | | 115 | (21) | | | | - |
| | Total | 189 | - | 189 | 137 | 186 | 177 | - | 177 |
| 5 | Total Power Purchase availability after PGCIL Losses | 2,829 | 627 | 3,456 | 3,519 | 3,840 | 3,253 | 630 | 3,883 |
| | Less: Retail Sales to Consumers | | | 3,071 | 3,114 | 3,233 | | | 3,027 |
| | Distribution Losses - MUs | 2,829 | 627 | 386 | 405 | 420 | 3,253 | 630 | 856 |
| 6 | Distribution Losses - % | | | 11.16% | 11.52% | 11.50% | | | 22.03% |

FORMAT-3
ELECTRICITY DEPARTMENT - GOA

TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19

ENERGY BALANCE
(All figures in MU)

| Sr. No. | Item | FY 2017-18 (H1) | | | FY 2017-18 (H2) | | | FY 2017-18 | | | FY 2018-19 |
|----------|---|-----------------|--------------|--------------|-----------------|--------------|---------------|--------------|--------------|---------------|---------------|
| | | WR | SR | Total | WR | SR | Total | WR | SR | Total | Total |
| 1 | 2 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 1 | Energy Input at Goa Periphery | 1,622 | 324 | 1,945 | | | 2,079 | | | 4,025 | 4,163 |
| 2 | Total Power Scheduled/ Purchased at Goa Periphery | | | | | | | - | - | | |
| | Total Schedule Billed Drawal - CGS | 1,395 | 376 | 1,770 | 1,427 | 361 | 1,788 | 2,822 | 736 | 3,558 | 3,908 |
| | Add: Overdrawal | 54 | 18 | 72 | | | - | 54 | 18 | 72 | |
| | Add: Power purchase from NVVN / Banking | (20) | | (20) | | - | - | (20) | - | (20) | |
| | Add: Power purchase from Traders/ Open Market | 188 | | 188 | 100 | | 100 | 288 | - | 288 | |
| | Less: Underdrawal | 14 | 12 | 26 | | | - | 14 | 12 | 26 | |
| | Add: Renewable Power | 68 | | 68 | 140 | | 140 | 208 | - | 208 | 85 |
| | Less: Power diverted to Exchange | 25 | (25) | - | | | - | 25 | (25) | - | |
| | | | | | | | - | - | - | - | |
| | Total | 1,696 | 357 | 2,052 | 1,667 | 361 | 2,027 | 3,313 | 767 | 4,080 | 4,160 |
| 3 | PGCIL Losses - MUs | 74 | 33 | 107 | 73 | 27 | 100 | 147 | 60 | 207 | 164 |
| | PGCIL Losses - % | 4.37% | 9.23% | 5.21% | 4.37% | 7.50% | 4.93% | 4.44% | 7.82% | 5.07% | 3.95% |
| 4 | Total Power Purchased within Goa State | | | - | | | | | | | |
| | Add: Co-generation | 76 | | 76 | 76 | | 76 | 152 | - | 152 | 167 |
| | Add: Independent Power Producers (IPP) | | | - | | | - | - | - | - | |
| | Total | 76 | - | 76 | 76 | - | 76 | 152 | - | 152 | 167 |
| 5 | Total Power Purchase availability after PGCIL Losses | 1,697 | 324 | 2,021 | 1,670 | 334 | 2,003 | 3,318 | 707 | 4,025 | 4,330 |
| | Less: Retail Sales to Consumers | | | 1,873 | | | 1,713 | - | - | 3,586 | 3,566 |
| | Distribution Losses - MUs | | | 148 | | | 290 | - | - | 439 | 430 |
| 6 | Distribution Losses - % | | | 7.33% | | | 14.50% | | | 10.90% | 12.04% |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
POWER PURCHASE COST YEAR 2013-14 (Actuals - April 2013 to March 2014)

| Sr. No. | Source | Capacity (MW) | Firm allocation to Licensee | | Gen. Avail. (MU) | Avail. / PLF (in %) | AFC (Rs. Crore) | Auxiliary Consumption % | Purchase (MU) | External losses (%) | Energy recd. by Licensee (MU) | VC (Rs./Unit) | FC (Rs. Crore) | VC (Rs. Crore) | Others (Rs. Crore) | Supplementary (Rs. Crore) | Total (Rs. Crore) |
|------------|---|---------------|-----------------------------|---------------|------------------|---------------------|-----------------|-------------------------|-----------------|---------------------|-------------------------------|---------------|----------------|----------------|--------------------|---------------------------|-------------------|
| | | | % | MW | | | | | | | | | | | | | |
| 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
| A | Central Sector Power Stations | | | | | | | | | | | | | | | | |
| I | NTPC | 14,254 | | 453 | - | - | - | - | 3,181 | | 3,267 | | 241.72 | 428.33 | 12.28 | 27.76 | 710.10 |
| | <i>KSTPS</i> | 2100 | 10.03% | 211 | | | | | 1,645.01 | | | 94.16 | 91.43 | 154.89 | 8.11 | 12.93 | 267.37 |
| | <i>KSTPS - III</i> | 500 | 0.95% | 5 | | | | | 41.09 | | | 94.38 | 6.39 | 3.88 | 0.21 | 0.55 | 11.02 |
| | <i>VSTPS - I</i> | 1260 | 2.82% | 35 | | | | | 231.57 | | | 137.10 | 18.03 | 31.75 | 1.40 | 4.52 | 55.69 |
| | <i>VSTPS - II</i> | 1000 | 1.24% | 12 | | | | | 103.89 | | | 129.44 | 6.82 | 13.45 | 0.64 | 1.81 | 22.72 |
| | <i>VSTPS - III</i> | 1000 | 1.04% | 10 | | | | | 92.82 | | | 129.63 | 9.80 | 12.03 | 0.57 | 1.29 | 23.68 |
| | <i>VSTPS-IV</i> | 1000 | 1.17% | 12 | | | | | 49.77 | | | 130.20 | 7.30 | 6.48 | 0.28 | 0.12 | 14.17 |
| | <i>KGPP</i> | 656 | 1.89% | 12 | | | | | 30.71 | | | 270.20 | 7.96 | 8.30 | - | (2.14) | 14.12 |
| | <i>GGPP</i> | 657 | 1.92% | 13 | | | | | 30.33 | | | 281.03 | 10.39 | 8.52 | - | (2.02) | 16.89 |
| | <i>SIPAT - I</i> | 1980 | 1.06% | 21 | | | | | 142.91 | | | 153.98 | 22.99 | 22.01 | 0.69 | 4.54 | 50.22 |
| | <i>FSTPS</i> | 0 | | - | | | | | - | | | - | - | - | - | - | - |
| | <i>RSTPS</i> | 2100 | 4.76% | 100 | | | | | 725.58 | | | 209.90 | 43.37 | 152.30 | - | 4.40 | 200.07 |
| | <i>SIPAT - II</i> | 1000 | 1.04% | 10 | | | | | 80.19 | | | 158.41 | 10.46 | 12.70 | 0.40 | 1.08 | 24.64 |
| | <i>Mouda</i> | 1000 | 1.17% | 12 | | | | | 7.16 | | | 282.62 | 6.79 | 2.02 | - | (1.13) | 7.68 |
| | <i>Add: Additional O&M charges and net of rebate</i> | 0 | 0.00% | - | | | | | - | | 3,267 | | | | - | 1.82 | 1.82 |
| | | | | | | | | | | | | | | | | | |
| II | RGPPPL | | | | | | | | 13.94 | | | 624.77 | | 8.71 | | (0.13) | 8.58 |
| III | NPCIL | 1,520 | | 26.60 | | | | | 200.21 | | | 259.61 | | 51.98 | | | 50.80 |
| | <i>KAPS</i> | 440 | 3% | 15.14 | | | | | 117.98 | | | 240.19 | | 28.34 | | (0.65) | 27.69 |
| | <i>TAPS</i> | 1080 | 1% | 11.46 | | | | | 82.23 | | | 287.47 | | 23.64 | | (0.53) | 23.11 |
| IV | Traders | | | | | | | | - | | | | | - | | | - |
| | <i>Trading margin & OA charges for short-term purchases</i> | | | | | | | | | | | | | - | | | - |
| V | NET OVER-DRAWAL | | | | | | | | 32.34 | | | 747.76 | | 24.19 | | | 24.19 |
| B | Within State Generations | | | | | | | | | | | | | | | | |
| I | CO- GENERATION | - | | - | - | - | - | - | 74.03 | | 74.03 | | - | 17.54 | - | - | 17.54 |
| | <i>Goa Energy Private Limited</i> | | | | | | | | 67.65 | | 67.65 | 237.73 | | 16.08 | | | 16.08 |
| | <i>Goa Sponge & Power Limited</i> | | | | | | | | 6.37 | | 6.37 | 229.02 | | 1.46 | | - | 1.46 |
| C | IPP: | | | | | | | | | | | | | | | | |
| | <i>Reliance Infra</i> | | | | | | | | 115.39 | | 115.39 | 1,269.22 | | 146.46 | | | 146.46 |
| D | OTHER CHARGES | - | | - | - | - | - | - | - | | | | | - | 120.79 | - | 120.79 |
| | <i>PGCIL Transmission Charges, Wheeling & Other Charges</i> | | | | | | | | | | | | | | 120.79 | | 120.79 |
| | Total | 15,774 | | 480.01 | | | | | 3,616.94 | | 3,456.44 | | 241.72 | 677.20 | 133.07 | 27.63 | 1,078.46 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
POWER PURCHASE COST YEAR 2014-15 (Approved - April 2014 to March 2015)

| Sr. No | Source | Capacity (MW) | Firm allocation to Licensee | | Gen. Avail. (MU) | Avail. / PLF (in %) | AFC (Rs. Crore) | Auxiliary Consumption % | Purchase (MU) | External losses (%) | Energy recd. by Licensee | VC (Ps/ Unit) | FC (Rs. Crore) | VC (Rs.Crore) | Others (Rs.Crore) | Supplementary (Rs.) | Total (Rs.Crore) |
|------------|--|---------------|-----------------------------|----|------------------|---------------------|-----------------|-------------------------|---------------|---------------------|--------------------------|---------------|----------------|----------------|-------------------|---------------------|-------------------|
| | | | % | MW | | | | | | | | | | | | | |
| 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
| A | Central Sector Power Stations | | | | | | | | | | | | | | | | |
| I | NTPC | 14,274 | - | - | - | - | - | 3,133 | | | - | 237.56 | 490.17 | 7.20 | 8.08 | 689.56 | |
| | KSTPS | 2,100 | | | | | | 1,453.87 | | | | 98.27 | 81.40 | 142.87 | 4.64 | (3.81) | 225.10 |
| | KORBA - III | 500 | | | | | | 40.17 | | | | 96.84 | 6.00 | 3.89 | 0.12 | 0.04 | 10.05 |
| | VSTPS - I | 1,260 | | | | | | 240.30 | | | | 164.67 | 15.54 | 39.57 | 0.74 | 6.11 | 61.96 |
| | VSTPS - II | 1,000 | | | | | | 90.74 | | | | 156.16 | 5.64 | 14.17 | 0.26 | 3.07 | 23.14 |
| | VSTPS -III | 1,000 | | | | | | 78.08 | | | | 154.33 | 8.38 | 12.05 | 0.26 | 2.18 | 22.87 |
| | VSTPS-IV | 1,000 | | | | | | 89.38 | | | | 155.63 | 12.20 | 13.91 | 0.25 | (0.46) | 25.90 |
| | KGPP | 656 | | | | | | 46.24 | | | | 280.06 | 7.02 | 12.95 | | 0.03 | 20.00 |
| | GGPP | 657 | | | | | | 49.57 | | | | 266.49 | 9.14 | 13.21 | | 0.01 | 22.36 |
| | SIPAT- I | 1,980 | | | | | | 169.39 | | | | 142.04 | 23.18 | 24.06 | 0.43 | 0.08 | 47.75 |
| | RSTPS | 2,100 | | | | | | 690.49 | | | | 239.67 | 41.98 | 165.49 | 0.27 | 0.37 | 208.11 |
| | SIPAT- II | 1,000 | | | | | | 77.82 | | | | 141.74 | 10.16 | 11.03 | 0.23 | 1.52 | 22.94 |
| | Mouda | 1,020 | | | | | | 106.81 | | | | 346.13 | 16.92 | 36.97 | | (0.75) | (0.31) |
| | Less: Additional rebate | | | | | | | | | | | | | | | (0.31) | (0.31) |
| II | RGPPL | | | | | | | | | | | | | 7.55 | | | 7.55 |
| III | NPCIL | | | | | | | 204.56 | | | | | | 48.14 | | | 48.14 |
| | KAPS | | | | | | | 105.12 | | | | | | 25.40 | | | 25.40 |
| | TAPS | | | | | | | 99.44 | | | | | | 22.74 | | | 22.74 |
| IV | Traders | | | | | | | 154.70 | | | | | | 54.95 | | | 54.95 |
| | NVVN STOA | | | | | | | 56 | | | | | | 19.88 | | | 19.88 |
| | Power Trading Company STOA | | | | | | | 44 | | | | | | 16.45 | | | 16.45 |
| | Tata Power Trading Company | | | | | | | 8 | | | | | | 2.82 | | | 2.82 |
| | Adani Enterprises | | | | | | | 46 | | | | | | 15.80 | | | 15.80 |
| V | Net Over Drawal | | | | | | | 100 | | | | | | 51.21 | | | 51.21 |
| B | Within State Generations | | | | | | | | | | | | | | | | |
| I | CO- GENERATION | - | - | - | - | - | - | 158.44 | | | - | - | - | 38.09 | - | - | 38.09 |
| | Goa Energy Private Limited | | | | | | | 124.26 | | | | | | 29.89 | | | 29.89 |
| | Goa Sponge & Power Limited | | | | | | | 6.68 | | | | | | 1.60 | | | 1.60 |
| | Sesa Goa Limited | | | | | | | 27.50 | | | | | | 6.60 | | | 6.60 |
| C | IPP: | | | | | | | | | | | | | | | | |
| | Reliance Infra | | | | | | | (21.40) | | | | 128.97 | | (2.76) | | | (2.76) |
| D | RPO Obligation | | | | | | | 4.75 | | | | | | 16.73 | - | - | 16.73 |
| | REC Certificates (Non-Solar) | | | | | | | | | | | | | | | | |
| | NVVN Solar | | | | | | | 4.75 | | | | | | 16.73 | | | 16.73 |
| D | OTHER CHARGES | - | - | - | - | - | - | - | | | | | | - | 136.70 | - | 136.70 |
| | PGCIL Transmission Charges, Wheeling & Other Charges | | | | | | | | | | | | | | 136.70 | | 136.70 |
| | Total | 14,274 | | | | | | 3,733.94 | | | | 188.56 | 237.56 | 704.08 | 143.90 | 8.08 | 1,040.17 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 11-12, 12-13 AND TARIFF DETERMINATION FOR FY 2017-18
POWER PURCHASE COST YEAR 2015-16 -(Approved April 2015 to March 2016)

| Sr. No. | Source | Capacity (MW) | Firm allocation to Licensee | | Gen. Avail. (MU) | Avail. / PLF (in %) | AFC (Rs. Crore) | Auxiliary Consumption % | Purchase (MU) | External losses (%) | Energy recd. by Licensee | VC (Ps/ Unit) | FC (Rs. Crore) | VC (Rs. Crore) | Others (Rs. Crore) | Supplementary (Rs.) | Total (Rs. Crore) |
|------------|---|---------------|-----------------------------|--------------|------------------|---------------------|-----------------|-------------------------|---------------|---------------------|--------------------------|---------------|----------------|----------------|--------------------|---------------------|-------------------|
| | | | % | MW | | | | | | | | | | | | | |
| 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
| A | Central Sector Power Stations | | | | | | | | | | | | | | | | |
| I | NTPC | 15,574 | | | | | | 3,228.43 | 5.36% | 3,055.53 | | 246.96 | 479.43 | - | - | 726.39 | |
| | KSTPS | 2,100 | 10.19% | 213.99 | 90.13% | | 8.50% | 1,545.92 | 3.71% | 1,488.57 | 92.17 | 83.36 | 142.49 | | | 225.85 | |
| | KSTPS - III | 500 | 1.29% | 6.45 | 85.00% | | 9.00% | 43.70 | 3.71% | 42.08 | 90.91 | 5.97 | 3.97 | | | 9.94 | |
| | VSTPS - I | 1,260 | 3.07% | 38.68 | 90.12% | | 5.25% | 289.34 | 3.71% | 278.61 | 177.58 | 18.06 | 51.38 | | | 69.44 | |
| | VSTPS - II | 1,000 | 1.48% | 14.80 | 90.12% | | 5.25% | 110.70 | 3.71% | 106.60 | 168.26 | 6.72 | 18.63 | | | 25.35 | |
| | VSTPS - III | 1,000 | 1.28% | 12.80 | 90.12% | | 5.25% | 95.74 | 3.71% | 92.19 | 167.93 | 9.76 | 16.08 | | | 25.84 | |
| | VSTPS - IV | 1,000 | 1.51% | 15.10 | 78.03% | | 9.00% | 93.93 | 3.71% | 90.44 | 167.91 | 6.92 | 15.77 | | | 22.69 | |
| | Kawas GPS | 656 | 1.89% | 12.40 | 56.23% | | 3.00% | 59.26 | 3.71% | 57.06 | 297.35 | 7.77 | 17.62 | | | 25.39 | |
| | Gandhar GPS | 657 | 1.93% | 12.69 | 59.21% | | 3.00% | 33.83 | 3.71% | 32.57 | 284.59 | 10.02 | 9.63 | | | 19.65 | |
| | Sipat Stage I | 1,980 | 1.40% | 27.72 | 86.44% | | 5.25% | 198.88 | 3.71% | 191.50 | 136.82 | 18.72 | 27.21 | | | 45.93 | |
| | Ramagundam STPS | 2,100 | 4.76% | 99.96 | 91.22% | | 8.50% | 640.87 | 12.00% | 563.97 | 240.08 | 45.85 | 153.86 | | | 199.71 | |
| | Sipat Stage II | 1,000 | 1.22% | 12.20 | 86.44% | | 5.25% | 87.53 | 3.71% | 84.28 | 133.79 | 10.61 | 11.71 | | | 22.32 | |
| | Mauda STPS | 1,000 | 1.17% | 11.70 | 85.00% | | 9.00% | 4.28 | 3.71% | 4.12 | 388.90 | 8.53 | 1.66 | | | 10.19 | |
| | Barh - II | 1,320 | 1.00% | 13.20 | 85.00% | | 9.00% | 24.44 | 3.71% | 23.53 | 385.36 | 14.67 | 9.42 | | | 24.09 | |
| | | | | | | | | | | | | | | | | | |
| II | RGPPL | | | | | | | | | | | | | | | | - |
| | | | | | | | | | | | | | | | | | |
| III | NPCIL | 2,920 | 1.58% | 46.06 | | | | 320.01 | 3.71% | 308.14 | 763.30 | - | 81.37 | - | - | 81.37 | |
| | KAPS 1 & 2 | 440 | 3.64% | 16.02 | 86.52% | | 10.00% | 109.25 | 3.71% | 105.20 | 237.71 | - | 25.97 | | | 25.97 | |
| | KAPS 3 & 4 | 1,400 | 1.12% | 15.68 | 85.00% | | 10.00% | 105.08 | 3.71% | 101.18 | 237.71 | - | 24.98 | | | 24.98 | |
| | TAPS | 1,080 | 1.33% | 14.36 | 93.32% | | 10.00% | 105.68 | 3.71% | 101.76 | 287.88 | - | 30.42 | | | 30.42 | |
| | | | | | | | | | | | | | | | | | |
| IV | Solar RPO | | | | | | | 27.00 | 0.00% | 27.00 | 1,349.00 | - | 17.34 | - | - | 17.34 | |
| | NVVN Solar | | | | | | | 10.00 | 0.00% | 10.00 | 799.00 | - | 7.99 | | | 7.99 | |
| | Solar Energy Corporation of India | | | | | | | 17.00 | 0.00% | 17.00 | 550.00 | - | 9.35 | | | 9.35 | |
| | | | | | | | | | | | | | | | | | |
| V | Short term Tied up | | | | | | | 62.26 | 0.00% | 62.26 | 369.77 | - | 23.02 | | | 23.02 | |
| | | | | | | | | | | | | | | | | | |
| VI | Traders/Open Market Short Term | | | | | | | 14.89 | 0.00% | 14.89 | 370.05 | | 5.51 | | | 5.51 | |
| | | | | | | | | | | | | | | | | | |
| | A -Total-Central Stations | | | | | | | | | | | | | | | | |
| B | Within State Generations | | | | | | | | | | | | | | | | |
| I | CO- GENERATION | - | - | - | - | - | - | 185.95 | - | 185.95 | 2.40 | - | 44.63 | - | - | 44.63 | |
| | Goa Energy Private Limited | | | | | | | 124.27 | 0.00% | 124.27 | 240 | | 29.82 | | | 29.82 | |
| | Goa Sponge & Power Limited | | | | | | | 6.68 | 0.00% | 6.68 | 240 | | 1.60 | | | 1.60 | |
| | Sesa Goa Limited | | | | | | | 55.00 | 0.00% | 55.00 | 240 | | 13.20 | | | 13.20 | |
| | | | | | | | | | | | | | | | | | |
| C | IPP: | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| D | RPO Obligation | | | | | | | - | | - | - | - | 13.37 | - | - | 13.37 | |
| | REC Certificates -Solar | | | | | | | | | | | | 0.28 | | | 0.28 | |
| | REC Certificates -Non Solar | | | | | | | | | | | | 13.09 | | | 13.09 | |
| | | | | | | | | | | | | | | | | | |
| E | Other Charges | | | | | | | - | | - | - | - | 136.70 | - | - | 136.70 | |
| | PGCIL Transmission Charges, wheeling, Open Access & Trading, margin and other charges | | | | | | | | | | | | 136.70 | | | 136.70 | |
| | | | | | | | | | | | | | | | | | |
| F | Grand Total | | | | | | | 3,838.54 | | 3,653.76 | 2,854.52 | 246.96 | 801.38 | - | - | 1,048.34 | |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 11-12, 12-13 AND TARIFF DETERMINATION FOR FY 2017-18
POWER PURCHASE COST YEAR 2016-17 H1 (Provisional Actual April 2016 to September 2016)

| Sr. No. | Source | Capacity (MW) | Firm allocation to Licensee | | Net Gen. Avail. | Avail. / PLF (in %) | AFC (Rs. Crore) | Auxiliary Consumption % | Purchase (MU) | External losses (%) | Energy recd. by Licensee | VC (Ps/ Unit) | FC (Rs. Crore) | VC (Rs. Crore) | Others (Rs. Crore) | Supplementary (Rs.) | Total (Rs. Crore) |
|------------|--|---------------|-----------------------------|--------------|-----------------|---------------------|-----------------|-------------------------|-----------------|---------------------|--------------------------|---------------|----------------|----------------|--------------------|---------------------|-------------------|
| | | | % | MW | | | | | | | | | | | | | |
| 1 | 2 | 4 | 5 | | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| A | Central Sector Power Stations | | | | | | | | | | | | | | | | |
| I | NTPC | 14,254 | | 442 | | | | | 1,670 | | 1,585 | 166.00 | 116.39 | 277.20 | 13.10 | (0.47) | 406.22 |
| | KSTPS | 2,100 | 10% | 211.93 | | | | | 801.72 | 4.37% | 766.69 | 147.10 | 37.77 | 117.93 | 9.22 | (1.82) | 163.10 |
| | VSTPS - I | 1,260 | 3% | 36.72 | | | | | 129.79 | 4.37% | 124.12 | 175.32 | 7.73 | 22.75 | 0.91 | 0.81 | 32.20 |
| | VSTPS - II | 1,000 | 1% | 13.30 | | | | | 38.87 | 4.37% | 37.17 | 169.40 | 2.66 | 6.58 | 0.27 | 0.35 | 9.86 |
| | VSTPS - III | 1,000 | 1% | 11.30 | | | | | 44.67 | 4.37% | 42.72 | 166.63 | 4.22 | 7.44 | 0.32 | 2.29 | 14.28 |
| | VSTPS - IV | 1,000 | 1% | 13.02 | | | | | 52.23 | 4.37% | 49.95 | 168.30 | 6.80 | 8.79 | 0.36 | (0.05) | 15.89 |
| | VSTPS - V | 500 | 1% | 6.09 | | | | | 24.68 | 4.37% | 23.60 | 165.22 | 3.07 | 4.08 | 0.19 | 0.22 | 7.56 |
| | KGPP | 656 | 2% | 12.38 | | | | | 12.92 | 4.37% | 12.35 | 226.47 | 3.28 | 2.93 | - | (0.11) | 6.09 |
| | GGPP | 657 | 2% | 12.64 | | | | | 28.29 | 4.37% | 27.06 | 220.00 | 4.19 | 6.22 | - | (0.22) | 10.20 |
| | SIPAT - I | 1,980 | 0% | | | | | | 90.35 | 4.37% | 86.40 | 128.41 | 11.07 | 11.60 | 0.99 | 1.01 | 24.68 |
| | KSTPS-III | - | 0% | | | | | | 22.37 | 4.37% | 21.39 | 145.83 | 2.83 | 3.26 | 0.35 | 0.49 | 6.94 |
| | RSTPS | 2,100 | 5% | 100.00 | | | | | 367.59 | 7.50% | 340.02 | 209.97 | 19.48 | 77.18 | - | (4.66) | 92.01 |
| | SIPAT - II | 1,000 | 1% | 11.24 | | | | | 43.04 | 4.37% | 41.16 | 131.70 | 4.83 | 5.67 | 0.49 | 1.77 | 12.76 |
| | Mouda | 1,000 | 1% | 13.02 | | | | | 13.31 | 4.37% | 12.73 | 260.54 | 8.44 | 3.47 | - | (0.54) | 11.37 |
| | Add/ Less: Other Adjustments | - | 0% | | | | | | | | | - | | (0.72) | | | (0.72) |
| | | | | | | | | | | | | - | | | | | - |
| II | NPCIL | 1,520 | | 28.13 | | | | | 53 | | 51 | | - | 16.52 | - | - | 16.52 |
| | KAPS | 440 | 3.53% | 15.52 | | | | | - | 4.37% | - | - | - | 0.28 | - | - | 0.28 |
| | TAPS | 1,080 | 1.17% | 12.60 | | | | | 53 | 4.37% | 50.56 | 307.15 | | 16.24 | - | - | 16.24 |
| III | Traders | | | | | | | | 110.07 | | 105.26 | | | 33.47 | - | - | 33.47 |
| | a) IEX PURCHASE AND SALES | | | | | | | | 69.88 | 4.37% | 66.83 | 304.49 | - | 21.28 | - | - | 21.28 |
| | b) Traders | | | | | | | | 40.19 | 4.37% | 38.43 | 303.46 | - | 12.20 | - | - | 12.20 |
| IV | NET OVER DRAWAL | | | | | | | | 126.78 | 4.37% | 121.24 | 250.80 | - | 31.80 | - | - | 31.80 |
| V | Banking | | | | | | | | (14.35) | 4.37% | (13.72) | | - | - | - | - | - |
| B | Within State Generations | | | | | | | | | | | | | | | | |
| I | CO- GENERATION | | | | | | | | 86.42 | | 86.42 | | - | 20.71 | - | - | 20.71 |
| | Vedanta Plant-1 | | | | | | | | 51.29 | 0.00% | 51.29 | 239.87 | - | 12.30 | - | - | 12.30 |
| | Vedanta Plant -2 | | | | | | | | 32.05 | 0.00% | 32.05 | 239.34 | - | 7.67 | - | - | 7.67 |
| | Goa Sponge and private limited | | | | | | | | 3.08 | 0.00% | 3.08 | 239.77 | - | 0.74 | - | - | 0.74 |
| C | RPO Obligations | | | | | | | | 30.63 | | 29.29 | | | 19.91 | - | - | 19.91 |
| | NVVNL Solar | | | | | | | | 5.64 | 4.37% | 5.40 | 854.59 | - | 4.82 | - | - | 4.82 |
| | SECI Solar | | | | | | | | 24.98 | 4.37% | 23.89 | 604.02 | - | 15.09 | - | - | 15.09 |
| | NVVNL Hydro (Non Solar) | | | | | | | | - | 4.37% | - | - | - | - | - | - | - |
| D | OTHER CHARGES | | | | | | | | | | | | | 99.63 | | | 99.63 |
| | PGCIL Transmission Charges, Wheeling & Other Charges | | | | | | | | | | | | | 99.63 | | | 99.63 |
| | Total | | | | | | | | 2,062.25 | 4.74% | 1,964.41 | 242.09 | 116.39 | 499.25 | 13.10 | (0.47) | 628.27 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 11-12, 12-13 AND TARIFF DETERMINATION FOR FY 2017-18
POWER PURCHASE COST YEAR 2016-17 H2 (Provisional Actual October 2016 to March 2017)

| Sr. No. | Source | Capacity (MW) | Firm allocation to Licensee | | Net Gen. Avail. | Avail. / PLF (in %) | AFC (Rs. Crore) | Auxiliary Consumption % | Purchase (MU) | External losses (%) | Energy recd. by Licensee | VC (Ps/ Unit) | FC (Rs. Crore) | VC (Rs. Crore) | Others (Rs. Crore) | Supplementary (Rs.) | Total (Rs. Crore) |
|------------|--|---------------|-----------------------------|--------------|-----------------|---------------------|-----------------|-------------------------|-----------------|---------------------|--------------------------|---------------|----------------|----------------|--------------------|---------------------|-------------------|
| | | | % | MW | | | | | | | | | | | | | |
| 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
| A | Central Sector Power Stations | | | | | | | | | | | | | | | | |
| I | NTPC | 14,254 | | 442 | | | | | 1,706 | | 1,619 | 156.03 | 125.72 | 266.14 | 13.95 | 95.75 | 501.56 |
| | KSTPS | 2,100 | 10% | 211.93 | | | | | 789.27 | 4.37% | 754.78 | 122.75 | 41.69 | 96.88 | 7.17 | 57.78 | 203.52 |
| | VSTPS - I | 1,260 | 3% | 36.72 | | | | | 137.55 | 4.37% | 131.54 | 170.14 | 8.39 | 23.40 | 0.87 | 10.49 | 43.15 |
| | VSTPS - II | 1,000 | 1% | 13.30 | | | | | 52.04 | 4.37% | 49.77 | 160.02 | 3.14 | 8.33 | 0.32 | 1.93 | 13.72 |
| | VSTPS - III | 1,000 | 1% | 11.30 | | | | | 43.58 | 4.37% | 41.68 | 159.22 | 4.21 | 6.94 | 0.27 | 0.52 | 11.94 |
| | VSTPS - IV | 1,000 | 1% | 13.02 | | | | | 51.25 | 4.37% | 49.01 | 162.28 | 6.86 | 8.32 | 0.33 | 1.75 | 17.26 |
| | VSTPS - V | 500 | 1% | 6.09 | | | | | 21.89 | 4.37% | 20.94 | 161.47 | 3.07 | 3.54 | 0.12 | 0.12 | 6.84 |
| | KGPP | 656 | 2% | 12.38 | | | | | 23.49 | 4.37% | 22.46 | 192.95 | 3.99 | 4.53 | - | 2.65 | 11.18 |
| | GGPP | 657 | 2% | 12.64 | | | | | 24.95 | 4.37% | 23.86 | 185.22 | 4.36 | 4.62 | - | 1.98 | 10.96 |
| | SIPAT - I | 1,980 | 0% | - | | | | | 90.46 | 4.37% | 86.50 | 129.74 | 11.01 | 11.74 | 0.87 | 2.05 | 25.67 |
| | KSTPS - III | - | 0% | - | | | | | 22.21 | 4.37% | 21.24 | 120.82 | 2.82 | 2.68 | 0.31 | (0.45) | 5.36 |
| | RSTPS | 2,100 | 5% | 100.00 | | | | | 397.87 | 7.50% | 368.03 | 220.55 | 21.45 | 87.75 | 3.10 | 15.49 | 127.79 |
| | SIPAT - II | 1,000 | 1% | 11.24 | | | | | 46.13 | 4.37% | 44.12 | 133.73 | 4.86 | 6.17 | 0.59 | 1.38 | 12.99 |
| | Mouda | 1,000 | 1% | 13.02 | | | | | 3.85 | 4.37% | 3.69 | 248.38 | 8.52 | 0.96 | - | 0.06 | 9.54 |
| | Mauda II | | | | | | | | 1.19 | 4.37% | 1.14 | 244.58 | 1.34 | 0.29 | - | (0.00) | 1.63 |
| | Add/ Less: Other Adjustments | | | | | | | | | | | | | | | | - |
| II | NPCL | 1,520 | | 28.13 | | | | | 48 | | 46 | | - | 14.18 | - | - | 14.18 |
| | KAPS | 440 | 4% | 15.52 | | | | | - | 4.37% | - | - | - | - | - | - | - |
| | TAPS | 1,080 | 1% | 12.60 | | | | | 48 | 4.37% | 46.14 | 293.95 | - | 14.18 | - | - | 14.18 |
| III | Traders | | | | | | | | (23.96) | | (22.91) | | | (1.31) | - | - | (1.31) |
| | a) IEX PURCHASE AND SALES | | | | | | | | (29.30) | 4.37% | (28.02) | 98.47 | - | (2.89) | - | - | (2.89) |
| | b) Traders | | | | | | | | 5.34 | 4.37% | 5.11 | 294.49 | - | 1.57 | - | - | 1.57 |
| IV | NET OVER DRAWAL | | | | | | | | 58.61 | 4.37% | 56.05 | 270.44 | - | 15.85 | - | - | 15.85 |
| V | Banking | | | | | | | | 18.00 | 4.37% | 17.21 | | | | | | - |
| B | Within State Generations | | | | | | | | | | | | | | | | |
| I | CO- GENERATION | | | | | | | | 90.89 | | 90.89 | | - | 21.85 | - | - | 21.85 |
| | Vedanta Plant-1 | | | | | | | | 45.00 | 0.00% | 45.00 | 240.67 | - | 10.83 | - | - | 10.83 |
| | Vedanta Plant -2 | | | | | | | | 43.16 | 0.00% | 43.16 | 239.88 | - | 10.35 | - | - | 10.35 |
| | Goa Sponge and private limited | | | | | | | | 2.74 | 0.00% | 2.74 | 243.80 | - | 0.67 | - | - | 0.67 |
| C | RPO Obligations | | | | | | | | 107.79 | | 103.08 | | | 54.80 | - | - | 54.80 |
| | NVVNL Solar | | | | | | | | 6.08 | 4.37% | 5.82 | 851.43 | - | 5.18 | - | - | 5.18 |
| | SECI Solar | | | | | | | | 28.83 | 4.37% | 27.57 | 586.00 | - | 16.89 | - | - | 16.89 |
| | NVVNL Hydro (Non Solar) | | | | | | | | 72.88 | 4.37% | 69.69 | 449.00 | - | 32.72 | - | - | 32.72 |
| D | OTHER CHARGES | | | | | | | | | | | | | 92.89 | | | 92.89 |
| | PGCIL Transmission Charges, Wheeling & Other Charges | | | | | | | | | | | | | 92.89 | | | 92.89 |
| | Total | | | | | | | | 2,005.33 | 4.79% | 1,909.22 | 231.58 | 125.72 | 464.40 | 13.95 | 95.75 | 699.82 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 11-12, 12-13 AND TARIFF DETERMINATION FOR FY 2017-18
POWER PURCHASE COST YEAR 2016-17 (Provisional Actual April 2016 to March 2017)

| Sr. No. | Source | Capacity (MW) | Firm allocation to Licensee | | Net Gen. Avail. | Avail. / PLF (in %) | AFC (Rs. Crore) | Auxiliary Consumption % | Purchase (MU) | External losses (%) | Energy recd. by Licensee | VC (Ps/ Unit) | FC (Rs. Crore) | VC (Rs. Crore) | Others (Rs. Crore) | Supplementary (Rs.) | Total (Rs. Crore) |
|------------|--|---------------|-----------------------------|--------------|-----------------|---------------------|-----------------|-------------------------|---------------|---------------------|--------------------------|---------------|----------------|----------------|--------------------|---------------------|-------------------|
| | | | % | MW | | | | | | | | | | | | | |
| 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
| A | Central Sector Power Stations | | | | | | | | | | | | | | | | |
| I | NTPC | 14,254 | | 442 | | | | 3,376 | | | 3,204 | 160.96 | 242.10 | 543.34 | 27.05 | 95.29 | 907.78 |
| | KSTPS | 2,100 | 10% | 211.93 | | | | 1,590.99 | 4.37% | 1,521.47 | 135.02 | 79.46 | 214.81 | 16.39 | 55.97 | 366.62 | |
| | VSTPS - I | 1,260 | 3% | 36.72 | | | | 267.34 | 4.37% | 255.66 | 172.65 | 16.12 | 46.16 | 1.78 | 11.29 | 75.35 | |
| | VSTPS - II | 1,000 | 1% | 13.30 | | | | 90.91 | 4.37% | 86.94 | 164.03 | 5.80 | 14.91 | 0.59 | 2.28 | 23.58 | |
| | VSTPS -III | 1,000 | 1% | 13.30 | | | | 88.25 | 4.37% | 84.39 | 162.97 | 8.44 | 14.38 | 0.59 | 2.82 | 26.22 | |
| | VSTPS-IV | 1,000 | 1% | 13.02 | | | | 103.48 | 4.37% | 98.96 | 165.32 | 13.66 | 17.11 | 0.69 | 1.70 | 33.15 | |
| | VSTPS-V | 500 | 1% | 6.09 | | | | 46.58 | 4.37% | 44.54 | 163.45 | 6.14 | 7.61 | 0.31 | 0.33 | 14.40 | |
| | KGPP | 656 | 2% | 12.38 | | | | 36.40 | 4.37% | 34.81 | 204.84 | 7.28 | 7.46 | - | 2.54 | 17.27 | |
| | GGPP | 657 | 2% | 12.64 | | | | 53.25 | 4.37% | 50.92 | 203.70 | 8.55 | 10.85 | - | 1.76 | 21.16 | |
| | SIPAT- I | 1,980 | 0% | - | | | | 180.80 | 4.37% | 172.90 | 129.07 | 22.09 | 23.34 | 1.86 | 3.06 | 50.35 | |
| | KSTPS-III | - | 0% | - | | | | 44.58 | 4.37% | 42.63 | 133.37 | 5.65 | 5.95 | 0.66 | 0.04 | 12.30 | |
| | RSTPS | 2,100 | 5% | 100.00 | | | | 765.46 | 7.50% | 708.05 | 215.47 | 40.94 | 164.94 | 3.10 | 10.83 | 219.80 | |
| | SIPAT- II | 1,000 | 1% | 11.24 | | | | 89.18 | 4.37% | 85.28 | 132.75 | 9.69 | 11.84 | 1.08 | 3.15 | 25.75 | |
| | Mouda | 1,000 | 1% | 13.02 | | | | 17.16 | 4.37% | 16.41 | 257.81 | 16.96 | 4.42 | - | (0.48) | 20.90 | |
| | Mauda II | | | - | | | | 1.19 | 4.37% | 1.14 | 244.58 | 1.34 | 0.29 | - | (0.00) | 1.63 | |
| | Add/ Less: Other Adjustments | | | - | | | | - | | - | - | - | (0.72) | - | - | (0.72) | |
| | | | | | | | | | | | | | | | | | - |
| II | NPCIL | 1,520 | | 28.13 | | | | 101 | | | 97 | | | 30.71 | | | 30.71 |
| | KAPS | 440 | 4% | 15.52 | | | | - | 4.37% | - | - | - | 0 | - | - | - | 0.28 |
| | TAPS | 1,080 | 1% | 12.60 | | | | 101 | 4.37% | 97 | 300.85 | - | 30 | - | - | - | 30.42 |
| III | Traders | | | | | | | 86.11 | | | 82.35 | | | 32.16 | | | 32.16 |
| | a) IEX PURCHASE AND SALES | - | - | - | | | | 40.58 | 4.37% | 38.81 | 453.22 | - | 18.39 | - | - | - | 18.39 |
| | b) Traders | - | - | - | | | | 45.53 | 4.37% | 43.54 | 302.41 | - | 13.77 | - | - | - | 13.77 |
| IV | OVER DRAWAL | | | | | | | 185.39 | 4.37% | 177.29 | 257.01 | | 47.65 | | | | 47.65 |
| V | Banking | | | | | | | 3.65 | 4.37% | 3.49 | | | | | | | |
| B | Within State Generations | | | | | | | | | | | | | | | | |
| I | CO- GENERATION | | | | | | | 177.31 | | | 177.31 | | | 42.56 | | | 42.56 |
| | Vedanta Plant-1 | | | | | | | 96.28 | 0.00% | 96.28 | 240.24 | - | 23.13 | - | - | - | 23.13 |
| | Vedanta Plant -2 | | | | | | | 75.21 | 0.00% | 75.21 | 239.65 | - | 18.02 | - | - | - | 18.02 |
| | Goa Sponge and private limited | | | | | | | 5.82 | 0.00% | 5.82 | 241.66 | - | 1.41 | - | - | - | 1.41 |
| C | RPO Obligations | | | | | | | 138.42 | | | 132.37 | | | 74.71 | | | 74.71 |
| | NVVNL Solar | | | | | | | 11.73 | 4.37% | 11.22 | 852.95 | - | 10.00 | - | - | - | 10.00 |
| | SECI Solar | | | | | | | 53.81 | 4.37% | 51.46 | 594.36 | - | 31.98 | - | - | - | 31.98 |
| | NVVNL Hydro (Non Solar) | | | | | | | 72.88 | 4.37% | 69.69 | 449.00 | - | 32.72 | - | - | - | 32.72 |
| D | OTHER CHARGES | | | | | | | | | | | | | 192.52 | | | 192.52 |
| | PGCIL Transmission Charges, Wheeling & Other Charges | | | | | | | - | | - | - | - | 192.52 | - | - | - | 192.52 |
| | Total | | | | | | | 4,067.58 | 4.77% | 3,873.62 | 236.91 | 242.10 | 963.65 | 27.05 | 95.29 | 1,328.08 | |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 11-12, 12-13 AND TARIFF DETERMINATION FOR FY 2017-18
POWER PURCHASE COST YEAR 2017-18 H1 (Provisional Actuals - April 2017 to September 2017)

| Sr. No | Source | Capacity (MW) | Firm allocation to Licensee | | Gen. Avail. (MU) | Avail. / PLF (in %) | AFC (Rs. Crore) | Auxiliary Consumption % | Purchase (MU) | External losses (%) | Energy recd. by Licensee | VC (Ps/ Unit) | FC (Rs. Crore) | VC (Rs. Crore) | Others (Rs. Crore) | Supplementary (Rs.) | Total (Rs. Crore) |
|------------|---|---------------|-----------------------------|---------------|------------------|---------------------|-----------------|-------------------------|-----------------|---------------------|--------------------------|-----------------|----------------|----------------|--------------------|---------------------|-------------------|
| | | | % | MW | | | | | | | | | | | | | |
| 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
| A | Central Sector Power Stations | | | | | | | | | | | | | | | | |
| I | NTPC | 14,254 | | 441.64 | - | - | - | - | 1,753.96 | 5.04% | 1,665.56 | | 139.62 | 283.46 | 19.51 | (120.26) | 322.34 |
| | KSTPS | 2100 | 10.09% | 211.93 | | | | | 811.55 | 4.37% | 776.09 | 127.01 | 48.59 | 103.08 | 10.28 | (72.99) | 88.96 |
| | VSTPS - I | 1260 | 2.91% | 36.72 | | | | | 132.04 | 4.37% | 126.27 | 151.62 | 10.29 | 20.02 | 0.84 | (14.53) | 16.62 |
| | VSTPS - II | 1000 | 1.33% | 13.30 | | | | | 47.40 | 4.37% | 45.33 | 141.74 | 3.18 | 6.72 | 0.30 | 0.41 | 10.62 |
| | VSTPS - III | 1000 | 1.13% | 11.30 | | | | | 45.81 | 4.37% | 43.80 | 142.45 | 4.19 | 6.53 | 0.54 | 0.26 | 11.51 |
| | VSTPS - IV | 1000 | 1.30% | 13.02 | | | | | 45.41 | 4.37% | 43.43 | 142.23 | 7.12 | 6.46 | 0.29 | 0.62 | 14.49 |
| | VSTPS - V | 500 | 1.22% | 6.09 | | | | | 27.54 | 4.37% | 26.33 | 142.83 | 3.47 | 3.93 | 0.46 | 0.13 | 8.00 |
| | KGPP | 656 | 1.89% | 12.38 | | | | | 21.30 | 4.37% | 20.37 | 204.87 | 3.79 | 4.36 | - | 0.32 | 8.48 |
| | GGPP | 657 | 1.92% | 12.64 | | | | | 31.19 | 4.37% | 29.83 | 191.03 | 4.82 | 5.96 | - | 1.88 | 12.66 |
| | SIPAT - I | 1980 | 0.00% | - | | | | | 90.69 | 4.37% | 86.72 | 124.32 | 10.97 | 11.27 | 1.03 | 0.40 | 23.68 |
| | solaphur | | | | | | | | 0.26 | 4.37% | 0.25 | 261.30 | 0.06 | 0.07 | - | 0.00 | 0.13 |
| | KSTPS-III | 0 | 0.00% | - | | | | | 19.46 | 4.37% | 18.61 | 125.64 | 2.70 | 2.44 | 0.16 | 0.16 | 5.46 |
| | KHSTPS-I | | | | | | | | - | 4.37% | - | - | - | - | - | (0.08) | (0.08) |
| | RSTPS | 2,100 | 5% | 100.00 | | | | | 375.54 | 7.50% | 347.37 | 239.46 | 24.41 | 89.93 | 0.00 | (37.25) | 77.09 |
| | SIPAT - II | 1,000 | 1% | 11.24 | | | | | 45.59 | 4.37% | 43.60 | 128.55 | 4.94 | 5.86 | 0.66 | 0.04 | 11.50 |
| | Mouda I | 1,000 | 1% | 13.02 | | | | | 50.48 | 4.37% | 48.27 | 281.80 | 8.74 | 14.23 | - | 0.38 | 23.35 |
| | Mouda II | | | | | | | | 9.71 | 4.37% | 9.28 | 268.44 | 2.34 | 2.61 | - | (0.02) | 4.93 |
| | Add/ Less: Other Adjustments(URS Power) | | | | | | | | - | | | | | | 4.94 | | 4.94 |
| | | | | | | | | | | | | | | | | | - |
| II | RGPPL | | | | | | | | - | | | | - | - | - | - | - |
| III | NPCIL | 1,520 | | 28 | | | | | 16 | | 16 | 314.11 | - | 5.16 | - | - | 5.16 |
| | KAPS | 440 | 3.53% | 15.52 | | | | | - | 4.37% | - | - | - | 0.00 | - | - | 0.00 |
| | TAPS | 1,080 | 1.17% | 12.60 | | | | | 16.42 | 4.37% | 15.70 | 314.11 | - | 5.16 | - | - | 5.16 |
| IV | Traders | | | | | | | | 187.57 | | 179.37 | 355.06 | | 66.60 | - | - | 66.60 |
| | a) IEX PURCHASE AND SALES | | | | | | | | 102.90 | 4.37% | 98.40 | 382.51 | - | 39.36 | - | - | 39.36 |
| | b) Traders | | | | | | | | 84.67 | 4.37% | 80.97 | 321.70 | - | 27.24 | - | - | 27.24 |
| V | NET OVER DRAWAL | | | | | | | | 46.14 | 4.37% | 44.13 | 377.82 | - | 17.43 | - | - | 17.43 |
| VI | Banking of Power | | | | | | | | (19.68) | 4.37% | (18.82) | | | | | | - |
| B | Within State Generations | | | | | | | | | | | | | | | | |
| I | CO- GENERATION | - | | - | - | - | - | - | 75.86 | | 75.86 | 240.19 | - | 18.22 | - | - | 18.22 |
| | Vedanta Plant-1 | | | | | | | | 40.10 | 0.00% | 40.10 | 240.53 | - | 9.65 | - | - | 9.65 |
| | Vedanta Plant -2 | | | | | | | | 33.03 | 0.00% | 33.03 | 239.77 | - | 7.92 | - | - | 7.92 |
| | Goa Sponge and private limited | | | | | | | | 2.73 | 0.00% | 2.73 | 240.15 | - | 0.66 | - | - | 0.66 |
| C | RPO Obligation | - | | - | | | | | 68.05 | | 65.07 | 532.23 | - | 36.22 | - | - | 36.22 |
| | NVVNL Solar | | | | | | | | 5.33 | 4.37% | 5.09 | 877.97 | - | 4.68 | - | - | 4.68 |
| | SECI Solar | | | | | | | | 24.85 | 4.37% | 23.76 | 585.00 | - | 14.53 | - | - | 14.53 |
| | NVVNL Hydro (Non Solar) | | | | | | | | 37.87 | 4.37% | 36.22 | 449.00 | - | 17.01 | - | - | 17.01 |
| D | REC Certificates | | | | | | | | | | | 103.34 | - | 2.07 | - | - | 2.07 |
| E | OTHER CHARGES | - | | - | - | - | - | - | - | | - | - | - | 89.32 | - | - | 89.32 |
| | PGCIL Transmission Charges, Wheeling, Oen Access & Trading Margin & Other Charges | | | | | | | | | | | | | 89.32 | | | 89.32 |
| F | Total | 15,774 | 0% | 469.76 | - | - | - | - | 2,128.33 | 4.77% | 2,026.88 | 1,922.75 | 139.62 | 518.48 | 19.51 | (120.26) | 557.36 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
POWER PURCHASE COST YEAR 2017-18 H2 (Estimated - October 2017 to March 2018)

| Sr. No | Source | Capacity (MW) | Firm allocation to Licensee | | Gen. Avail. (MU) | Avail. / PLF (in %) | AFC (Rs. Crore) | Auxiliary Consumption % | Purchase (MU) | External losses (%) | Energy recd. by Licensee | VC (Ps/ Unit) | FC (Rs. Crore) | VC (Rs. Crore) | Others (Rs. Crore) | Supplementary (Rs.) | Total (Rs. Crore) |
|------------|--|---------------|-----------------------------|---------------|------------------|---------------------|-----------------|-------------------------|-----------------|---------------------|--------------------------|-----------------|----------------|----------------|--------------------|---------------------|-------------------|
| | | | % | MW | | | | | | | | | | | | | |
| 1 | 2 | 4 | 5 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| A | Central Sector Power Stations | | | | | | | | | | | | | | | | |
| I | NTPC | 16,074 | | 488.56 | - | | - | 71.50% | 1,744.43 | 5.02% | 1,656.91 | | 139.62 | 288.66 | 14.57 | - | 442.85 |
| | KSTPS | 2,100 | 10.09% | 211.93 | | 89.80% | | 8.50% | 762.66 | 4.37% | 729.33 | 127.01 | 48.59 | 96.87 | 10.28 | | 155.74 |
| | VSTPS - I | 1,260 | 2.91% | 36.72 | | 89.86% | | 5.25% | 136.96 | 4.37% | 130.97 | 151.62 | 10.29 | 20.77 | 0.84 | | 31.89 |
| | VSTPS - II | 1,000 | 1.33% | 13.30 | | 89.28% | | 5.25% | 49.29 | 4.37% | 47.14 | 141.74 | 3.18 | 6.99 | 0.30 | | 10.47 |
| | VSTPS - III | 1,000 | 1.13% | 11.30 | | 89.79% | | 5.25% | 42.12 | 4.37% | 40.28 | 142.45 | 4.19 | 6.00 | 0.54 | | 10.73 |
| | VSTPS - IV | 1,000 | 1.30% | 13.02 | | 93.59% | | 9.00% | 48.57 | 4.37% | 46.45 | 142.23 | 7.12 | 6.91 | 0.29 | | 14.32 |
| | VSTPS - V | 500 | 1.20% | 6.00 | | 88.65% | | 9.00% | 21.20 | 4.37% | 20.27 | 142.83 | 3.47 | 3.03 | 0.46 | | 6.96 |
| | KGPP | 656 | 1.89% | 12.38 | | 62.55% | | 3.00% | 32.89 | 4.37% | 31.46 | 204.87 | 3.79 | 6.74 | - | | 10.53 |
| | GGPP | 657 | 1.92% | 12.64 | | 64.18% | | 3.00% | 34.46 | 4.37% | 32.95 | 191.03 | 4.82 | 6.58 | - | | 11.41 |
| | SIPAT - I | 1,980 | 1.19% | 23.61 | | 86.44% | | 5.25% | 84.68 | 4.37% | 80.98 | 124.32 | 10.97 | 10.53 | 1.03 | | 22.53 |
| | Solphur | 660 | 1.59% | 10.50 | | 85.00% | | 9.00% | 35.58 | 4.37% | 34.02 | 261.30 | 0.06 | 9.30 | - | | 9.36 |
| | KSTPS-III | 500 | 1.08% | 5.41 | | 90.00% | | 9.00% | 19.41 | 4.37% | 18.56 | 125.64 | 2.70 | 2.44 | 0.16 | | 5.30 |
| | KHSTPS-I | - | 0.00% | - | | 0.00% | | 0.00% | - | 4.37% | - | - | - | - | - | | - |
| | RSTPS | 2,100 | 4.76% | 100.00 | | 90.04% | | 8.50% | 360.86 | 7.50% | 333.80 | 239.46 | 24.41 | 86.41 | 0.00 | | 110.83 |
| | SIPAT - II | 1,000 | 1.12% | 11.24 | | 86.44% | | 5.25% | 40.30 | 4.37% | 38.54 | 128.55 | 4.94 | 5.18 | 0.66 | | 10.78 |
| | Mouda I | 1,000 | 1.30% | 13.02 | | 96.44% | | 9.00% | 50.05 | 4.37% | 47.86 | 281.80 | 8.74 | 14.10 | - | | 22.84 |
| | Mouda II | 660 | 1.14% | 7.50 | | 85.00% | | 9.00% | 25.41 | 4.37% | 24.30 | 268.44 | 2.34 | 6.82 | - | | 9.17 |
| | Add/ Less: Other Adjustments(URS Power) | | | | | | | | | | | | | | | | - |
| | | | | | | | | | | | | | | | | | - |
| II | RGPP | | | | | | | | - | | | - | - | - | - | | - |
| | | | | | | | | | | | | - | - | - | - | | - |
| III | NPCIL | 1,520 | | 28 | | | | | 43 | 4.37% | 41 | 314.11 | - | 13.59 | - | - | 13.59 |
| | KAPS | 440 | 3.53% | 15.52 | | 95.22% | | 10.00% | | 4.37% | - | - | - | - | - | | - |
| | TAPS | 1,080 | 1.17% | 12.60 | | 87.09% | | 10.00% | 43.26 | 4.37% | 41.37 | 314.11 | - | 13.59 | - | | 13.59 |
| | | | | | | | | | | | | | | | | | - |
| IV | Traders | | | | | | | | 100.00 | | 95.63 | 382.51 | | 38.25 | - | - | 38.25 |
| | a) IEX PURCHASE AND SALES | | | | | | | | 100.00 | 4.37% | 95.63 | 382.51 | - | 38.25 | - | | 38.25 |
| | b) Traders | | | | | | | | | 4.37% | - | 321.70 | - | - | - | | - |
| V | OVER/ UNDER DRAWAL | | | | | | | | | | | | | | | | - |
| VI | Banking of Power | | | | | | | | | | | | | | | | - |
| B | Within State Generations | | | | | | | | | | | | | | | | |
| I | CO- GENERATION | - | | - | | - | | - | 75.86 | | 75.86 | 240.19 | - | 18.22 | - | - | 18.22 |
| | Vedanta Plant-1 | | | | | | | | 40.10 | 0.00% | 40.10 | 240.53 | - | 9.65 | - | | 9.65 |
| | Vedanta Plant -2 | | | | | | | | 33.03 | 0.00% | 33.03 | 239.77 | - | 7.92 | - | | 7.92 |
| | Goa Sponge and private limited | | | | | | | | 2.73 | 0.00% | 2.73 | 240.15 | - | 0.66 | - | | 0.66 |
| C | RPO Obligation | - | | - | | | | | 139.78 | | 133.67 | | - | 70.30 | - | - | 70.30 |
| | NVVNL Solar | | | | | | | | 5.33 | 4.37% | 5.09 | 877.97 | - | 4.68 | - | | 4.68 |
| | Mittal Solar | | | | | | | | 22.96 | 4.37% | 21.95 | 490.00 | - | 11.25 | - | | 11.25 |
| | SECI Solar | | | | | | | | 24.85 | 4.37% | 23.76 | 585.00 | - | 14.53 | - | | 14.53 |
| | NVVNL Hydro (Non Solar) | | | | | | | | 64.65 | 4.37% | 61.82 | 449.00 | - | 29.03 | - | | 29.03 |
| | Mittal | | | | | | | | 22.00 | 4.37% | 21.04 | 491.36 | - | 10.81 | - | | 10.81 |
| D | REC Certificates | | | | | | | | | 4.37% | - | 103.34 | | 2.17 | - | | 2.17 |
| E | OTHER CHARGES | - | | - | | - | | - | - | | - | - | - | 69.35 | - | - | 69.35 |
| | PGCIL Transmission Charges, Wheeling, Oen Access & Trading Marrgin & Other Charges | | | | | | | | | | | | | 69.35 | - | | 69.35 |
| F | Total | 17,594 | 0% | 516.69 | - | - | - | - | 2,103.34 | 4.75% | 2,003.44 | 1,040.14 | 139.62 | 500.54 | 14.57 | - | 654.73 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
POWER PURCHASE COST YEAR 2017-18 (Estimated - April 2017 to March 2018)

| Sr. No. | Source | Capacity (MW) | Firm allocation to Licensee | | Gen. Avail. (MU) | Avail. / PLF (in %) | AFC (Rs. Crore) | Auxiliary Consumption % | Purchase (MU) | External losses (%) | Energy recd. by Licensee | VC (Ps/ Unit) | FC (Rs. Crore) | VC (Rs. Crore) | Others (Rs. Crore) | Supplementary (Rs.) | Total (Rs. Crore) |
|------------|--|---------------|-----------------------------|---------------|------------------|---------------------|-----------------|-------------------------|-----------------|---------------------|--------------------------|---------------|----------------|----------------|--------------------|---------------------|-------------------|
| | | | % | MW | | | | | | | | | | | | | |
| 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
| A | Central Sector Power Stations | | | | | | | | | | | | | | | | |
| I | NTPC | 16,074 | | 488.56 | - | | | 71.50% | 3,498.39 | 5.03% | 3,322.47 | | 279.24 | 572.12 | 34.08 | (120.26) | 765.19 |
| | KSTPS | 2,100 | 10.1% | 211.93 | | 89.80% | | 8.50% | 1,574.21 | 4.37% | 1,505.42 | 127.01 | 97.18 | 199.95 | 20.56 | (72.99) | 244.70 |
| | VSTPS - I | 1,260 | 2.9% | 36.72 | | 89.86% | | 5.25% | 268.99 | 4.37% | 257.24 | 151.62 | 20.57 | 40.79 | 1.68 | (14.53) | 48.51 |
| | VSTPS - II | 1,000 | 1.3% | 13.30 | | 89.28% | | 5.25% | 96.69 | 4.37% | 92.47 | 141.74 | 6.36 | 13.71 | 0.61 | 0.41 | 21.08 |
| | VSTPS - III | 1,000 | 1.1% | 11.30 | | 89.79% | | 5.25% | 87.93 | 4.37% | 84.09 | 142.45 | 8.37 | 12.53 | 1.09 | 0.26 | 22.25 |
| | VSTPS-IV | 1,000 | 1.3% | 13.02 | | 93.59% | | 9.00% | 93.98 | 4.37% | 89.87 | 142.23 | 14.24 | 13.37 | 0.58 | 0.62 | 28.81 |
| | VSTPS-V | 500 | 1.2% | 6.00 | | 88.65% | | 9.00% | 48.74 | 4.37% | 46.61 | 142.83 | 6.94 | 6.96 | 0.92 | 0.13 | 14.95 |
| | KGPP | 656 | 1.9% | 12.38 | | 62.55% | | 3.00% | 54.20 | 4.37% | 51.83 | 204.87 | 7.59 | 11.10 | - | 0.32 | 19.02 |
| | GGPP | 657 | 1.9% | 12.64 | | 64.18% | | 3.00% | 65.65 | 4.37% | 62.78 | 191.03 | 9.64 | 12.54 | - | 1.88 | 24.07 |
| | SIPAT- I | 1,980 | 1.2% | 23.61 | | 86.44% | | 5.25% | 175.37 | 4.37% | 167.70 | 124.32 | 21.94 | 21.80 | 2.07 | 0.40 | 46.21 |
| | Solphur | 660 | 1.6% | 10.50 | | 85.00% | | 9.00% | 35.83 | 4.37% | 34.27 | 261.30 | 0.13 | 9.36 | - | 0.00 | 9.49 |
| | KSTPS-III | 500 | 1.1% | 5.41 | | 90.00% | | 9.00% | 38.87 | 4.37% | 37.17 | 125.64 | 5.40 | 4.88 | 0.32 | 0.16 | 10.75 |
| | KHSTPS-I | - | 0.0% | - | | 0.00% | | 0.00% | - | | - | - | - | - | - | (0.08) | (0.08) |
| | RSTPS | 2,100 | 4.8% | 100.00 | | 90.04% | | 8.50% | 736.40 | 7.50% | 681.17 | 239.46 | 48.83 | 176.34 | 0.01 | (37.25) | 187.92 |
| | SIPAT- II | 1,000 | 1.1% | 11.24 | | 86.44% | | 5.25% | 85.90 | 4.37% | 82.14 | 128.55 | 9.88 | 11.04 | 1.31 | 0.04 | 22.28 |
| | Mouda I | 1,000 | 1.3% | 13.02 | | 96.44% | | 9.00% | 100.53 | 4.37% | 96.14 | 281.80 | 17.48 | 28.33 | - | 0.38 | 46.19 |
| | Mouda II | 660 | 1.1% | 7.50 | | 85.00% | | 9.00% | 35.12 | 4.37% | 33.59 | 268.44 | 4.69 | 9.43 | - | (0.02) | 14.10 |
| | Add/ Less: Other Adjustments(URS Power) | - | 0.0% | - | | 0.00% | | 0.00% | - | | - | - | - | - | 4.94 | - | 4.94 |
| | | | | | | | | | | | | | | | | | - |
| | | | | | | | | | | | | | | | | | - |
| II | RGPPL | | | | | | | | | | | | | | | | - |
| III | NPCIL | 1,520 | | 28 | | | | | 60 | 4.37% | 57.07 | 314.11 | - | 18.75 | - | - | 18.75 |
| | KAPS | 440 | 4% | 15.52 | | 95.22% | | 10.00% | - | | - | - | - | 0.00 | - | - | 0.00 |
| | TAPS | 1,080 | 1% | 12.60 | | 87.09% | | 10.00% | 59.68 | 4.37% | 57.07 | 314.11 | - | 18.75 | - | - | 18.75 |
| | | | | | | | | | | | | | | | | | - |
| IV | Traders | | | | | | | | 287.57 | | 275.00 | | | | | | 104.85 |
| | a) IEX PURCHASE AND SALES | - | 0% | - | | 0.00% | | 0.00% | 202.90 | 4.37% | 194.03 | 382.51 | - | 77.61 | - | - | 77.61 |
| | b) Traders | - | 0% | - | | 0.00% | | 0.00% | 84.67 | 4.37% | 80.97 | 321.70 | - | 27.24 | - | - | 27.24 |
| V | OVER/ UNDER DRAWAL | - | 0% | - | | 0.00% | | 0.00% | 46.14 | 4.37% | 44.13 | 377.82 | - | 17.43 | - | - | 17.43 |
| VI | Banking of Power | | | | | | | | (19.68) | 4.37% | (18.82) | | | | | | - |
| B | Within State Generations | | | | | | | | | | | | | | | | |
| I | CO- GENERATION | | | | | | | | 151.73 | | 151.73 | | | | | | 36.44 |
| | Vedanta Plant-1 | - | 0% | - | | 0.00% | | 0.00% | 80.20 | 0.00% | 80.20 | 240.53 | - | 19.29 | - | - | 19.29 |
| | Vedanta Plant -2 | - | 0% | - | | 0.00% | | 0.00% | 66.07 | 0.00% | 66.07 | 239.77 | - | 15.84 | - | - | 15.84 |
| | Goa Sponge and private limited | - | 0% | - | | 0.00% | | 0.00% | 5.46 | 0.00% | 5.46 | 240.15 | - | 1.31 | - | - | 1.31 |
| C | RPO Obligation | | | | | | | | 207.83 | | 198.74 | | - | 106.51 | - | - | 106.51 |
| | NVVNL Solar | - | 0% | - | | 0.00% | | 0.00% | 10.65 | 4.37% | 10.19 | 877.97 | - | 9.35 | - | - | 9.35 |
| | Mittal Solar | | | | | | | | 22.96 | 4.37% | 21.95 | 490.00 | - | 11.25 | - | - | 11.25 |
| | SECI Solar | - | 0% | - | | 0.00% | | 0.00% | 49.69 | 4.37% | 47.52 | 585.00 | - | 29.07 | - | - | 29.07 |
| | NVVNL Hydro (Non Solar) | - | 0% | - | | 0.00% | | 0.00% | 102.52 | 4.37% | 98.04 | 449.00 | - | 46.03 | - | - | 46.03 |
| | Mittal | | | | | | | | 22.00 | 4.37% | 21.04 | | - | 10.81 | - | - | 10.81 |
| D | REC Certificates | - | 0% | - | | 0.00% | | 0.00% | - | | - | - | - | 4.24 | - | - | 4.24 |
| E | OTHER CHARGES | | | | | | | | | | | | | | | | 158.67 |
| | PGCIL Transmission Charges, Wheeling, Oen Access & Trading Marrgin & Other Charges | - | 0% | - | | 0.00% | | 0.00% | - | 0.00% | - | - | - | 158.67 | - | - | 158.67 |
| F | Total | | | 516.69 | | | | | 4,231.66 | 4.76% | 4,030.33 | | 279.24 | 877.73 | 34.08 | (120.26) | 1,212.08 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
POWER PURCHASE COST
YEAR 2018-19 (Approved - April 2018 to March 2019)

| Sr. No. | Source | Capacity (MW) | Firm allocation to Licensee | | Gen. Avail. (MU) | Avail. / PLF (in %) | AFC (Rs. Crore) | Auxiliary Consumption % | Purchase (MU) | External losses (%) | Energy recd. by Licensee | VC (Ps/ Unit) | FC (Rs. Crore) | VC (Rs. Crore) | Others (Rs. Crore) | Supplementary (Rs.) | Total (Rs. Crore) |
|------------|---------------------------------------|---------------|-----------------------------|----|------------------|---------------------|-----------------|-------------------------|---------------|---------------------|--------------------------|---------------|----------------|----------------|--------------------|---------------------|-------------------|
| | | | % | MW | | | | | | | | | | | | | |
| 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
| A | Central Sector Power Stations | | | | | | | | | | | | | | | | |
| I | NTPC | - | - | - | - | - | - | 3,664.32 | 4.40% | 3,503.16 | | | 330.80 | 629.82 | - | - | 960.62 |
| | <i>KSTPS-III</i> | | | | | | | 37.66 | 3.66% | 36.28 | 101.70 | 7.72 | 3.83 | | | | 11.55 |
| | <i>KSTPS</i> | | | | | | | 1,483.17 | 3.66% | 1,428.95 | 103.30 | 104.52 | 153.21 | | | | 257.73 |
| | <i>SIPAT-1</i> | | | | | | | 160.38 | 3.66% | 154.51 | 107.18 | 29.37 | 17.19 | | | | 46.56 |
| | <i>SIPAT- II</i> | | | | | | | 76.33 | 3.66% | 73.54 | 110.31 | 14.14 | 8.42 | | | | 22.56 |
| | <i>VSTPS -III</i> | | | | | | | 78.98 | 3.65% | 76.10 | 142.06 | 11.87 | 11.22 | | | | 23.09 |
| | <i>VSTPS-IV</i> | | | | | | | 87.96 | 3.65% | 84.75 | 145.41 | 17.08 | 12.79 | | | | 29.87 |
| | <i>VSTPS-V</i> | | | | | | | 37.92 | 3.64% | 36.54 | 146.10 | 6.54 | 5.54 | | | | 12.08 |
| | <i>VSTPS - II</i> | | | | | | | 93.58 | 3.65% | 90.16 | 146.61 | 8.25 | 13.72 | | | | 21.97 |
| | <i>VSTPS - 1</i> | | | | | | | 258.32 | 3.65% | 248.88 | 147.22 | 22.19 | 38.03 | | | | 60.22 |
| | <i>RSTPS</i> | | | | | | | 708.25 | 7.50% | 655.13 | 223.13 | 62.17 | 158.03 | | | | 220.20 |
| | <i>Mouda</i> | | | | | | | 100.10 | 3.66% | 96.44 | 247.75 | 24.10 | 24.80 | | | | 48.90 |
| | <i>Mouda II</i> | | | | | | | 101.65 | 3.66% | 97.93 | 303.98 | | 30.90 | | | | 30.90 |
| | <i>GGPP</i> | | | | | | | 41.39 | 3.65% | 39.88 | 307.32 | 12.86 | 12.72 | | | | 25.58 |
| | <i>KGPP</i> | | | | | | | 40.15 | 3.66% | 38.68 | 314.32 | 9.99 | 12.62 | | | | 22.61 |
| | <i>Lara I & II</i> | | | | | | | 155.84 | 3.65% | 150.15 | 327.00 | | 50.96 | | | | 50.96 |
| | <i>Gadarwara I</i> | | | | | | | 115.20 | 3.65% | 110.99 | 363.02 | | 41.82 | | | | 41.82 |
| | <i>Solapur</i> | | | | | | | 87.44 | 3.65% | 84.25 | 389.07 | | 34.02 | | | | 34.02 |
| II | NPCIL | | | | | | | 188.20 | 0.00% | 188.20 | 522.95 | | 48.59 | - | - | | 48.59 |
| | <i>KAPS</i> | | | | | | | 106.96 | 0.00% | 106.96 | 237.38 | | 25.39 | | | | 25.39 |
| | <i>TAPS</i> | | | | | | | 81.24 | 0.00% | 81.24 | 285.57 | | 23.20 | | | | 23.20 |
| III | New Hydro Station | | | | | | | 55.18 | 0.00% | 55.18 | | | 22.07 | - | - | | 22.07 |
| | <i>Kameng HEP</i> | | | | | | | 11.03 | 0.00% | 11.03 | 399.82 | | 4.41 | | | | 4.41 |
| | <i>Subansiri (Lower) HEP</i> | | | | | | | 44.15 | 0.00% | 44.15 | 400.00 | | 17.66 | | | | 17.66 |
| B | Within State Generations | | | | | | | | | | | | | | | | |
| I | CO- GENERATION | - | - | - | - | - | - | 167.24 | 0.00% | 167.24 | 719.36 | | 40.13 | - | - | | 40.13 |
| | <i>Goa Energy Private Limited</i> | | | | | | | 107.52 | 0.00% | 107.52 | 239.96 | | 25.80 | | | | 25.80 |
| | <i>Goa Sponge & Power Limited</i> | | | | | | | 4.72 | 0.00% | 4.72 | 239.41 | | 1.13 | | | | 1.13 |
| | <i>Sesa Goa Limited</i> | | | | | | | 55.00 | 0.00% | 55.00 | 240.00 | | 13.20 | | | | 13.20 |
| C | RPO Obligations | | | | | | | 85.26 | 3.66% | 82.14 | 1,348.80 | | 45.83 | - | - | | 45.83 |
| | Solar RPO | | | | | | | 50.57 | 3.66% | 48.72 | 1,348.80 | | 30.25 | - | - | | 30.25 |
| | <i>NVVN Solar</i> | | | | | | | 9.79 | 3.68% | 9.43 | 798.77 | | 7.82 | | | | 7.82 |
| | <i>Solar Energy Corp. of India</i> | | | | | | | 40.78 | 3.65% | 39.29 | 550.02 | | 22.43 | | | | 22.43 |
| | <i>REC Certificates - Solar</i> | | | | | | | | | | | | | | | | |
| | Non Solar RPO | | | | | | | 34.69 | | 33.42 | | | 15.58 | - | - | | 15.58 |
| | <i>NVVNL Hydro</i> | | | | | | | 34.69 | 3.66% | 33.42 | | | 15.58 | | | | 15.58 |
| E | OTHER CHARGES | | | | | | | | | | | | | | 300.68 | - | 300.68 |
| | <i>PGCIL Charges</i> | | | | | | | | | | | | | | 297.23 | | 297.23 |
| | <i>KPTCL Wheeling Charges</i> | | | | | | | | | | | | | | 1.80 | | 1.80 |
| | <i>Fees and charges of SLDC - WR</i> | | | | | | | | | | | | | | 0.49 | | 0.49 |
| | <i>Fees and charges of SLDC - SR</i> | | | | | | | | | | | | | | 0.41 | | 0.41 |
| | <i>SCADA & Reactive charges</i> | | | | | | | | | | | | | | 0.75 | | 0.75 |
| | | | | | | | | | | | | | | | | | |
| F | Total | | | | | | | 4,160.20 | | 3,995.92 | | | 330.80 | 786.44 | 300.68 | - | 1,417.92 |

Information regarding Renewable Power Purchase Obligation

Name of State/UT: Goa

TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19

| S.No | Description | Unit | Previous Year | | | Audited | Approved | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
|------|--------------------------------------|----------------|---------------|--------------|--------------|--------------|---------------|---------------|--------------------|--------------------------|---------------|
| | | | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | Sales Within State | MUs | 2,544 | 2,880 | 2,925 | 3,071 | 3,114 | 3,233 | 3,027 | 3,586.18 | 3,644.93 |
| 2 | RPO Obligation | % | 1.00% | 2.00% | 3.00% | 3.00% | 3.30% | 3.55% | 4.85% | 6.70% | 9.00% |
| | - Solar | % | 0.25% | 0.30% | 0.40% | 0.40% | 0.60% | 0.85% | 1.65% | 2.50% | 3.60% |
| | - Non Solar | % | 0.75% | 1.70% | 2.60% | 2.60% | 2.70% | 2.70% | 3.20% | 4.20% | 5.40% |
| 3 | RPO Obligation | MUs | 25.44 | 57.60 | 87.76 | 92.12 | 102.75 | 114.76 | 146.83 | 240.27 | 328.04 |
| | - Solar | MUs | 6.36 | 8.64 | 11.70 | 12.28 | 18.68 | 27.48 | 49.95 | 89.65 | 131.22 |
| | - Non Solar | MUs | 19.08 | 48.96 | 76.06 | 79.83 | 84.07 | 87.29 | 96.88 | 150.62 | 196.83 |
| 4 | RPO Purchase / REC | MUs | | | | | | | | | |
| | - Solar | MUs | | | | | 6.31 | 78.78 | 65.54 | 83.30 | 83.30 |
| | - Non Solar | MUs | | 128.14 | 71.80 | 29.20 | 158.44 | 87.98 | 72.88 | 165.52 | 102.52 |
| 5 | Cumulative RPO Obligation | | | | | | | | | | |
| | - Solar | MUs | 6.36 | 15.00 | 26.70 | 38.98 | 51.35 | 0.05 | - | 6.35 | 54.27 |
| | - Non Solar | MUs | 19.08 | - | 4.25 | 54.89 | - | - | 24.00 | 9.10 | 103.40 |
| 6 | Floor Price of REC Certificates /MWH | | | | | | | | | | |
| | - Solar | Rs./MWH | 17000 | 17000 | 13,400 | 13,400 | 13,400 | 5,800 | 5,800 | 2,500 | 2,500 |
| | - Non Solar | Rs./MWH | 3900 | 3900 | 3,300 | 3,300 | 3,300 | 3,300 | 3,300 | 2,900 | 2,900 |
| 7 | Amount for RPO Compliance | | | | | | | | | | |
| | - Solar | Rs. Crs | | | | | | | | 1.59 | |
| | - Non Solar | Rs. Crs | | | | | | | | 2.64 | |
| 8 | Total (Rs Crores) | Rs. Crs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.23 | 0.00 |

ELECTRICITY DEPARTMENT - GOA
MULTI YEAR TARIFF FY 2018-19
CAPITAL EXPENDITURE PLAN AND CAPITALISATION PLAN

| Project Details | | | | | |
|---|-------------------------|---------------------|--|-------------------------------|------------------------------------|
| Name of scheme | Estimated Cost (Rs.Crs) | Nature of Project * | Approved by the Commission ^{n**} (YES/NO) | Project Start Date (DD-MM-YY) | Project Completion date (DD-MM-YY) |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Scheduled castes development scheme(P) | 1.57 | b | | 2015-16 | 2018-19 |
| Schedule Tribe Development Scheme (P) | 263.58 | b | Partly | 2009-10 | 2018-19 |
| Machinery and Equipments (Plan) Motor Vehicles | 0.83 | f | Yes | 2013-14 | 2013-14 |
| Infrastructure development through Electricity Duty (Plan) | 780.77 | b | Yes | 2008-09 | Beyond 2018 19 (Continuos) |
| Erection and Augmentation of 33/11 KV S/S line (Plan) | 26.00 | b | Yes | 2010-11 | 2018-19 |
| Normal Development Schemes (Plan) | 95.82 | b | Yes | 2010-11 | 2018-19 |
| System Improvement Schemes (Plan) | 15.21 | b | Yes | 2011-12 | 2018-19 |
| Construction of staff quarters and office buildings (Plan) | 9.89 | f | Yes | 2011-12 | 2018-19 |
| Erection of 220/33 KV 1X50 MVA Sub- Station at Cuncolim | 72.74 | a | Yes | 2007-08 | 2015-16 |
| Erection of 220 KV line from Xeldem to Cuncolim | 15.87 | a | Yes | 2007-08 | 2015-16 |
| Strengthening of 220 KV Transmission Network | 11.85 | a | Yes | 2013-14 | 2017-18 |
| Erection of 220/33KV, 1x50 MVA Sub-Station Xeldem | 0.14 | a | Yes | | |
| Accelerated Power Development Reforms Programme | 0.06 | b | Yes | | |
| Erection of 2nd 100 MVA transformer at Xeldem 220/110 KV S/S | 0.28 | a | Yes | | |
| Erection of 220/110/33/11 KV Sub-Station at Verna (New) | 90.00 | a | Yes | 2017-18 | 2018-19 |
| Erection of 220 KV line from Ponda-Verna-Xeldem | 40.00 | a | Yes | 2017-18 | 2018-19 |
| Erection of 220/110/33/11 KV Sub-Station at Soccorro | | | | | |
| Erection of 220 KV D/C line from Colvale to Soccorro | | | | | |
| Erection of 110 KV D/C line from Soccorro to Kadamba | | | | | |
| APDRP(State Schemes) | 86.00 | b | Yes | 2009-10 | 2015-16 |
| Restructured Accelerated Power Development and Reforms Programme Part A | 136.73 | f | Yes | 2011-12 | 2017-18 |
| Research training and human research development | 0.07 | f | Yes | | |
| Underground Cabling (R-APDRP) during Eleventh Plan period | 171.86 | b | Partly | 2013-14 | 2018-19 |
| Public Lighting Scheme | 4.68 | b | Yes | 2013-14 | 2018-19 |
| R-APDRP Part B / IPDS | 52.07 | b | Yes | 2015-16 | 2017-18 |
| EHV new Transmission / Sub-Station / Capacitor banks schemes | 800.00 | a | Yes | 2015-16 | 2018-19 |
| Total | | | | | |

**ELECTRICITY DEPARTMENT
MULTI YEAR TARIFF
CAPITAL EXPENDITURE PLAN AND**

| Project Details Name of scheme | Capex | | | | | | | |
|---|--------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------|
| | Expenditure incurred till FY 2012-13 | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 H1 | FY 2017-18 H2 | FY 2017-18 Total |
| | Actual | Actual | Actual | Actual | Actual | Actual | Projected | Projected |
| 1 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Scheduled castes development scheme(P) | | | | - | | | | |
| Schedule Tribe Development Scheme (P) | 86.78 | 16.62 | 29.62 | 20.22 | 23.51 | 4.65 | 15.35 | 20.00 |
| Machinery and Equipments (Plan) Motor Vehicles | | 0.83 | | - | | | | |
| Infrastructure development through Electricity Duty (Plan) | 143.34 | 32.28 | 25.30 | 23.91 | 50.13 | 12.66 | 65.00 | 77.66 |
| Erection and Augmentation of 33/11 KV S/S line (Plan) | 20.66 | 3.42 | 2.72 | 1.11 | 0.62 | | 1.00 | 1.00 |
| Normal Development Schemes (Plan) | 65.00 | 10.86 | 9.38 | 9.51 | 8.78 | 2.05 | 11.95 | 14.00 |
| System Improvement Schemes (Plan) | 5.36 | 2.84 | 3.37 | 2.32 | 1.73 | 3.13 | 3.37 | 6.50 |
| Construction of staff quarters and office buildings (Plan) | 1.11 | 0.84 | 1.05 | 1.11 | 0.52 | 0.11 | 0.89 | 1.00 |
| Erection of 220/33 KV 1X50 MVA Sub- Station at Cuncolim | 55.34 | 2.40 | 2.00 | 8.61 | 1.92 | | 0.10 | 0.10 |
| Erection of 220 KV line from Xeldem to Cuncolim | 5.40 | 0.47 | 4.00 | 5.00 | 0.56 | | | |
| Strengthening of 220 KV Transmission Network | | 4.37 | 9.85 | 1.36 | 0.65 | 0.39 | 1.11 | 1.50 |
| Erection of 220/33KV, 1x50 MVA Sub-Station Xeldem | | 0.14 | | - | | | | |
| Accelerated Power Development Reforms Programme | | 0.06 | | 0.02 | | | | |
| Erection of 2nd 100 MVA transformer at Xeldem 220/110 KV S/S | | | | 0.28 | | | | |
| Erection of 220/110/33/11 KV Sub-Station at Verna (New) | | | | | | | 10.00 | 10.00 |
| Erection of 220 KV line from Ponda-Verna-Xeldem | | | | | | | 5.00 | 5.00 |
| Erection of 220/110/33/11 KV Sub-Station at Socorro | | | | | | | | |
| Erection of 220 KV D/C line from Colvale to Socorro | | | | | | | | |
| Erection of 110 KV D/C line from Socorro to Kadamba | | | | | | | | |
| APDRP(State Schemes) | 56.00 | 16.57 | 13.01 | 1.58 | | | | |
| Restructured Accelerated Power Development and Reforms Programme Part A | 13.48 | 4.57 | 2.16 | 16.76 | 42.43 | 28.20 | 27.80 | 56.00 |
| Research training and human research development | | 0.05 | 0.07 | - | | | | |
| Underground Cabling (R-APDRP) during Eleventh Plan period | | 6.73 | 12.90 | 4.34 | 0.86 | | 18.50 | 18.50 |
| Public Lighting Scheme | | 0.03 | 0.68 | 0.51 | 0.32 | 0.22 | 1.28 | 1.50 |
| R-APDRP Part B / IPDS | | | | 7.29 | 0.55 | | 52.07 | 52.07 |
| EHV new Transmission / Sub-Station / Capacitor banks schemes | | | | 30.96 | 30.74 | | 15.00 | 15.00 |
| Total | 452.47 | 103.08 | 116.11 | 134.89 | 163.32 | 51.41 | 228.42 | 279.83 |

**ELECTRICITY DEPARTMENT
MULTI YEAR TARIFF
CAPITAL EXPENDITURE PLAN AND**

Rs.Crores

| Project Details | Capitalisation | | | | | | | | SOURCE OF FINANCING for Capex Scheme | | | | |
|---|---------------------------|--------------|--------------|---------------|---------------|---------------|---------------|------------------|--------------------------------------|---------------------------|----------------------------|------|---------------------------------|
| | Capitalised till FY 12-13 | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 H1 | FY 2017-18 H2 | FY 2017-18 Total | Equity component | | Capital Subsidies / grants | Loan | Consumer Contribution component |
| | Actual | Actual | Actual | Actual | Actual | Actual | Projected | Projected | Electricity Duty Fund | Equity infusion - EDG/GoG | | | |
| 1 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| Scheduled castes development scheme(P) | | | | | | | | | | ✓ | | | |
| Schedule Tribe Development Scheme (P) | 57.48 | 10.00 | 18.00 | 63.60 | 23.51 | 4.65 | 10.00 | 14.65 | | ✓ | | | |
| Machinery and Equipments (Plan) Motor Vehicles | - | 0.83 | | | | | | | | | | | |
| Infrastructure development through Electricity Duty (Plan) | 92.00 | 20.00 | 20.00 | 69.50 | 62.65 | 7.00 | 35.00 | 42.00 | ✓ | | | | |
| Erection and Augmentation of 33/11 KV S/S line (Plan) | 20.00 | | 3.60 | 4.91 | | | 1.00 | 1.00 | | ✓ | | | |
| Normal Development Schemes (Plan) | 61.23 | 7.86 | 7.68 | 12.51 | 8.78 | 2.05 | 11.95 | 14.00 | | ✓ | | | |
| System Improvement Schemes (Plan) | 4.70 | 1.84 | 2.37 | 3.32 | 1.73 | 3.13 | 3.37 | 6.50 | | ✓ | | | |
| Construction of staff quarters and office buildings (Plan) | 1.11 | 0.57 | 1.05 | 1.11 | 0.52 | 0.11 | 0.89 | 1.00 | | ✓ | | | |
| Erection of 220/33 KV 1X50 MVA Sub- Station at Cuncolim | - | 12.66 | - | 53.69 | 1.92 | | 0.10 | 0.10 | | | | ✓ | |
| Erection of 220 KV line from Xeldem to Cuncolim | - | - | 1.29 | 13.58 | 0.56 | | | - | | | | ✓ | |
| Strengthening of 220 KV Transmission Network | - | 2.39 | 9.09 | 3.77 | 0.65 | 0.39 | 1.11 | 1.50 | | ✓ | | | |
| Erection of 220/33KV, 1x50 MVA Sub-Station Xeldem | - | 0.14 | | | | | | | | | | | |
| Accelerated Power Development Reforms Programme | - | 0.06 | | 0.02 | | | | | | ✓ | | | |
| Erection of 2nd 100 MVA transformer at Xeldem 220/110 KV S/S | - | | | 0.28 | | | | | | ✓ | | | |
| Erection of 220/110/33/11 KV Sub-Station at Verna (New) | | | | | | | | | | | | | |
| Erection of 220 KV line from Ponda-Verna-Xeldem | | | | | | | | | | | | | |
| Erection of 220/110/33/11 KV Sub-Station at Socorro | | | | | | | | | | | | | |
| Erection of 220 KV D/C line from Colvale to Socorro | | | | | | | | | | | | | |
| Erection of 110 KV D/C line from Socorro to Kadamba | | | | | | | | | | | | | |
| APDRP(State Schemes) | 49.80 | 10.00 | 8.00 | 17.08 | | | | | | ✓ | | | |
| Restructured Accelerated Power Development and Reforms Programme Part A | 6.43 | | | 18.92 | 42.43 | 28.20 | 27.80 | 56.00 | | | ✓ | | |
| Research training and human research development | - | | | | | | | | | ✓ | | | |
| Underground Cabling (R-APDRP) during Eleventh Plan period | - | | 5.00 | 18.97 | 0.86 | | 18.50 | 18.50 | | ✓ | | | |
| Public Lighting Scheme | - | | 0.68 | 0.51 | 0.32 | 0.22 | 1.28 | 1.50 | | ✓ | | | |
| R-APDRP Part B / IPDS | - | | | | | | 52.07 | 52.07 | | ✓ | ✓ | | |
| EHV new Transmission / Sub-Station / Capacitor banks schemes | - | | | 30.96 | 30.74 | | 3.00 | 3.00 | | ✓ | | | |
| Total | 292.75 | 66.35 | 76.76 | 312.73 | 174.67 | 45.75 | 166.07 | 211.82 | | | | | |

Format-6

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Capital Base and Return

(Rs. Crore)

| Sr. No. | Particulars | True Up | Approved | Approved |
|---------|--|-----------------|-----------------|-----------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 |
| 1 | 2 | 3 | 4 | 5 |
| 1 | Gross block at beginning of the year | 816.84 | 883.20 | 1,065.83 |
| 2 | Opening CWIP | 487.24 | 523.97 | 457.45 |
| 3 | Less accumulated depreciation | 217.42 | 256.98 | 282.85 |
| 4 | Less Opening Debt | - | - | - |
| 4 | Net block at beginning of the year | 1,086.67 | 1,150.18 | 1,240.42 |
| 5 | Less accumulated consumer contribution | | | |
| 6 | Net fixed assets at beginning of the year | 1,086.67 | 1,150.18 | 1,240.42 |
| 7 | Reasonable return @3% of NFA | 32.60 | 11.12 | 37.21 |

| Sr. No. | Particulars | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
|---------|---|--------------|--------------------|--------------------------|---------------|
| | | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | Opening Equity Amount | 266 | 333 | 358 | 436.49 |
| 2 | Equity Addition during year (30% of Capitalization) | 66 | 26 | 41 | 167.85 |
| 3 | Closing Equity Amount | 333 | 358 | 399 | 604.34 |
| 4 | Average Equity Amount | 299 | 345 | 379 | 520.42 |
| 5 | Rate of Return on Equity | 16% | 16% | 16% | 16% |
| 6 | Return on Equity | 47.88 | 55.28 | 60.62 | 83.27 |

Format-6A

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19

Details of GFA and WIP

| Sr. No. | Particulars | WIP | Fixed Assets |
|---------|---|-----------------|-----------------|
| 1 | 2 | 3 | 4 |
| 1 | As on 31st March of previous year (12-13) | 487.24 | 816.84 |
| | Add capital expenditure during FY 2013-14 | 103.08 | |
| | Add capitalised during FY 2013-14 | | 66.35 |
| | Total: | 590.32 | 883.20 |
| | Less transferred to fixed assets | 66.35 | |
| | Less: Deductions from Fixed assets | | - |
| 2 | As on 31st March of Previous year (13-14) | 523.97 | 883.20 |
| | Add capital expenditure during FY 2014-15 | 116.11 | |
| | Add capitalised during FY 2014-15 | | 182.63 |
| | Total: | 640.08 | 1,065.83 |
| | Less transferred to fixed assets | 182.63 | |
| | Less: Deductions from Fixed assets | | - |
| 3 | As on 31st March of Previous year (14-15) | 457.45 | 1,065.83 |
| | Add capital expenditure during FY 2015-16 | 134.89 | |
| | Add capitalised during FY 2015-16 | | 312.73 |
| | Total: | 592.34 | 1,378.56 |
| | Less transferred to fixed assets | 312.73 | |
| | Less: Deductions from Fixed assets | | - |
| 4 | As on 31st March of Previous year (15-16) | 279.61 | 1,378.56 |
| | Add capital expenditure during FY 2016-17 | 163.32 | |
| | Add capitalised during FY 2016-17 | | 174.67 |
| | Total: | 442.93 | 1,553.23 |
| | Less transferred to fixed assets | 174.67 | |
| | Less: Deductions from Fixed assets | | - |
| 5 | As on 31st March of Previous year (16-17) | 268.26 | 1,553.23 |
| | Add capital expenditure during FY 2017-18 | 279.83 | |
| | Add capitalised during FY 2017-18 | | 211.82 |
| | Total: | 548.09 | 1,765.05 |
| | Less transferred to fixed assets | 211.82 | |
| | Less: Deductions from Fixed assets | | - |
| 6 | As on 31st March of Previous year (17-18) | 336.27 | 1,765.05 |
| | Add capital expenditure during FY 2018-19 | 1,158.26 | |
| | Add capitalised during FY 2018-19 | | 559.50 |
| | Total: | 1,494.53 | 2,324.55 |
| | Less transferred to fixed assets | 559.50 | |
| | Less: Deductions from Fixed assets | | - |

Format-6B

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19

Details of Accumulated Depreciation

| Sr. | Particulars | Amount |
|------------|---|---------------|
| A | Accumulated Depreciation | |
| 1 | As on 31st March of previous year (12-13) * | 217.42 |
| 2 | Add: Depreciation for Previous year (13-14) | 39.57 |
| 3 | As on 31st March of Previous year (13-14) | 256.98 |
| 4 | Add: Depreciation for Previous year (14-15) | 25.87 |
| 5 | As on 31st March of Previous year (14-15) | 282.85 |
| 6 | Add: Depreciation for Previous year (15-16) | 38.81 |
| 7 | As on 31st March of Previous year (15-16) | 321.66 |
| 8 | Add: Depreciation for Previous year (16-17) | 76.88 |
| 9 | As on 31st March of Previous year (16-17) | 398.54 |
| 10 | Add: Depreciation for Previous year (17-18) | 87.01 |
| 11 | As on 31st March of Previous year (17-18) | 485.56 |
| 12 | Add: Depreciation for Previous year (18-19) | 107.24 |
| 13 | As on 31st March of Previous year (18-19) | 592.80 |

(Rs. Crore)

Additions to Gross Fixed Assets for Normative Loan, Equity & Depreciation Purpose

| Sr. No. | Particulars | True Up | Particulars | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
|---------|---|--------------|---------------|---------------|--------------------|--------------------------|---------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Additions to GFA | 66.35 | 182.63 | 312.73 | 174.67 | 211.82 | 559.50 |
| 2 | Less: 60% Grant Component of APDRP Part-B / IPDS scheme | 6.04 | 4.80 | 21.61 | 25.46 | 33.60 | - |
| 3 | Less: Schemes out of ED Fund | 20.00 | 20.00 | 69.50 | 62.65 | 42.00 | - |
| 4 | Net Additions to GFA | 40.32 | 157.83 | 221.62 | 86.56 | 136.22 | 559.50 |

Calculation of Opening Balance of Equity

Rs. Crs

| Sr. No. | Particulars | Amount |
|---------|--|--------|
| | Calculation of Opening Balance of Equity | |
| 1 | Cl. Balance of GFA as on 31st March 2015 | 1,066 |
| 2 | Electricity Duty utilised from FY 2008-09 to FY 2010-11 | 64 |
| 3 | Additionl of Electricity Duty Fund from FY 2011-12 to FY 2014-15 | 115 |
| 4 | Op. Balance of Equity as on 1st April 2015 = (1-2-3)*30% | 266 |

Format-7
ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19

Original Cost of Fixed Assets

(Rs. Crs)

| Sr. No. | Assets group | Value of assets at the beginning of previous year * | Addition during previous year | Value of assets sold/ disposed off | Closing balance at the end of previous year | Addition during previous year | Value of assets sold/ disposed off | Closing balance at the end of previous year | Addition during previous year | Value of assets sold/ disposed off | Closing balance at the end of previous year |
|---------|-----------------------------|---|-------------------------------|------------------------------------|---|-------------------------------|------------------------------------|---|-------------------------------|------------------------------------|---|
| | | 2013-14 | 2013-14 | 2013-14 | 2013-14 | 2014-15 | 2014-15 | 2014-15 | 2015-16 | 2015-16 | 2015-16 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | |
| 1 | Land | 6.28 | 0.02 | - | 6.30 | 1.30 | | 7.60 | 2.23 | | 9.84 |
| 2 | Building | 12.45 | - | - | 12.45 | 2.57 | | 15.02 | 4.41 | | 19.43 |
| 3 | R.C.C. Tank | 0.89 | - | - | 0.89 | 0.18 | | 1.08 | 0.32 | | 1.39 |
| 4 | Plant & Machinery | 92.66 | 1.37 | - | 94.02 | 19.44 | | 113.46 | 33.29 | | 146.76 |
| 5 | Transformer above 100KVA | 117.53 | - | - | 117.53 | 24.30 | | 141.83 | 41.61 | | 183.44 |
| 6 | Transformer below 100KVA | 29.50 | 12.07 | - | 41.57 | 8.60 | | 50.16 | 14.72 | | 64.88 |
| 7 | Static Machine Tools | 2.42 | - | - | 2.42 | 0.50 | | 2.92 | 0.86 | | 3.78 |
| 8 | Self Propelled vehicles | 3.41 | - | - | 3.41 | 0.70 | | 4.11 | 1.21 | | 5.32 |
| 9 | Switch gear & S/S Equipment | 61.57 | - | - | 61.57 | 12.73 | | 74.30 | 21.80 | | 96.11 |
| 10 | Meters | 74.78 | - | - | 74.78 | 15.46 | | 90.24 | 26.48 | | 116.71 |
| 11 | Office furniture | 1.12 | 0.05 | - | 1.17 | 0.24 | | 1.42 | 0.42 | | 1.83 |
| 12 | Office Equipments | 1.39 | 0.08 | - | 1.47 | 0.30 | | 1.77 | 0.52 | | 2.29 |
| 13 | LT & HT Overhead Lines | 168.21 | 25.77 | - | 193.98 | 40.11 | | 234.09 | 68.69 | | 302.77 |
| 14 | Lightening Arrestors | 8.09 | 0.03 | - | 8.12 | 1.68 | | 9.80 | 2.88 | | 12.68 |
| 15 | Batteries | 0.44 | 0.09 | - | 0.54 | 0.11 | | 0.65 | 0.19 | | 0.84 |
| 16 | Street light fixtures | 29.94 | 4.17 | - | 34.11 | 7.05 | | 41.16 | 12.08 | | 53.24 |
| 17 | Service lines | 17.92 | - | - | 17.92 | 3.71 | | 21.63 | 6.35 | | 27.97 |
| 18 | Under Ground Lines | 188.26 | - | - | 188.26 | 38.93 | | 227.19 | 66.66 | | 293.84 |
| 19 | Sub stations | - | 12.66 | - | 12.66 | 2.62 | | 15.28 | 4.48 | | 19.76 |
| 20 | Testing Equipments | - | 8.47 | - | 8.47 | 1.75 | | 10.22 | 3.00 | | 13.21 |
| 21 | IT Equipments | - | 0.10 | - | 0.10 | 0.02 | | 0.13 | 0.04 | | 0.16 |
| 22 | Distribution acceseries | - | 1.48 | - | 1.48 | 0.31 | | 1.78 | 0.52 | | 2.30 |
| | Total | 816.84 | 66.35 | - | 883.20 | 182.63 | - | 1,065.83 | 312.73 | - | 1,378.56 |

Format-7
ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19

Original Cost of Fixed Assets

(Rs. Crs)

| Sr. No. | Assets group | Addition during previous year | Value of assets sold/ disposed off | Closing balance at the end of previous year | Addition during previous year | Value of assets sold/ disposed off | Closing balance at the end of previous year | Addition during previous year | Value of assets sold/ disposed off | Closing balance at the end of previous year |
|---------|-----------------------------|-------------------------------|------------------------------------|---|-------------------------------|------------------------------------|---|-------------------------------|------------------------------------|---|
| | | 2016-17 | 2016-17 | 2016-17 | 2017-18 | 2017-18 | 2017-18 | 2018-19 | 2018-19 | 2018-19 |
| 1 | 2 | | | | | | | | | |
| 1 | Land | 1.25 | | 11.08 | 1.51 | | 12.59 | 3.99 | | 16.59 |
| 2 | Building | 2.46 | | 21.89 | 2.99 | | 24.88 | 7.89 | | 32.77 |
| 3 | R.C.C. Tank | 0.18 | | 1.57 | 0.21 | | 1.78 | 0.56 | | 2.35 |
| 4 | Plant & Machinery | 18.59 | | 165.35 | 22.55 | | 187.90 | 59.56 | | 247.46 |
| 5 | Transformer above 100KVA | 23.24 | | 206.68 | 28.19 | | 234.87 | 74.45 | | 309.32 |
| 6 | Transformer below 100KVA | 8.22 | | 73.10 | 9.97 | | 83.07 | 26.33 | | 109.40 |
| 7 | Static Machine Tools | 0.48 | | 4.25 | 0.58 | | 4.84 | 1.53 | | 6.37 |
| 8 | Self Propelled vehicles | 0.67 | | 5.99 | 0.82 | | 6.81 | 2.16 | | 8.97 |
| 9 | Switch gear & S/S Equipment | 12.18 | | 108.28 | 14.77 | | 123.05 | 39.01 | | 162.06 |
| 10 | Meters | 14.79 | | 131.50 | 17.93 | | 149.44 | 47.37 | | 196.81 |
| 11 | Office furniture | 0.23 | | 2.07 | 0.28 | | 2.35 | 0.74 | | 3.09 |
| 12 | Office Equipments | 0.29 | | 2.58 | 0.35 | | 2.93 | 0.93 | | 3.86 |
| 13 | LT & HT Overhead Lines | 38.36 | | 341.14 | 46.52 | | 387.66 | 122.88 | | 510.54 |
| 14 | Lightening Arrestors | 1.61 | | 14.29 | 1.95 | | 16.24 | 5.15 | | 21.38 |
| 15 | Batteries | 0.11 | | 0.94 | 0.13 | | 1.07 | 0.34 | | 1.41 |
| 16 | Street light fixtures | 6.75 | | 59.98 | 8.18 | | 68.16 | 21.61 | | 89.77 |
| 17 | Service lines | 3.54 | | 31.51 | 4.30 | | 35.81 | 11.35 | | 47.16 |
| 18 | Under Ground Lines | 37.23 | | 331.08 | 45.15 | | 376.23 | 119.26 | | 495.49 |
| 19 | Sub stations | 2.50 | | 22.27 | 3.04 | | 25.30 | 8.02 | | 33.32 |
| 20 | Testing Equipments | 1.67 | | 14.89 | 2.03 | | 16.92 | 5.36 | | 22.28 |
| 21 | IT Equipments | 0.02 | | 0.18 | 0.03 | | 0.21 | 0.07 | | 0.28 |
| 22 | Distribution accessories | 0.29 | | 2.59 | 0.35 | | 2.95 | 0.93 | | 3.88 |
| | Total | 174.67 | - | 1,553.23 | 211.82 | - | 1,765.05 | 559.50 | - | 2,324.55 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Works in Progress

(Rs. Crs)

| Sr. No. | Particulars | True Up | Approved | Approved | | Current Year Provisional | Ensuing Year |
|---------|-----------------------------|------------|------------|------------|------------|--------------------------|--------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | | | | |
| 1 | Opening Balance | 487.24 | 506.12 | 439.60 | 261.76 | 250.41 | 318.42 |
| 2 | Add: New Investments | 103.08 | 116.11 | 134.89 | 163.32 | 279.83 | 1,158.26 |
| 3 | Total | 590.32 | 622.23 | 574.49 | 425.08 | 530.24 | 1,476.68 |
| 4 | Less Investment Capitalized | 66.35 | 182.63 | 312.73 | 174.67 | 211.82 | 559.50 |
| 5 | Other Entries in CWIP* | 17.85 | | | | | |
| 7 | Closing Balance | 506.12 | 439.60 | 261.76 | 250.41 | 318.42 | 917.18 |
| | | | | | | | |

* Other entries : Material lying at site, advance to contractor/Supplier etc

Format-9

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Interest Capitalised

(Rs. Crs)

| Sr. No. | Interest Capitalized | True Up | Approved | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
|---------|---------------------------------------|------------|------------|------------|--------------------|--------------------------|--------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | WIP | 506.12 | 439.60 | 261.76 | 250.41 | 318.42 | 917.18 |
| 2 | GFA* at the end of the year | 883.20 | 1,065.83 | 1,378.56 | 1,553.23 | 1,765.05 | 2,324.55 |
| 3 | WIP+GFA at the end of the year | 1,389.32 | 1,505.43 | 1,640.32 | 1,803.64 | 2,083.47 | 3,241.73 |
| 4 | Interest (excluding interest on WCL*) | 22.37 | 24.12 | 32.19 | 49.90 | 49.44 | 107.19 |
| 5 | Interest Capitalized | - | - | - | - | - | - |
| | | | | | | | |

**WIP:Works-in-Progress; GFA:Gross Fixed Assets; WCL:Working capital loan*

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Details of loans for FY 2013-14 (Actuals)

(Rs. Crs)

| Sl. No. | Particulars (source) | Opening balance | Rate of interest * | Addition during the year | Repayment during the year | Closing balance | Amount of Interest paid |
|---------|---|-----------------|--------------------|--------------------------|---------------------------|-----------------|-------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 |
| 1 | SLR Bonds | | | | | | |
| 2 | Non SLR Bonds | | | | | | |
| 3 | LIC | | | | | | |
| 4 | REC | | | | | | |
| 5 | Commercial Banks | | | | | | |
| 6 | Letter of Credit Charges | | | | | | |
| 7 | Lease rental | | | | | | |
| 8 | PFC | | | | | | |
| 9 | GPF | | | | | | |
| 10 | CSS | | | | | | |
| 11 | Working capital loan | | | | N.A. | | |
| 12 | Others | | | | | | |
| 13 | Total | | | | | | |
| 14 | Add Govt. loan | | | | | | |
| | -State Govt. | | | | | | |
| | -Central Govt. | | | | | | |
| | Total | | | | | | |
| 15 | Total (13+14) | | | | | | |
| 16 | Less capitalization | | | | | | |
| 17 | Net interest | | | | | | |
| 18 | Add prior period | | | | | | |
| 19 | Total interest | | | | | | |
| 20 | Finance charges | | | | | | 1.48 |
| 21 | Total Interest and Finance Charges | - | | - | - | - | 1.48 |

Details of loans for FY 2014-15 (Actuals)

(Rs. Crore)

| Sl. No. | Particulars (source) | Opening balance | Rate of interest * | Addition during the year | Repayment during the year | Closing balance | Amount of Interest paid |
|---------|---|-----------------|--------------------|--------------------------|---------------------------|-----------------|-------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 |
| 1 | SLR Bonds | | | | | | |
| 2 | Non SLR Bonds | | | | | | |
| 3 | LIC | | | | | | |
| 4 | REC | | | | | | |
| 5 | Commercial Banks | | | | | | |
| 6 | Letter of Credit Charges | | | | | | |
| 7 | Lease rental | | | | | | |
| 8 | PFC | | | | | | |
| 9 | GPF | | | | | | |
| 10 | CSS | | | | | | |
| 11 | Working capital loan | | | | N.A. | | |
| 12 | Others | | | | | | |
| 13 | Total | | | | | | |
| 14 | Add Govt. loan | | | | | | |
| | -State Govt. | | | | | | |
| | -Central Govt. | | | | | | |
| | Total | | | | | | |
| 15 | Total (13+14) | | | | | | |
| 16 | Less capitalization # | | | | | | |
| 17 | Net interest | | | | | | |
| 18 | Add prior period | | | | | | |
| 19 | Total interest | | | | | | |
| 20 | Finance charges | | | | | | |
| 21 | Total Interest and Finance Charges | - | - | - | - | - | - |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Details of loans for FY 2015-16 (Approved)

(Rs. Crore)

| Sl. No. | Particulars (source) | Opening balance | Rate of interest * | Addition during the year | Repayment during the year | Closing balance | Amount of Interest paid |
|---------|---|-----------------|--------------------|--------------------------|---------------------------|-----------------|-------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 |
| 1 | SLR Bonds | | | | | | |
| 2 | Non SLR Bonds | | | | | | |
| 3 | LIC | | | | | | |
| 4 | REC | | | | | - | - |
| 5 | Commercial Banks | | | | | | |
| 6 | Letter of Credit Charges | | | | | | |
| 7 | Lease rental | | | | | - | |
| 9 | GPF | | | | | | |
| 10 | CSS | | | | | | |
| 11 | Working capital loan | | | | | | |
| 12 | Others | | | | | | |
| 13 | Total | - | | - | - | - | - |
| | Add Govt. loan | | | | | | |
| 14 | -State Govt. | | | | | | |
| | -Central Govt. | | | | | | |
| | Total | - | - | - | - | - | - |
| 15 | Total (13+14) | - | - | - | - | - | - |
| 16 | Less capitalization # | | | | | | |
| 17 | Net interest | - | - | - | - | - | - |
| 18 | Add prior period | | | | | | |
| 19 | Total interest | - | - | - | - | - | - |
| 20 | Finance charges | | | | | | - |
| 21 | Total Interest and Finance Charges | - | - | - | - | - | - |

Details of loans for FY 2016-17 (Provisional Actual)

(Rs. Crore)

| Sl. No. | Particulars (source) | Opening balance | Rate of interest * | Addition during the year | Repayment during the year | Closing balance | Amount of Interest paid |
|---------|---|-----------------|--------------------|--------------------------|---------------------------|-----------------|-------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 |
| 1 | SLR Bonds | - | | | | | - |
| 2 | Non SLR Bonds | - | | | | | - |
| 3 | LIC | - | | | | | - |
| 4 | REC | - | | | | - | - |
| 5 | Commercial Banks | - | | | | | - |
| 6 | Letter of Credit Charges | - | | | | | - |
| 7 | Lease rental | - | | | - | - | - |
| 8 | Working capital loan | - | | | | | - |
| 9 | Others | - | | | | | - |
| 10 | Total | - | | - | - | - | - |
| | Add Govt. loan | - | | | | | - |
| 11 | -State Govt. | - | | | | | - |
| | -Central Govt. | - | | | | | - |
| | Total | - | - | - | - | - | - |
| 12 | Total (13+14) | - | | - | - | - | - |
| 13 | Less capitalization # | - | | | | | |
| 14 | Net interest | - | - | - | - | - | - |
| 15 | Add prior period | - | | | | | |
| 16 | Total interest | - | - | - | - | - | - |
| 17 | Finance charges | - | | | | | - |
| 18 | Total Interest and Finance Charges | - | - | - | - | - | - |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Details of loans for FY 2017-18 (Estimated)

(Rs. Crore)

| Sl. No. | Particulars (source) | Opening balance | Rate of interest * | Addition during the year | Repayment during the year | Closing balance | Amount of Interest paid |
|---------|---|-----------------|--------------------|--------------------------|---------------------------|-----------------|-------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 |
| 1 | SLR Bonds | - | | | | - | - |
| 2 | Non SLR Bonds | - | | | | - | - |
| 3 | LIC | - | | | | - | - |
| 4 | REC | - | | | | - | - |
| 5 | Commercial Banks | - | | | | - | - |
| 6 | Letter of Credit Charges | - | | | | - | - |
| 7 | Lease rental | - | | | - | - | - |
| 8 | Working capital loan | - | | | | | |
| 9 | Others/ JICA | - | | | | | |
| 10 | Total | - | | - | - | - | 4.22 |
| 11 | Add Govt. loan | - | | | | - | - |
| | -State Govt. | - | | | | - | - |
| | -Central Govt. | - | | | | - | - |
| | Total | - | - | - | - | - | - |
| 12 | Total (13+14) | - | | - | - | - | 4.22 |
| 13 | Less capitalization # | | | | | | |
| 14 | Net interest | - | | - | - | - | 4.22 |
| 15 | Add prior period | | | | | | |
| 16 | Total interest | - | - | - | - | - | 4.22 |
| 17 | Finance charges | | | | | | - |
| 18 | Total Interest and Finance Charges | - | - | - | - | - | 4.22 |

Details of loans for FY 2018-19 (Approved)

(Rs. Crore)

| Sl. No. | Particulars (source) | Opening balance | Rate of interest * | Addition during the year | Repayment during the year | Closing balance | Amount of Interest paid |
|---------|---|-----------------|--------------------|--------------------------|---------------------------|-----------------|-------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 |
| 1 | SLR Bonds | - | - | | | - | - |
| 2 | Non SLR Bonds | - | - | | | - | - |
| 3 | LIC | - | - | | | - | - |
| 4 | REC | - | - | | | - | - |
| 5 | Commercial Banks | - | - | | | - | - |
| 6 | Letter of Credit Charges | - | - | | | - | - |
| 7 | Lease rental | - | 0% | | - | - | - |
| 8 | Working capital loan | - | | | | - | - |
| 9 | Others/JICA | - | 0% | | | - | - |
| 10 | Total | - | | - | - | - | - |
| 11 | Add Govt. loan | - | | | | | |
| | -State Govt. | - | | | | | |
| | -Central Govt. | - | | | | | |
| | Total | - | - | - | - | - | - |
| 12 | Total (13+14) | - | | - | - | - | - |
| 13 | Less capitalization # | | | | | | |
| 14 | Net interest | - | | - | - | - | - |
| 15 | Add prior period | | | | | | |
| 16 | Total interest | - | - | - | - | - | 107.19 |
| 17 | Finance charges | | | | | | |
| 18 | Total Interest and Finance Charges | - | - | - | - | - | 107.19 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Normative Loan Recalculation

(Rs. Crs)

| Sr. No. | Particulars | True Up | Approved | Approved | Provisional | Estimated | Ensuing Year |
|----------|---|---------------|---------------|---------------|---------------|---------------|---------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | | | | |
| 1 | Opening Normative Loan | 148.07 | 161.49 | 314.67 | 438.34 | 422.05 | 430.39 |
| 2 | Add: Normative Loan during the Year | 28.22 | 110.48 | 155.13 | 60.59 | 95.35 | 391.65 |
| 3 | Less: Normative Repayment | 14.81 | 16.15 | 31.47 | 76.88 | 87.01 | 107.24 |
| 4 | Closing Normative Loan | 161.49 | 255.82 | 438.34 | 422.05 | 430.39 | 714.80 |
| 4 | Average Normative Loan | 154.78 | 208.65 | 376.50 | 430.19 | 426.22 | 572.59 |
| 5 | Rate of Interest (@SBAR rate) | 14.45% | 14.75% | | 11.60% | 11.60% | 11.60% |
| 6 | Interest on Normative Loan | 22.37 | 24.12 | 32.19 | 49.90 | 49.44 | 107.19 |
| 7 | Other Finance Charges | 1.48 | - | - | | | - |
| 8 | Total Interest & Finance Charges | 23.84 | 24.12 | 32.19 | 49.90 | 49.44 | 107.19 |

Format-11

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Information regarding restructuring of outstanding loans

| Sr. No. | Source of loan | Amount of original loan (Rs. Crores) | Old rate of interest | Amount already restructured | Revised rate of interest | Amount now being restructured (Rs. Crores) | New rate of interest |
|---------|----------------|--------------------------------------|----------------------|-----------------------------|--------------------------|--|----------------------|
| | | | | (Rs. Crores) | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | | N.A | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Format 12
ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Value of Assets and Depreciation Charges on total capitalisaiton

(Rs Crs)

| Sr. No. | Name of the Assets | Rate of Dep* | True Up | | Approved | | Approved | | Provisional Actual | | Current Year Provisional | | Ensuing Year | |
|---------|-----------------------------|--------------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|
| | | | FY 2013-14 | | FY 2014-15 | | FY 2015-16 | | FY 2016-17 | | FY 2017-18 | | FY 2018-19 | |
| | | | Assets value at the beginning of the year | Depreciation charges | Assets value at the beginning of the year | Depreciation charges | Assets value at the beginning of the year | Depreciation charges | Assets value at the beginning of the year | Depreciation charges | Assets value at the beginning of the year | Depreciation charges | Assets value at the beginning of the year | Depreciation charges |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | Land | | 6.28 | | 6.30 | | 7.60 | 0.28 | 9.84 | | 11.08 | | 12.59 | |
| 2 | Building | 3.34% | 12.45 | 0.37 | 12.45 | 0.37 | 15.02 | 0.55 | 19.43 | 0.69 | 21.89 | 0.78 | 24.88 | 0.96 |
| 3 | R.C.C. Tank | 5.28% | 0.89 | 0.04 | 0.89 | 0.03 | 1.08 | 0.04 | 1.39 | 0.08 | 1.57 | 0.09 | 1.78 | 0.11 |
| 4 | Plant & Machinery | 5.28% | 92.66 | 4.42 | 94.02 | 2.77 | 113.46 | 4.13 | 146.76 | 8.24 | 165.35 | 9.33 | 187.90 | 11.49 |
| 5 | Transformer above 100KVA | 5.28% | 117.53 | 5.58 | 117.53 | 3.47 | 141.83 | 5.16 | 183.44 | 10.30 | 206.68 | 11.66 | 234.87 | 14.37 |
| 6 | Transformer below 100KVA | 5.28% | 29.50 | 1.67 | 41.57 | 1.23 | 50.16 | 1.83 | 64.88 | 3.64 | 73.10 | 4.12 | 83.07 | 5.08 |
| 7 | Static Machine Tools | 5.28% | 2.42 | 0.11 | 2.42 | 0.07 | 2.92 | 0.11 | 3.78 | 0.21 | 4.25 | 0.24 | 4.84 | 0.30 |
| 8 | Self Propelled vehicles | 9.50% | 3.41 | 0.29 | 3.41 | 0.10 | 4.11 | 0.15 | 5.32 | 0.54 | 5.99 | 0.61 | 6.81 | 0.75 |
| 9 | Switch gear & S/S Equipment | 5.28% | 61.57 | 2.93 | 61.57 | 1.82 | 74.30 | 2.71 | 96.11 | 5.40 | 108.28 | 6.11 | 123.05 | 7.53 |
| 10 | Meters | 5.28% | 74.78 | 3.55 | 74.78 | 2.21 | 90.24 | 3.29 | 116.71 | 6.55 | 131.50 | 7.42 | 149.44 | 9.14 |
| 11 | Office furniture | 6.33% | 1.12 | 0.07 | 1.17 | 0.03 | 1.42 | 0.05 | 1.83 | 0.12 | 2.07 | 0.14 | 2.35 | 0.17 |
| 12 | Office Equipments | 6.33% | 1.39 | 0.08 | 1.47 | 0.04 | 1.77 | 0.06 | 2.29 | 0.15 | 2.58 | 0.17 | 2.93 | 0.21 |
| 13 | LT & HT Overhead Lines | 5.28% | 168.21 | 8.46 | 193.98 | 5.72 | 234.09 | 8.52 | 302.77 | 17.00 | 341.14 | 19.24 | 387.66 | 23.71 |
| 14 | Lightening Arrestors | 5.28% | 8.09 | 0.38 | 8.12 | 0.24 | 9.80 | 0.36 | 12.68 | 0.71 | 14.29 | 0.81 | 16.24 | 0.99 |
| 15 | Batteries | 5.28% | 0.44 | 0.02 | 0.54 | 0.02 | 0.65 | 0.02 | 0.84 | 0.05 | 0.94 | 0.05 | 1.07 | 0.07 |
| 16 | Street light fixtures | 5.28% | 29.94 | 1.44 | 34.11 | 1.01 | 41.16 | 1.50 | 53.24 | 2.99 | 59.98 | 3.38 | 68.16 | 4.17 |
| 17 | Service lines | 5.28% | 17.92 | 0.85 | 17.92 | 0.53 | 21.63 | 0.79 | 27.97 | 1.57 | 31.51 | 1.78 | 35.81 | 2.19 |
| 18 | Under Ground Lines | 5.28% | 188.26 | 8.95 | 188.26 | 5.55 | 227.19 | 8.27 | 293.84 | 16.50 | 331.08 | 18.67 | 376.23 | 23.01 |
| 19 | Sub stations | 5.28% | - | 0.25 | 12.66 | 0.37 | 15.28 | 0.56 | 19.76 | 1.11 | 22.27 | 1.26 | 25.30 | 1.55 |
| 20 | Testing Equipments | 6.33% | - | 0.03 | 8.47 | 0.25 | 10.22 | 0.37 | 13.21 | 0.89 | 14.89 | 1.01 | 16.92 | 1.24 |
| 21 | IT Equipments | 6.33% | - | 0.01 | 0.10 | 0.00 | 0.13 | 0.00 | 0.16 | 0.01 | 0.18 | 0.01 | 0.21 | 0.02 |
| 22 | Distribution acceseries | 5.28% | - | 0.04 | 1.48 | 0.04 | 1.78 | 0.06 | 2.30 | 0.13 | 2.59 | 0.15 | 2.95 | 0.18 |
| | Total | | 816.84 | 39.57 | 883.20 | 25.87 | 1,065.83 | 38.81 | 1,378.56 | 76.88 | 1,553.23 | 87.01 | 1,765.05 | 107.24 |

Format-12
Electricity Department - Goa
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Depreciation & Accumulated Depreciation Charges as per Norms

(Rs. Crs)

| Sr. No. | Depreciaton | True Up | | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
|----------|--|---------------|-----------------|-----------------|--------------------|--------------------------|-----------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Opening Gross Fixed Asset | 816.84 | 857.16 | 1,014.99 | 1,236.61 | 1,323.17 | 1,459.39 |
| 2 | Add: Assets added during year (excl grant & ED Fund component) | 40.32 | 157.83 | 221.62 | 86.56 | 136.22 | 559.50 |
| 3 | Less: Withdrawal during year | - | - | | | | |
| 4 | Closing Gross Fixed Asset | 857.16 | 1,014.99 | 1,236.61 | 1,323.17 | 1,459.39 | 2,018.89 |
| 5 | Average Gross Fixed Asset | 837.00 | 936.08 | 1,125.80 | 1,279.89 | 1,391.28 | 1,739.14 |
| 6 | Average Depreciation Rate | 4.73% | 2.76% | | 5.28% | 5.28% | 6.17% |
| | Total Depreciation for year | 39.57 | 25.87 | 38.81 | 67.58 | 73.46 | 107.24 |

(Rs. Crs)

| Sr. No. | Accumulated Depreciation | True Up | | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
|----------|---|---------------|---------------|---------------|--------------------|--------------------------|---------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Opening Accumulated Depreciation | 217.42 | 256.98 | 282.85 | 321.66 | 389.24 | 462.70 |
| 2 | Add: Depreciation for the year | 39.57 | 25.87 | 38.81 | 67.58 | 73.46 | 107.24 |
| 3 | Closing Accumulated Depreciation | 256.98 | 282.85 | 321.66 | 389.24 | 462.70 | 569.94 |

Format-13

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Repair and Maintenance Expenses

(Rs. Crs)

| Sr. No | Particulars | True Up | Approved | Approved | Provisional Actual | Current Year Actual | Current Year Esimated | Current Year Provisional | Ensuing Year |
|--------|--|--------------|--------------|--------------|--------------------|---------------------|-----------------------|--------------------------|--------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 H1 | FY 2017-18 H2 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | | | | | | |
| 1 | Plant & machinery | | | | | | | | |
| 2 | Building | | | | 1.49 | 0.68 | 0.82 | 1.50 | |
| 3 | Hydraulic works & civil works | | | | | | | - | |
| 4 | Line cable & network | | | | 0.09 | 0.01 | | 0.01 | |
| 5 | Vehicles | 21.45 | 20.73 | 12.68 | 5.92 | 2.73 | 3.28 | 6.02 | 45.60 |
| 6 | Furnitures & Fixtures | | | | | | | - | |
| 7 | Office Equipments | | | | | | | - | |
| 8 | Operating Expenses | | | | | | | - | |
| 9 | Minor R&M works | | | | 19.49 | 10.05 | 12.48 | 22.53 | |
| 10 | Total | 21.45 | 20.73 | 12.68 | 26.98 | 13.47 | 16.59 | 30.06 | 45.60 |
| 11 | Add/Deduct share of others (To be specified) | | | | | | | - | |
| 12 | Total expenses | 21.45 | 20.73 | 12.68 | 26.98 | 13.47 | 16.59 | 30.06 | 45.60 |
| 13 | Less : Capitalized | | | | | | | - | |
| 14 | Net expenses | 21.45 | 20.73 | 12.68 | 26.98 | 13.47 | 16.59 | 30.06 | 45.60 |
| 15 | Add: prior period | | | | | | | - | |
| 16 | Total expenses charged to revenue as R&M expenses | 21.45 | 20.73 | 12.68 | 26.98 | 13.47 | 16.59 | 30.06 | 45.60 |

Format-14

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Total Number of Employees

| Sr. No. | Particulars | True Up | Approved | Approved | Provisional Actual | Current Year Actual | Current Year Esimated | Ensuing Year |
|----------|---|--------------|--------------|--------------|--------------------|---------------------|-----------------------|--------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 H1 | FY 2017-18 H2 | FY 2018-19 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | Number of employees as on 1st April | 5,015 | 4,910 | 5,845 | 5,769 | 6,566 | 6,496 | 6,648 |
| 2 | Employees on deputation/ foreign service as on 1st April | - | - | | 738 | 622 | 622 | 622 |
| 3 | Total number of employees as on 1st April (1+2) | 5,015 | 4,910 | 5,845 | 6,507 | 7,188 | 7,118 | 7,270 |
| 4 | Permanent Posts filled during the year | 87 | 1,079 | 95 | 919 | - | 160 | |
| 5 | Contract Employees as on 31st March | - | - | 738 | 622 | 622 | 622 | 622 |
| 6 | Number of employees retired/ retiring/ Expired/VR/Regined during the year | 192 | 144 | 171 | 122 | 70 | 8 | |
| 7 | Number of employees at the end of the year (4-5) | 4,910 | 5,845 | 6,507 | 7,188 | 7,118 | 7,270 | 7,270 |

Format-15

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Employee Cost

(Rs. Crs)

| Sr.No | Particulars | True Up | Approved | Approved | Provisional | Current Year | Current Year | Current | Ensuing |
|-------|--------------------------------------|---------------|---------------|---------------|---------------|------------------|------------------|---------------|---------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | Actual | Actual | Esimated | Year | Year |
| | | | | | FY 2016-17 | FY 2017-18 H1 | FY 2017-18 H2 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Salaries & Allowances | | | | | | | | |
| 1 | Salary | | | | | | | | |
| 2 | Wages | | | | | | | | |
| 3 | Stipend | 170.07 | 152.42 | 161.53 | 230.92 | 171.88 | 125.00 | 296.88 | 270.41 |
| 4 | Transport Allowance | | | | | | | | |
| 5 | Overtime allowance | | | | | | | | |
| 6 | Total | 170.07 | 152.42 | 161.53 | 230.92 | 171.88 | 125.00 | 296.88 | 270.41 |
| 7 | Less: Add/Deduct share of others | | | | | | | | |
| 8 | Total | 170.07 | 152.42 | 161.53 | 230.92 | 171.88 | 125.00 | 296.88 | 270.41 |
| 9 | Less: Amount capitalized | | | | - | - | - | | |
| 10 | Net amount | 170.07 | 152.42 | 161.53 | 230.92 | 171.88 | 125.00 | 296.88 | 270.41 |
| 11 | Add: Pension/ DA and other Provision | | | | | - | - | - | - |
| 12 | Total Employee Expenses | 170.07 | 152.42 | 161.53 | 230.92 | 171.88 | 125.00 | 296.88 | 270.41 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Administration and General Expenses

(Rs. Crs)

| Sr. No. | Particulars | True Up | Approved | Approved | Provisional Actual | Current Year Actual | Current Year Esimated | Current Year Provisional | Ensuing Year |
|---------|--|--------------|-------------|--------------|--------------------|---------------------|-----------------------|--------------------------|--------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 H1 | FY 2017-18 H2 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | | | | | | |
| 1 | Travelling Expenses | 0.39 | | | 0.27 | 0.08 | 0.23 | 0.31 | 10.81 |
| 2 | Office Expenses | 13.51 | | | 14.23 | 10.08 | 4.61 | 14.70 | |
| 3 | Regulatory Expenses (License + Petition Fees) | | | | 2.29 | 1.73 | 5.20 | 6.92 | |
| 4 | Petrol,Oil,Lubricant (P.O.L) | 0.00 | | | | - | - | - | |
| 5 | Rent,Rates & Taxes | 0.29 | | | 0.36 | 0.15 | 0.33 | 0.48 | |
| 6 | Advertisement & Publicity | 0.26 | | | 0.12 | 0.10 | 0.06 | 0.16 | |
| 7 | Professional & Special Services | 0.97 | | | | - | - | - | |
| 8 | Other A&G Charges | 1.46 | | | 0.35 | - | - | - | |
| 9 | Overtime Allowance | 0.00 | | | | - | - | - | |
| 10 | Minor Works | 1.66 | | | | - | - | - | |
| 11 | Legal, Professional & Special Service Charges | | | | 0.59 | 0.01 | 1.09 | 1.10 | |
| 12 | Total | 18.54 | - | - | 18.20 | 12.16 | 11.52 | 23.67 | 10.81 |
| 13 | Add/Deduct share of others (to be specified) | | | | | | | - | |
| 14 | Total expenses | 18.54 | - | - | 18.20 | 12.16 | 11.52 | 23.67 | 10.81 |
| 15 | Less: Capitalized | | | | | | | - | |
| 16 | Net expenses | 18.54 | 9.46 | 10.03 | 18.20 | 12.16 | 11.52 | 23.67 | 10.81 |
| 17 | Add: Prior period | | | | | | | - | |
| 18 | Total A&G Expenses charged to revenue | 18.54 | 9.46 | 10.03 | 18.20 | 12.16 | 11.52 | 23.67 | 10.81 |

Format-17

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION
FOR FY 2018-19

Information regarding Bad and Doubtful Debts

(Rs. Crs)

| Sr. No. | Particulars | True Up | |
|---------|--|------------|------------|
| | | FY 2013-14 | FY 2014-15 |
| 1 | 2 | 3 | 4 |
| 1 | Amount of receivables (audited) | 296.48 | |
| 2 | Bad and doubtful debts actually written-off in the books of accounts | - | |
| 3 | Provision made for debts in ARR | 2.96 | - |

Format-18

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-
19

Information regarding Working Capital for Previous and Current year as per JERC
(Terms and Conditions for Determination of Tariff) Regulations, 2009

(Rs. Crs)

| Sr. No. | Particulars | True Up | Approved | Approved |
|---------|---|--------------|-------------|--------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 |
| 1 | 2 | 3 | 4 | |
| 1 | Power Purchase Cost - 1 Month | 89.87 | - | 87.36 |
| 2 | Employee Cost - 1 Month | 14.17 | - | 13.46 |
| 3 | Administration & General Expenses - 1 Month | 1.55 | - | 0.84 |
| 4 | R&M Cost - 1 Month | 1.79 | - | 1.06 |
| 5 | Less: Security Deposit Opening Bal. | 17.17 | 21.09 | 86.83 |
| 6 | Total | 90.21 | | 15.89 |
| 7 | Interest Rate | 14.45% | | 14.75% |
| 8 | Interest on working capital | 13.04 | 1.80 | 2.34 |

Format - 18

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-
19

Information regarding Working Capital for ensuing year as per JERC (Multi Year
Distribution Tariff) Regulations, 2014

(Rs. Crs)

| Sr. No. | Particulars | Provisional Actual | Current Year Provisional | Ensuing Year |
|---------|--|--------------------|--------------------------|---------------|
| | | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | 5 |
| 1 | Two Months Receivable | 240.51 | 284.16 | 265.62 |
| 2 | Power Purchase Cost for one month | 110.67 | 101.01 | 118.16 |
| 3 | Inventory for two months | | | |
| 4 | Total working Capital requirement | 129.84 | 183.16 | 147.46 |
| 5 | Less: Security Deposit | 27.33 | 37.86 | 43.87 |
| 6 | Net working Capital requirement | 102.51 | 145.29 | 103.59 |
| 7 | Interest Rate | 9.15% | 8.00% | 8.00% |
| 8 | Interest on working capital | 9.38 | 11.62 | 12.36 |

Format-18-A

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Information regarding Security Deposits from Consumers

(Rs. Crs)

| Sr. No. | Particulars | Previous Years | | True Up | Approved | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
|---------|---------------------------------------|----------------|--------------|--------------|--------------|--------------|--------------------|--------------------------|--------------|
| | | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | | | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Opening Security Deposit | 11.86 | 16.58 | 17.17 | 21.09 | 21.09 | 22.23 | 32.44 | 43.29 |
| 2 | Add: Deposits during the Year | 7.11 | 4.85 | 8.26 | | 1.14 | 15.67 | 17.03 | 1.16 |
| 3 | Less: Deposits refunded | 2.38 | 4.27 | 4.33 | | | 3.91 | 1.91 | |
| 4 | Less: Deposits in form of BG/FDR | | | | | | 1.55 | 4.26 | |
| 5 | Closing Security Deposit | 16.58 | 17.17 | 21.09 | 21.09 | 22.23 | 32.44 | 43.29 | 44.45 |
| 6 | Bank Rate | 8.50% | 8.50% | 8.50% | 8.50% | | 7.75% | 7.75% | |
| 7 | Interest on Security Deposit * | 1.21 | 1.43 | 1.63 | 6.82 | 7.43 | 2.12 | 2.93 | 7.02 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Provisions of Interest on Security Deposits from Consumers

Rs.Crs

| Sr. No. | Particulars | Previous Years | | True Up | Approved | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
|---------|---|----------------|--------------|--------------|--------------|--------------|--------------------|--------------------------|--------------|
| | | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | | | 3 | 4 | | | | |
| 1 | Opening Security Deposit | 11.86 | 16.58 | 17.17 | 21.09 | 21.09 | 22.23 | 32.44 | 43.29 |
| 2 | Add: Deposits during the Year | 7.11 | 4.85 | 8.26 | - | 1.14 | 15.67 | 17.03 | 1.16 |
| 3 | Less: Deposits refunded | 2.38 | 4.27 | 4.33 | - | - | 3.91 | 1.91 | - |
| 4 | Less: Deposits in form of BG/FDR | - | - | - | - | | | 4.26 | - |
| 5 | Closing Security Deposit | 16.58 | 17.17 | 21.09 | 21.09 | 22.23 | 33.99 | 43.29 | 44.45 |
| 6 | Bank Rate | 8.50% | 8.50% | 8.50% | 8.50% | 0.00% | 7.75% | 7.75% | 0.00% |
| 7 | Interest on Security Deposit * | 1.21 | 1.43 | 1.63 | 6.82 | 7.43 | 2.12 | 2.93 | 7.02 |
| 8 | Cumulative Interest on Security Deposit of Past Years | 1.21 | 2.64 | 4.27 | 11.09 | 18.52 | 20.64 | 23.57 | 30.59 |
| 9 | Interest on Security Deposit Paid | | | | | | 0.37 | 8.20 | |
| 10 | Balance Interest on Security Deposit to be Paid during control Period | | | | | | | 6.21 | 9.15 |

Format-19

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Information regarding Foreign Exchange Rate Variation (FERV)

(Rs. Crs)

| Sr. No. | Particulars | True Up | Approved | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
|---------|------------------------------|------------|------------|------------|--------------------|--------------------------|--------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Amount of liability provided | NIL | | | | | |
| 2 | Amount recovered | | | | | | |
| 3 | Amount adjusted | | | | | | |

Format-20

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Non Tariff Income

(Rs. Crore)

| Sr. No. | Particulars | True Up | Approved | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
|---------|--|--------------|-------------|-------------|--------------------|--------------------------|--------------|
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Meter/service rent | 3.81 | 6.74 | 6.74 | 4.19 | 4.61 | 6.74 |
| 2 | Late payment surcharge | | | | | | |
| 3 | UI Sales / Sales to Exchange | - | | | | | |
| 4 | Sale Proceeds of dead stock, waste paper etc | | | | - | 1.23 | |
| 5 | Wheeling charges under open access | | | | | | |
| 6 | Income from trading | 0.75 | | | | | |
| 7 | Income staff welfare activities | | | | | | |
| 8 | Misc. Receipts/income | 12.46 | | | 19.43 | 22.30 | |
| 9 | Deferred Income (Electricity Development fund) | | | | | | |
| 10 | Total income | 17.02 | | | 6.74 | 6.74 | |
| 11 | Add: Prior Period income | | | | - | - | |
| 12 | Total Non Tariff income | 17.02 | 6.74 | 6.74 | 23.63 | 28.14 | 6.74 |

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ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Information regarding Revenue from Other Business

| Sr. No. | Particulars | (Amount in Crores Rupees) | | | | | |
|---------|--|---------------------------|------------|------------|--------------------|--------------------------|--------------|
| | | True Up | Approved | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
| | | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Total revenue from other business | NIL | | | | | |
| 2 | Income from other business to be considered for licensed business as per regulations | | | | | | |

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ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
Lease Details

| Sr. No. | Name of Lesser | Gross Assets (Rs. Crore) | Lease entered on | Lease Rentals (Crs/pm) | Primary period ended/ ending by | Secondary period ending by |
|---------|----------------|--------------------------|------------------|-------------------------|---------------------------------|----------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | | | | | NA |

Format-23

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY
Information regarding Wholesale Price Index (All Commodities)

| Sr. No. | Period | WPI | Increase over previous year |
|---------|---------------------------------|--------|-----------------------------|
| 1 | 2 | 3 | 4 |
| 1 | Financial Year 2011-12 | 156.13 | |
| 2 | Financial Year 2012-13 | 167.62 | 7.36% |
| 3 | Financial Year 2013-14 | 177.64 | 5.98% |
| 4 | Financial Year 2014-15 | 181.19 | 2.00% |
| 5 | Financial Year 2015-16 | 176.72 | -2.47% |
| 6 | Financial Year 2016-17 | 183.20 | 3.67% |
| 7 | Average WPI of last three years | | 1.07% |

Format-24

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY
Information regarding amount of equity and loan

| Sr. No. | Period | Amount of equity (Rs. Crore) * | Amount of loan (Rs. Crore) | Ratio of equity & loan |
|---------|------------------------------|--------------------------------|----------------------------|------------------------|
| 1 | 2 | 3 | 4 | 5 |
| 1 | As on March 31 of FY 2013-14 | 706.90 | 161.49 | 81 : 19 |
| 2 | As on March 31 of FY 2014-15 | 761.69 | 255.82 | 75 : 25 |
| 3 | As on March 31 of FY 2015-16 | 855.51 | 438.34 | 66 : 34 |
| 4 | As on March 31 of FY 2016-17 | 907.91 | 422.05 | 68 : 32 |
| 5 | As on March 31 of FY 2017-18 | 971.46 | 430.39 | 69 : 31 |
| 6 | As on March 31 of FY 2018-19 | 1,139.31 | 714.80 | 61 : 39 |

*Note * Equity is computed as balancing figure from Total GFA minus Normative Loan.*

Format-25B

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
BRIEF GAP SUMMARY FOR CONTROL PERIOD

(Rs.In Crs)

| Particulars | True Up | Approved | Approved | Provisional Actual | Current Year Provisional | Ensuing Year |
|---|------------|------------|------------|--------------------|--------------------------|--------------|
| | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 |
| Net ARR | 1,373 | 1,360 | 1,324 | 1,782 | 1,740 | 2,058 |
| Less: Revenue at Existing Tariffs excluding Surcharge | 1,060 | 1,147 | 1,138 | 1,443 | 1,705 | 1,594 |
| Revenue Gap for the year | 313 | 212 | 185 | 339 | 35 | 464 |
| Opening Balance of Gap | | - | - | - | - | - |
| Add: Past Gap | | | | | | |
| <i>Gap for FY 2013-14</i> | 313 | | | | | |
| <i>Gap for FY 2014-15</i> | | 212 | | | | |
| <i>Gap for FY 2015-16</i> | | | 185 | | | |
| <i>Gap for FY 2016-17</i> | | | | 339 | | |
| <i>Gap for FY 2017-18</i> | | | | | 35 | |
| <i>Gap for FY 2018-19</i> | | | | | | 464 |
| Total Cumulative Gap for years | 313 | 212 | 185 | 339 | 35 | 464 |
| Less: Budgetary Support | 313 | | | | | |
| Gap to be recovered from Consumers | - | 212 | 185 | 339 | 35 | 464 |
| Less: To be addressed at the time of True-up | | 212 | 185 | 339 | 35 | |
| Balance Gap to be recovered | - | - | - | - | - | 464 |
| Less: Proposed recovery in FY 2018-19 | - | - | - | - | - | 464 |
| Balance Gap to be recovered | | - | - | - | - | - |
| Additional Past recoveries | | | | | | |
| Accumulated Interest on Security Deposit to be paid in MYT Period | | | | | | 9 |
| Balance Gap to be recovered from MYT Control Period | | | | | | 473 |
| Less: Budgetary Support from Government of Goa | | | | | | |
| Proposed Gap Recovery in FY 2018-19 | | | | | | 79 |
| Proposed Tariff hike from last year | | | | | | 5% |

ELECTRICITY DEPARTMENT - GOA

TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19ANNUAL REVENUE REQUIREMENT FOR FY 2013-14 (ACTUALS)

(Rs. in Crs)

| Sr. No. | Item of expense | Approved by Commission Order dtd 15.04.14 | Actuals as per Accounts |
|-----------|---|---|-------------------------|
| | | 2013-14 | |
| 1 | 2 | 3 | 4 |
| 1 | Cost of fuel | | |
| 2 | Cost of power purchase | 933.41 | 1,078.46 |
| 3 | Employee costs | 144.21 | 170.07 |
| 4 | Other Expenses | 0.56 | 0.33 |
| 5 | Administration and General expenses | 9.08 | 18.54 |
| 6 | R&M Expenses | 19.61 | 21.45 |
| 7 | Depreciation | 16.00 | 39.57 |
| 8 | Interest and Finance Charges | 16.70 | 23.84 |
| 9 | Interest on Working Capital | 3.84 | 13.04 |
| 10 | Return on NFA /Equity | 5.86 | 32.60 |
| 11 | Provision for Bad Debt | | 2.96 |
| 12 | Interest on Consumer Security Deposit paid | 5.42 | - |
| 13 | Total Revenue Requirement | 1,154.68 | 1,400.86 |
| 14 | Less: Non Tariff Income | 22.55 | 17.02 |
| 15 | Add : Provision for RPO Obligation for FY 2014- | | |
| 16 | Provision for RPO Obligation for previous | 29.42 | |
| 17 | Less: Revenue from Sale of Power - UI Pool | 8.38 | 10.34 |
| 18 | Net Revenue Requirement (11-12) | 1,153.17 | 1,373.50 |
| 19 | Revenue from Tariff | 1,014.05 | 1,060.29 |
| 20 | Net Gap (13-14) | 139.12 | 313.20 |
| 21 | Energy sales (MU) * | 2,962.00 | 3,071 |
| 22 | Average Cost of Supply (Rs/kWh) | 3.89 | 4.47 |

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ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF
DETERMINATION FOR FY 2018-19

ANNUAL REVENUE REQUIREMENT FOR FY 14-15 and FY 2015-16

(Rs. in Crs)

| Sr. No. | Item of expense | Approved by Commission BP Order dtd 06.04.15 | Approved as per Order dtd 06.04.15 |
|-----------|--|---|---|
| | | FY14-15 | FY15-16 |
| 1 | 2 | | 3 |
| 1 | Cost of fuel | | |
| 2 | Cost of power purchase | 1093.62 | 1048.34 |
| 3 | Provision for RPO Compliance | | |
| 4 | Employee costs | 152.42 | 161.53 |
| 5 | Administration and General expenses | 9.46 | 10.03 |
| 6 | R&M expenses | 20.73 | 12.68 |
| 7 | Depreciation | 25.87 | 38.81 |
| 8 | Int and Finance Charges | 24.12 | 33.49 |
| 9 | Interest on Working Capital | 1.8 | 2.34 |
| 10 | Return on NFA /Equity | 11.12 | 15.82 |
| 11 | Provision for Bad Debt | | |
| 12 | Interest on Consumer Security Deposit | 6.82 | 7.43 |
| 13 | Amortization of the regulatory asset proposed for previous years | | |
| 14 | Provision for DSM Expenses | | |
| 15 | Total Revenue Requirement | 1345.96 | 1330.47 |
| 16 | Less: Non Tariff Income | 6.74 | 6.74 |
| 17 | Less: Revenue from Sale of Power - UI Pool | | |
| 18 | Provision for RPO Obligation for previous | 20.7 | |
| 19 | Net Revenue Requirement (11-12) | 1359.92 | 1323.73 |
| 20 | Revenue from Tariff * | 1147.44 | 1138.3 |
| 21 | Revenue Gap (14-15) | 212.48 | 185.43 |
| 22 | Additional Surcharge | | 0 |
| 23 | Net Revenue Gap after Surcharge (16-17) | 212.48 | 185.43 |
| 24 | Energy sales (MU) | 3114 | 3233 |
| 25 | Average Cost of Supply (Rs/kWh) | 4.37 | 4.09 |

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ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY

ANNUAL REVENUE REQUIREMENT FOR FY 2016-17

(Rs. in Crs)

| Sr. No. | Item of expense | Approved as per Order dtd 18.04.16 | Provisional Actual |
|-----------|--|--|-----------------------|
| | | FY16-17 | FY16-17 |
| 1 | 2 | 3 | 4 |
| 1 | Cost of fuel | | |
| 2 | Cost of power purchase | 1,245.03 | 1,328.08 |
| 3 | Provision for RPO Compliance | 8.55 | |
| 4 | Employee costs | 239.21 | 230.92 |
| 5 | Administration and General expenses | 9.48 | 18.20 |
| 6 | R&M expenses | 27.86 | 26.98 |
| 7 | Depreciation | 49.22 | 76.88 |
| 8 | Int and Finance Charges | 57.63 | 49.90 |
| 9 | Interest on Working Capital | 8.36 | 9.38 |
| 10 | Return on NFA /Equity | 44.74 | 55.28 |
| 11 | Provision for Bad Debt | | 9.38 |
| 12 | Interest on Consumer Security Deposit | 6.82 | 0.37 |
| 13 | Amortization of the regulatory asset proposed for previous years | | |
| 14 | Provision for DSM Expenses | 3.98 | |
| 15 | Total Revenue Requirement | 1,700.87 | 1,805.38 |
| 16 | Less: Non Tariff Income | 6.74 | 23.63 |
| 17 | Less: Revenue from Sale of Power - UI Pool | | |
| 18 | Provision for RPO Obligation for previous | | |
| 19 | Net Revenue Requirement (11-12) | 1,694.13 | 1,781.76 |
| 20 | Revenue from Tariff * | 1,511.12 | 1,443.08 |
| 21 | Revenue Gap (14-15) | 183.02 | 338.67 |
| 22 | Additional Surcharge | - | |
| 23 | Net Revenue Gap after Surcharge (16-17) | 183.02 | 338.67 |
| 24 | Energy sales (MU) | 3,352.16 | 3,027.50 |
| 25 | Average Cost of Supply (Rs/kWh) | 5.05 | 5.89 |

Format-25

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19

ANNUAL REVENUE REQUIREMENT FOR FY 2017-18 (H1 Actual + H2 Projected)

(Rs. in Crs)

| Sr. No. | Item of expense | Approved by the Commission : Order dtd 23.05.17 | Actual H1 | Projected H2 | Actual Submitted by Licensee |
|-----------|--|---|-----------------|-----------------|------------------------------|
| 1 | 2 | 4 | 5 | 6 | 7 |
| 1 | Cost of fuel | | | | - |
| 2 | Cost of power purchase | 1,330.98 | 557.36 | 654.73 | 1,212.08 |
| 3 | Provision for RPO Compliance | 9.38 | | 4.23 | 4.23 |
| 4 | Employee costs | 254.24 | 171.88 | 125.00 | 296.88 |
| 5 | Administration and General expenses | 10.12 | 6.08 | 5.76 | 11.84 |
| 6 | R&M Expenses | 30.57 | 13.47 | 16.59 | 30.06 |
| 7 | Depreciation | 64.16 | 36.73 | 36.73 | 73.46 |
| 8 | Int and Finance Charges | 74.04 | 24.72 | 24.72 | 49.44 |
| 9 | Interest on Working Capital | 9.90 | 5.81 | 5.81 | 11.62 |
| 10 | Return on NFA /Equity | 58.33 | 30.31 | 30.31 | 60.62 |
| 11 | Provision for Bad Debt | - | | | - |
| 12 | Provision for DSM Expenses | 3.41 | 1.71 | 1.71 | 3.41 |
| 13 | Interest on Consumer Security Deposit | 6.93 | 8.20 | 6.21 | 14.42 |
| 14 | Total Revenue Requirement | 1,852.06 | 856.27 | 911.79 | 1,768.06 |
| 15 | Less: Non Tariff Income | 6.74 | 14.07 | 14.07 | 28.14 |
| 16 | Net Revenue Requirement | 1,845.32 | 842.20 | 897.72 | 1,739.92 |
| 17 | Revenue from Tariff | 1,563.67 | 885.50 | 819.48 | 1,704.98 |
| 18 | Revenue Gap | 281.65 | (43.30) | 78.24 | 34.94 |
| 19 | Additional Surcharge | - | | | - |
| 20 | Net Revenue Gap after Surcharge | 281.65 | (43.30) | 78.24 | 34.94 |
| 21 | Energy sales (MU) | 3,494.71 | 1,873.20 | 1,712.97 | 3,586.18 |
| 22 | Average Cost of Supply (Rs/kWh) | 5.28 | 4.50 | 5.24 | 4.85 |

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ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF
DETERMINATION FOR FY 2018-19

PROJECTION OF ANNUAL REVENUE REQUIREMENT FOR FY 2018-19

(Rs. in Crs)

| Sr. No. | Item of expense | Approved by the Commission Order dtd 18.04.16 |
|-----------|--|--|
| 1 | 2 | 3 |
| 1 | Cost of fuel | |
| 2 | Cost of power purchase | 1,417.92 |
| 3 | Provision for RPO Compliance | 15.17 |
| 4 | Employee costs | 270.41 |
| 5 | R&M expenses | 45.60 |
| 6 | Administration and General expenses | 10.81 |
| 7 | Depreciation | 91.59 |
| 8 | Interest on Loan | 107.19 |
| 9 | Interest on Working Capital | 12.36 |
| 10 | Return on NFA /Equity | 83.27 |
| 11 | Provision for Bad Debt | - |
| 12 | Provision for DSM Expenses | 3.03 |
| 13 | Interest on Consumer Security Deposit | 7.02 |
| 14 | Total Revenue Requirement | 2,064.37 |
| 15 | Less: Non Tariff Income | 6.74 |
| 16 | Net Revenue Requirement (11-12) | 2,057.63 |
| 17 | Revenue from Existing Tariff * | 1,593.75 |
| 18 | Net Gap | 463.88 |
| 19 | Energy sales (MU) | 3,645 |
| 20 | Average Cost of Supply (Rs/kWh) | 5.65 |

ELECTRICITY DEPARTMENT - Goa
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
REVENUE AT EXISTING TARIFF
YEAR 2013-14 (Actual April 2013 to March 2014)

| Sr. No. | Category of Consumer | No of Consumers | Energy Sale (MUs) | Contracted Maximum Demand (KW/kVA) | Revenue (Rs Crs) | | | |
|-------------------------------|--|-----------------|-------------------|------------------------------------|------------------|----------------|---------------|-----------------|
| | | | | | Demand Charges | Energy Charges | FPPCA Charges | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| A. LOW TENSION SUPPLY | | | | | | | | |
| 1 | (a) LTD/Domestic | 4,20,855 | 844.23 | 11,27,149 | | 172.74 | | 172.74 |
| | (b) LTD/L.I.G. | 11,340 | 8.26 | 1,201 | | 1.15 | | 1.15 |
| | (c) LTD Domestic Mixed | 1,141 | 5.00 | 2,186 | | 1.67 | | 1.67 |
| 2 | LTC/Commercial | 84,872 | 280.97 | 3,33,665 | | 119.86 | | 119.86 |
| 3 | (a) LTP/Motive Power | 46,272 | 74.41 | 4,57,533 | | 26.85 | | 26.85 |
| | (b) LTP Mixed (Hotel Industries) | 122 | 4.73 | 3,298 | | 2.62 | | 2.62 |
| | (c) LTP Ice Manufacturing | 37 | 8.00 | 1,873 | | 2.60 | | 2.60 |
| 4 | LTAG/Agriculture | 10,325 | 17.76 | 63,970 | | 3.20 | | 3.20 |
| 5 | (a) LTPL (Public lighting) | 1,444 | 37.08 | 9,011 | | 13.39 | | 13.39 |
| | (b) Arrears (Street light) | 13 | 0.15 | | | 0.00 | | - |
| 6 | LTPWW/Public Water works | 230 | 2.08 | 21,463 | | 0.99 | | 0.99 |
| | Total | 5,76,651 | 1,282.68 | 20,21,349 | | 345.07 | | 345.07 |
| B. HIGH TENSION SUPPLY | | | | | | | | |
| 7 | HT (Mixed) | 176 | 117.88 | 67,716 | | 52.15 | | 52.15 |
| 8 | HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive. | 24 | 517.37 | 93,316 | | 193.00 | | 193.00 |
| 9 | HTI Industrial | 397 | 619.33 | 3,57,311 | | 239.96 | | 239.96 |
| 10 | HTAG (Agriculture) | 41 | 6.09 | 8,211 | | 1.35 | | 1.35 |
| 11 | EHTI (Industrial) | 5 | 142.55 | 76,596 | | 56.82 | | 56.82 |
| 12 | HT P.W.W. & Sewage system | 33 | 138.12 | 26,879 | | 69.50 | | 69.50 |
| 13 | HT. M.E.'s Defence Estt. | 12 | 26.66 | 6,818 | | 9.70 | | 9.70 |
| 14 | HTI (Steel Rolling) | 13 | 69.02 | 16,219 | | 28.04 | | 28.04 |
| 15 | HTI / IT High Tech | 40 | 66.23 | 5,164 | | 24.43 | | 24.43 |
| 16 | HTI/Ice Manufacturing | 2 | 0.85 | 364.09 | | 0.33 | | 0.33 |
| 17 | (a) Sale from EDG to GSPL (Div. VII) | | 8.70 | | | 3.61 | | 3.61 |
| 18 | | | | | | | | |
| 19A | HTI Hotel Industry | 58 | 57.11 | | | 22.93 | | 22.93 |
| | Total | 801.00 | 1,769.92 | 6,58,595 | | 701.82 | | 701.82 |
| C. TEMPORARY SUPPLY | | | | | | | | |
| 20 | (a) L.T. Temporary | 4,557 | 17.89 | 16,316.40 | | 13.33 | | 13.33 |
| | (b) H.T. Temporary | 1 | 0.06 | - | | 0.08 | | 0.08 |
| | Total | 4,558 | 17.95 | 16,316 | | 13.40 | | 13.40 |
| | Total | 5,82,010 | 3,071 | 26,96,260 | | 1060.29 | | 1,060.29 |

ELECTRICITY DEPARTMENT - Goa
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
REVENUE AT EXISTING TARIFF
YEAR 2014-15 (Approved April 2014 to March 2015)

| Sr. No. | Category of Consumer | No of Consumers | Energy Sale (MUs) | Contracted Maximum Demand (KW/kVA) | Revenue (Rs Crs) | | | |
|--------------------------------------|--|-----------------|-------------------|------------------------------------|------------------|----------------|---------------|-----------------|
| | | | | | Demand Charges | Energy Charges | FPPCA Charges | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| <u>A. LOW TENSION SUPPLY</u> | | | | | | | | |
| 1 | (a) LTD/Domestic | 4,78,893 | 728 | 16,34,435 | 136.80 | | | 136.80 |
| | (b) LTD/L.I.G. | 11,547 | 2 | 2,046 | 0.57 | | | 0.57 |
| | (c) LTD Domestic Mixed | 1,405 | 7 | 3,191 | 2.38 | | | 2.38 |
| 2 | LTC/Commercial | 89,081 | 268 | 2,77,265 | 100.95 | | | 100.95 |
| 3 | (a) LTP/Motive Power | 6,981 | 179 | 1,65,019 | 68.34 | | | 68.34 |
| | (b) LTP Mixed (Hotel Industries) | 148 | 5 | 4,569 | 2.82 | | | 2.82 |
| | (c) LTP Ice Manufacturing | 66 | 8 | 3,072 | 2.95 | | | 2.95 |
| 4 | LTAG/Agriculture | 11,145 | 25 | 61,326 | 4.25 | | | 4.25 |
| 5 | (a) LTPL (Public lighting) | 2,740 | 40 | 9,598 | 12.43 | | | 12.43 |
| 6 | LTPWW/Public Water works | 744 | 6 | 5,600 | 2.02 | | | 2.02 |
| | Total | 6,02,750 | 1,266 | 21,66,121 | 333.51 | | | 333.51 |
| <u>B. HIGH TENSION SUPPLY</u> | | | | | | | | |
| 7 | HT (Mixed) | 168 | 134 | 74,767 | 58.68 | | | 58.68 |
| 8 | HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive. | 37 | 565 | 1,11,840 | 197.96 | | | 197.96 |
| 9 | HTI Industrial | 396 | 607 | 2,40,374 | 251.30 | | | 251.30 |
| 10 | HTAG (Agriculture) | 41 | 6 | 8,258 | 1.44 | | | 1.44 |
| 11 | EHTI (Industrial) | 5 | 175 | 51,833 | 74.48 | | | 74.48 |
| 12 | HT P.W.W. & Sewage system | 35 | 137 | 90,796 | 52.95 | | | 52.95 |
| 13 | HT. M.E.'s Defence Estt. | 12 | 27 | 7,080 | 10.10 | | | 10.10 |
| 14 | HTI (Steel Rolling) | | - | - | 12.57 | | | 12.57 |
| 15 | HTI / IT High Tech | 12 | 21 | 6,658 | 8.32 | | | 8.32 |
| 16 | Tariff HT-Industries (ICE). | 2.00 | 2 | 364 | 0.38 | | | 0.38 |
| 17 | HT Hotel Industries | 110 | 137 | 41,559 | 54.48 | | | 54.48 |
| | Total | 818 | 1,810 | 6,33,529 | 722.66 | | | 722.66 |
| <u>C. TEMPORARY SUPPLY</u> | | | | | | | | |
| 18 | (a) L.T. Temporary | 4,929 | 38 | 7,502 | 20.66 | | | 20.66 |
| | (b) H.T. Temporary | | | | - | | | - |
| | Hoarding/Sign Board | 104 | 0 | 523 | 0.09 | | | 0.09 |
| | Total | 6,08,601 | 3,114 | 28,07,675 | 1076.92 | | 0.00 | 1,076.92 |

ELECTRICITY DEPARTMENT - Goa
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
REVENUE AT EXISTING TARIFF
YEAR 2015-16 (Approved April 2015 to March 2016)

| Sr. No. | Category of Consumer | No of Consumers | Energy Sale (MUs) | Contracted Maximum Demand (KW/kVA) | Revenue (Rs Crs) | | | |
|-------------------------------|--|-----------------|-------------------|------------------------------------|------------------|-----------------|---------------|----------------|
| | | | | | Demand Charges | Energy Charges | FPPCA Charges | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| A. LOW TENSION SUPPLY | | | | | | | | |
| 1 | (a) LTD/Domestic | 4,88,471 | 764 | 16,42,607 | 15.30 | 155.09 | | 170.39 |
| | (b) LTD/L.I.G. | 11,547 | 2 | 2,046 | 0.42 | - | | 0.42 |
| | (c) LTD Domestic Mixed | 1,405 | 8 | 3,191 | 2.74 | 0.08 | | 2.82 |
| 2 | LTC/Commercial | 90,863 | 281 | 2,78,652 | 6.27 | 116.95 | | 123.22 |
| 3 | (a) LTP/Motive Power | 7,051 | 188 | 1,65,019 | 6.25 | 66.83 | | 73.08 |
| | (b) LTP Mixed (Hotel Industries) | 155 | 5 | 4,569 | 0.16 | 2.25 | | 2.41 |
| | (c) LTP Ice Manufacturing | 69 | 8 | 3,072 | | | | - |
| 4 | LTAG/Agriculture | 11,145 | 25 | 61,326 | 0.88 | 3.26 | | 4.14 |
| 5 | (a) LTPL (Public lighting) | 2,740 | 40 | 9,598 | 0.46 | 15.60 | | 16.06 |
| 6 | LTPWW/Public Water works | 744 | 6 | 5,600 | | | | - |
| | Total | 6,14,190 | 1,327 | 21,75,680 | 32.48 | 360.06 | - | 392.54 |
| B. HIGH TENSION SUPPLY | | | | | | | | |
| 7 | HT Commercial | 168 | 136 | 74,767 | 2 | 6 | | 8.40 |
| 8 | HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive. | 37 | 576 | 1,11,840 | 44 | 219 | | 262.50 |
| 9 | HTI Industrial | 400 | 637 | 2,40,374 | 132 | 484 | | 615.35 |
| 10 | HTAG (Agriculture) | 41 | 6 | 8,258 | 0 | 1 | | 1.19 |
| 11 | EHTI (Industrial) | 5 | 175 | 51,833 | | | | 0.00 |
| 12 | HT P.W.W. & Sewage system | 36 | 144 | 30,796 | | | | 0.00 |
| 13 | HT. M.E.'s Defence Estt. | 12 | 27 | 7,080 | 1 | 10 | | 11.52 |
| 14 | HTI (Steel Rolling) | - | | | | | | 0.00 |
| 15 | HTI / IT High Tech | 13 | 21 | 6,658 | | | | 0.00 |
| 16 | HTI/Ice Manufacturing | 2 | 2 | 364 | | | | 0.00 |
| 17 | HTI Hotel Industry | 111 | 143 | 41,559 | | | | 0.00 |
| | Total | 825 | 1,867 | 5,73,529 | 179 | 720 | - | 898.96 |
| C. TEMPORARY SUPPLY | | | | | | | | |
| | | 4,929 | 38 | 7,502 | 1 | | | 30.90 |
| 18 | (a) L.T. Temporary | 4,929 | 38 | 7,502 | 0.65 | 30.25 | | 30.90 |
| | (b) H.T. Temporary | - | - | - | | | | 0.00 |
| | (C)Hoarding/Sign Board | 104 | | 523 | 0.04 | 0.18 | | 0.22 |
| | Total | 6,20,047 | 3,233 | 27,57,234 | 212.53 | 1,079.84 | - | 1322.62 |

ELECTRICITY DEPARTMENT - Goa
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
REVENUE AT EXISTING TARIFF
YEAR 2016-17 (Actual Provisional April 2016 to March 2017)

| Sr. No. | Category of Consumer | No of Consumers | Energy Sale (MUs) | Contracted Maximum Demand (KW/kVA) | Revenue (Rs Crore) | | | |
|--------------|--|-----------------|-------------------|------------------------------------|--------------------|----------------|---------------|---------------|
| | | | | | Demand Charges | Energy Charges | FPPCA Charges | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| A | LT SUPPLY | | | | | | | - |
| 1 (a) | LTD/Domestic | 4,63,272 | 803.78 | 11,52,770 | 14 | 175 | 12 | 200.46 |
| | First 100 Units | 2,36,467 | 222.21 | 5,17,833 | 6 | 30 | 3 | 38.92 |
| | 101 - 200 Units | 1,18,682 | 202.49 | 2,66,682 | 4 | 38 | 3 | 44.03 |
| | 201 - 300 Units | 54,653 | 132.01 | 1,52,060 | 2 | 30 | 2 | 33.87 |
| | 301 - 400 Units | 24,648 | 84.80 | 80,138 | 1 | 24 | 1 | 26.47 |
| | Above 400 Units | 28,821 | 162.27 | 1,36,057 | 1 | 53 | 3 | 57.17 |
| 1 (b) | LTLIG/Low Income Group | 1,125 | 1.64 | 106 | 0 | 0 | 0 | 0.35 |
| 2 | LTC/Commercial | 89,328 | 300.86 | 2,96,465 | 7 | 131 | 12 | 149.75 |
| | First 100 Units | 53,888 | 45.43 | 85,755 | 3 | 15 | 1 | 19.35 |
| | 101 - 200 Units | 13,050 | 28.71 | 27,982 | 1 | 11 | 1 | 12.81 |
| | 201 - 400 Units | 9,663 | 48.21 | 31,550 | 1 | 21 | 1 | 23.23 |
| | Above 400 Units | 12,727 | 178.51 | 1,51,179 | 2 | 84 | 9 | 94.36 |
| 3 | LTI/Industry | 6,010 | 78.62 | 1,09,195 | 4 | 27 | 2 | 33.09 |
| | First 500 Units | 4,227 | 11.42 | 51,265 | 2 | 3 | 0 | 5.60 |
| | Above 500 Units | 1,783 | 67.20 | 57,930 | 2 | 23 | 2 | 27.48 |
| 4 | LTP/Mixed (Hotel Industries) | 109 | 5.10 | 2,075 | 0 | 2 | 0 | 2.44 |
| 5 (a) | LTAG/Agriculture (Pump sets/irrigation) | 11,118 | 13.43 | 38,939 | 1 | 2 | 0 | 2.33 |
| 5 (b) | LTAG/Agriculture (Allied Activities) | 188 | 0.62 | 4,082 | 0 | 0 | - | 0.16 |
| 8 | LTTTS/ Temporary Supply | 4,224 | 15.45 | 15,327 | 2 | 15 | 1 | 17.85 |
| | Temp - Domestic | 592 | 1.92 | 1,830 | 0 | 1 | 0 | 1.72 |
| | Temp - Commercial | 3,632 | 13.53 | 13,497 | 2 | 13 | 1 | 16.13 |
| | | | | | | | | - |
| B | HT SUPPLY | | | | | | | - |
| 8 | Tariff HTD/ Domestic | 3 | 0.27 | 300 | 0 | 0 | 0 | 0.16 |
| 9 | Tariff HTC/ Commercial | 191 | 97.81 | 65,210 | 14 | 53 | 6 | 72.56 |
| 10 | Tariff-HTI/ Industrial | 657 | 1,180.74 | 4,60,234 | 138 | 506 | 47 | 691.53 |
| | Connected at 11/33kv | 651 | 984.28 | 4,17,634 | 121 | 426 | 38 | 585.25 |
| | Connected at 110kv | 6 | 196.46 | 42,600 | 17 | 81 | 9 | 106.28 |
| 11 | Tariff HTFS Industrial(Ferro Metallurgical/ Steel Melting/ Power Intensive/ Steel Rolling) | 32 | 454.16 | 1,09,050 | 28 | 193 | 15 | 235.71 |
| 12 | Tariff HTAG/ Agriculture (Pump Sets/ irrigation) | 39 | 4.57 | 7,800 | 0 | 1 | - | 0.95 |
| 13 | Tariff HTAG/ Agriculture (allied activity) | 2 | 3.42 | 860 | 0 | 1 | - | 0.66 |
| 14 | Tariff HTMES/ Defence Establishment | 12 | 24.90 | 6,955 | 1 | 13 | 1 | 15.05 |
| 6 | LTPL/Public Lighting | 3,042 | 36.60 | 11,840 | 1 | 15 | 1 | 16.27 |
| 7 | LTH/ Hoardings & Signboards | 62 | 0.16 | 599 | 0 | 0 | 0 | 0.22 |
| 17 | Tariff HTTS/ Temporary Supply | 1 | 0.13 | 350 | 0 | 0 | - | 0.14 |
| 18 | Single Point Supply | 1 | 5.21 | 4,035 | 1 | 2 | 0 | 3.41 |
| | Residential Complexes | - | - | - | - | - | - | - |
| | Commercial Complexes | 1 | 5.21 | 4,035 | 1 | 2 | 0 | 3.41 |
| | Industrial Complexes | - | - | - | - | - | - | - |
| | | | | | | | | - |
| A+B | Grand Total | 5,79,415 | 3,027.50 | 22,86,192 | 211 | 1,136 | 96 | 1,443 |

ELECTRICITY DEPARTMENT - Goa
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
REVENUE AT EXISTING TARIFF
YEAR 2017-18 H2 (estimated October 2017 to March 2018)

| Sr. No. | Category of Consumer | No of Consumers | Energy Sale (MUs) | Contracted Maximum Demand (KW/kVA) | Revenue (Rs Crore) | | | |
|-----------|---|-----------------|-------------------|------------------------------------|--------------------|----------------|---------------|------------|
| | | | | | Demand Charges | Energy Charges | FPPCA Charges | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| A | Low Tension Supply | 6,05,563 | 624 | 17,63,208 | 14 | 164 | 15 | 193 |
| 1 | Tariff LTD/Domestic and Non-Commercial | 4,89,358 | 400 | 12,60,724 | 8 | 73 | 7 | 88 |
| 1.3 | 0 - 100 units | 2,03,345 | 229 | 4,13,691 | 2 | 30 | 3 | 36 |
| | 101 - 200 units | 1,36,521 | 82 | 2,74,914 | 2 | 16 | 1 | 19 |
| | 201 - 300 units | 70,946 | 33 | 1,99,522 | 2 | 8 | 1 | 10 |
| | 301- 400 units | 33,565 | 16 | 1,19,782 | 1 | 5 | 0 | 6 |
| | Above 400 Units | 44,981 | 41 | 2,52,815 | 1 | 15 | 1 | 17 |
| 2 | Tariff LTD/Low Income Group | 1,798 | 0 | 157 | 0 | - | - | 0 |
| 3 | Tariff LTDM/Domestic Mixed | | | | | - | - | |
| 4 | Tariff-LTC/Commercial | 94,727 | 166 | 3,08,058 | 3 | 71 | 6 | 81 |
| | <u>0-20 KW/Commercial Consumers</u> | 93,209 | 138 | 2,16,297 | 3 | 60 | 5 | 68 |
| | 0 - 100 units | 18,366 | 11 | 29,748 | 1 | 3 | 0 | 4 |
| | 101 - 200 units | 18,366 | 11 | 29,748 | 1 | 4 | 0 | 5 |
| | 201-400 units | 12,474 | 72 | 63,880 | 0 | 31 | 3 | 34 |
| | Above 400 units | 44,003 | 44 | 92,921 | 1 | 21 | 2 | 24 |
| | <u>>20-90Kw Commercial Consumers</u> | 1,518 | 28 | 91,761 | 0 | 12 | 1 | 13 |
| | 0 - 100 units | 69 | 0 | 2,336 | 0 | 0 | 0 | 0 |
| | 101 - 200 units | 69 | 0 | 2,336 | 0 | 0 | 0 | 0 |
| | 201-400 units | 1,204 | 27 | 81,097 | 0 | 12 | 1 | 13 |
| | Above 400 units | 175 | 0 | 5,991 | 0 | 0 | 0 | 0 |
| 5 | LTI-Industry | 5,995 | 35 | 1,37,396 | 2 | 12 | 1 | 15 |
| | 0 - 500 units | 4,118 | 9 | 62,811 | 1 | 3 | 0 | 4 |
| | Above 500 units | 1,877 | 26 | 74,585 | 1 | 9 | 1 | 11 |
| 6 | Tariff-LTP/Mixed (Hotel Industries) | 135 | 2 | 2,766 | 0 | 1 | 0 | 1 |
| 7 | Tariff-LTAG/Agriculture (Pump Sets/Irrigation) (A) | 10,673 | 5 | 42,119 | 0 | 1 | - | 1 |
| 8 | Tariff-LTAG/Agriculture Allied (B) | 192 | 1 | 1,514 | 0 | 0 | - | 0 |
| 9 | Tariff-LTPL/Public Lighting | 2,619 | 16 | 9,855 | 0 | 6 | 1 | 7 |
| 10 | Tariff-LT Hoarding and SignBoard | 66 | 0.08 | 619 | 0 | 0 | 0 | 0 |
| | | | | | | | | - |
| B | High Tension Supply | 965 | 1,075 | 6,77,994 | 100 | 467 | 46 | 613 |
| 11 | Tariff HTD/Domestic | 3 | 0 | 300 | 0 | 0 | 0 | 0 |
| 12 | Tariff HT-Commercial | 200 | 58 | 72,042 | 11 | 32 | 3 | 46 |
| 13 | Tariff HTI/Industrial | 679 | 834 | 4,78,437 | 72 | 357 | 35 | 464 |
| | Connected at 11 / 33 kV | 673 | 705 | 4,35,837 | 65 | 303 | 29 | 398 |
| | Connected at 110 kV | 6 | 128 | 42,600 | 6 | 54 | 6 | 66 |
| 14 | H.T.Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive) | 29 | 164 | 1,11,400 | 17 | 70 | 7 | 94 |
| 15 | Tariff-HTAG/Agriculture (Pump Sets/Irrigation) (A) | 40 | 3 | 8,000 | 0 | 0 | - | 1 |
| 16 | Tariff-HTAG/Agriculture (Allied Activities) (B) | 2 | 3 | 860 | 0 | 1 | - | 1 |
| 17 | H.T. MES/Defence Establishments | 12 | 14 | 6,955 | 1 | 7 | 1 | 8 |
| | | | | | | | | - |
| C | Temporary Supply | 4,375 | 10 | 17,614 | 1 | 9 | 1 | 11 |
| 18 | Tariff-LTTS/Temporary Supply | 4,374 | 10 | 17,264 | 1 | 9 | 1 | 11 |
| | Tariff-LT/Temporary Domestic | 651 | 0 | 1,246 | 0 | 0 | 0 | 0 |
| | Tariff-LT/Temporary Commercial | 3,723 | 9 | 16,018 | 1 | 9 | 1 | 11 |
| 19 | Tariff-HTTS/Temporary Supply | 1 | 1 | 350 | 0 | | - | 0 |
| | | | | | | | | - |
| D | Single Point Supply | 1 | 3 | 4,035 | 0 | 1 | - | 2 |
| 20 | Residential Complexes | - | - | - | - | - | - | - |
| 21 | Commercial Complexes | 1 | 3 | 4,035 | 0 | 1 | - | 2 |
| 22 | Industrial Complexes | - | - | - | - | - | - | - |
| | | | | | | | | - |
| | Total | 6,10,904 | 1,713 | 24,62,851 | 116 | 642 | 62 | 819 |

ELECTRICITY DEPARTMENT - Goa
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19
REVENUE AT EXISTING TARIFF
YEAR 2017-18 (Estimated April 2017 to March 2018)

| Sr. No. | Category of Consumer | No of Consumers | Energy Sale (MUs) | Contracted Maximum Demand (KW/kVA) | Revenue (Rs Crore) | | | |
|--------------|--|-----------------|-------------------|------------------------------------|--------------------|----------------|---------------|-----------------|
| | | | | | Demand Charges | Energy Charges | FPPCA Charges | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| A | LT Supply | | | | | | | |
| 1 (a) | LTD/Domestic | 4,89,358 | 988 | 12,60,724 | 17 | 195 | 32 | 243.90 |
| | First 100 Units | 2,03,345 | 467 | 4,13,691 | 6 | 61 | 11 | 77.34 |
| | 101 - 200 Units | 1,36,521 | 221 | 2,74,914 | 4 | 42 | 6 | 52.00 |
| | 201 - 300 Units | 70,946 | 106 | 1,99,522 | 3 | 25 | 5 | 33.31 |
| | 301 - 400 Units | 33,565 | 57 | 1,19,782 | 2 | 17 | 3 | 22.06 |
| | Above 400 Units | 44,981 | 137 | 2,52,815 | 2 | 49 | 7 | 59.18 |
| 1 (b) | LTLIG/Low Income Group | 1,798 | 1 | 157 | 0 | 0 | 0 | 0.22 |
| 2 | LTC/Commercial | 94,727 | 404 | 3,08,058 | 8 | 174 | 27 | 209.53 |
| | First 100 Units | 18,436 | 50 | 32,084 | 2 | 16 | 3 | 21.30 |
| | 101 - 200 Units | 18,436 | 34 | 32,084 | 1 | 13 | 3 | 17.21 |
| | 201 - 400 Units | 13,678 | 129 | 1,44,977 | 1 | 55 | 7 | 63.03 |
| | Above 400 Units | 44,178 | 190 | 98,912 | 3 | 89 | 15 | 107.99 |
| 3 | LTI/Industry | 5,995 | 82 | 1,37,396 | 5 | 28 | 4 | 37.14 |
| | First 500 Units | 4,118 | 18 | 62,811 | 2 | 6 | 1 | 9.00 |
| | Above 500 Units | 1,877 | 63 | 74,585 | 3 | 22 | 3 | 28.15 |
| 4 | LTP/Mixed (Hotel Industries) | 135 | 5 | 2,766 | 0 | 2 | 0 | 2.84 |
| 5 (a) | LTAG/Agriculture (Pump sets/irrigation) | 10,673 | 13 | 42,119 | 1 | 2 | 0 | 2.31 |
| 5 (b) | LTAG/Agriculture (Allied Activities) | 192 | 2 | 1,514 | 0 | 0 | - | 0.34 |
| 6 | LTPL/Public Lighting | 2,619 | 30 | 9,855 | 0 | 12 | 1 | 12.89 |
| 7 | LTH/ Hoardings & Signboards | 66 | 0 | 619 | 0 | 0 | 0 | 0.28 |
| B | HT Supply | | | | | | | |
| 8 | Tariff HTD/ Domestic | 3 | 0 | 300 | 0 | 0 | 0 | 0.21 |
| 9 | Tariff HTC/ Commercial | 200 | 110 | 72,042 | 18 | 61 | 9 | 87.80 |
| 10 | Tariff-HTI/ Industrial | 679 | 1,517 | 4,78,437 | 125 | 650 | 80 | 855.90 |
| | Connected at 11/33kv | 673 | 1,277 | 4,35,837 | 114 | 549 | 67 | 730.31 |
| | Connected at 110kv | 6 | 240 | 42,600 | 11 | 101 | 13 | 125.59 |
| 11 | Tariff HTFS Industrial(Ferro Metallurgical/ Steel Melting/ Power Intensive/ Steel Rolling) | 29 | 369 | 1,11,400 | 30 | 159 | 16 | 205.61 |
| 12 | Tariff HTAG/ Agriculture (Pump Sets/ irrigation) | 40 | 5 | 8,000 | 0 | 1 | - | 1.00 |
| 13 | Tariff HTAG/ Agriculture (allied activity) | 2 | 5 | 860 | 0 | 1 | - | 1.05 |
| 14 | Tariff HTMES/ Defence Establishment | 12 | 28 | 6,955 | 1 | 14 | 2 | 16.99 |
| C | Tariff-LTTS/Temporary Supply | 4,374 | 20 | 17,264 | 2 | 18 | 2 | 23.05 |
| | Tariff-LT/Temporary Domestic | 651 | 1 | 1,246 | 0 | 0 | 0 | 0.70 |
| | Tariff-LT/Temporary Commercial | 3,723 | 19 | 16,018 | 2 | 18 | 2 | 22.35 |
| | Tariff HTTS/ Temporary Supply | 1 | 1 | 350 | 0 | 0 | - | 0.17 |
| 18 | Single Point Supply | 1 | 6 | 4,035 | 1 | 3 | 0 | 4 |
| | Residential Complexes | - | - | - | - | - | - | - |
| | Commercial Complexes | 1 | 6 | 4,035 | 1 | 3 | 0 | 3.75 |
| | Industrial Complexes | - | - | - | - | - | - | - |
| | | | | | | | | |
| | Total | 6,10,904 | 3,586 | 24,62,851 | 210 | 1,321 | 174 | 1,704.98 |

ELECTRICITY DEPARTMENT - GOA
TRUE-UP FOR FY 13-14, FY 16-17, FY 17-18 AND TARIFF DETERMINATION FOR FY 2018-19

Segregation of Wheeling Business and Retail Supply Business for FY 18-19 (Rs. in Crs)

| Sr. No. | Item of expense | Wire | Supply | Wire | Supply | Total |
|-----------|--|----------|----------|---------------|-----------------|-----------------|
| | | Business | Business | Business | Business | |
| | | % | % | FY 2018-19 | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | Cost of fuel | | | | | |
| 2 | Cost of power purchase | 0% | 100% | - | 1,417.92 | 1,417.92 |
| 3 | Provision for RPO Compliance | 0% | 100% | - | 15.17 | 15.17 |
| 4 | Employee costs | 70% | 30% | 189.29 | 81.12 | 270.41 |
| 5 | R&M expenses | 50% | 50% | 22.80 | 22.80 | 45.60 |
| 6 | Administration and General expenses | 90% | 10% | 9.73 | 1.08 | 10.81 |
| 7 | Depreciation | 90% | 10% | 82.43 | 9.16 | 91.59 |
| 8 | Interest & Financial charges | 90% | 10% | 96.47 | 10.72 | 107.19 |
| 9 | Interest on Working Capital | 22% | 78% | 2.72 | 9.64 | 12.36 |
| 10 | Return on NFA /Equity | 90% | 10% | 74.94 | 8.33 | 83.27 |
| 11 | Provision for Bad Debt | 0% | 100% | - | - | - |
| 12 | Provision for DSM Expenses | 0% | 100% | - | 3.03 | 3.03 |
| 13 | Interest on Consumer Security Deposit | 0% | 100% | - | 7.02 | 7.02 |
| 14 | Total Revenue Requirement | | | 478.38 | 1,585.99 | 2,064.37 |
| 15 | Less: Non Tariff Income | 0% | 100% | - | 6.74 | 6.74 |
| 16 | Net Revenue Requirement | | | 478.38 | 1,579.25 | 2,057.63 |
| 17 | Energy sales (MU) * | | | | | 3,644.93 |
| 18 | Average Cost of Supply (Rs/kWh) | | | | | 5.65 |

ELECTRICITY DEPARTMENT - GOA

REVENUE AT EXISTING TARIFF for FY 2018-19

| Sr. No. | Category of Consumer | No of Consumers | Energy Sale/ Demand (MUs) | Contracted Maximum Demand (KW/kVA) | Fixed Demand Charges | Fixed Charge (Rs/kW Rs/kVA Rs/BHP Rs/Mont) | Energy Charge (Rs/kWh) | FPPCA Charge (Rs/kWh) | Min. Charges | Revenue (Rs Crore) | | | | | Average Revenue (Rs/kWh) |
|-----------------------------|--|-----------------|---------------------------|------------------------------------|-----------------------|--|-------------------------|-----------------------|--------------|--------------------|----------------|-----------------|---------------|--------|--------------------------|
| | | | | | Units | | | | | Fixed Charges | Energy Charges | Minimum Charges | FPPCA Charges | Total | |
| A Low Tension Supply | | | | | | | | | | | | | | | |
| 1 | Tariff LTD/Domestic and Non-Commercial | 4,96,725 | 984.51 | 14,29,336 | | | | | | 16.49 | 272.07 | - | - | 288.56 | 2.93 |
| 1(a) | 0-100 units | 2,11,955 | 89.28 | 4,90,300 | | 20.00 | 1.30 | | | 5.09 | 11.61 | | - | 16.69 | 1.87 |
| 1(b) | 101-200 units | 1,32,620 | 205.24 | 2,81,060 | | 20.00 | 1.90 | | | 3.18 | 38.99 | | - | 42.18 | 2.06 |
| 1(c) | 201 to 300 units | 67,644 | 174.49 | 1,97,298 | | 45.00 | 2.40 | | | 3.65 | 41.88 | | - | 45.53 | 2.61 |
| 1(d) | 301 to 400 units | 32,879 | 119.79 | 1,28,900 | | 45.00 | 3.10 | | | 1.78 | 37.14 | | - | 38.91 | 3.25 |
| 1(e) | Above 400 units | 51,626 | 395.72 | 3,31,778 | | 45.00 | 3.60 | | | 2.79 | 142.46 | | - | 145.25 | 3.67 |
| 2 | Tariff LTD/Low Income Group | 3,049 | 1.10 | 338 | Rs./Connection/ Month | 30.00 | - | | | 0.11 | - | | - | 0.11 | 1.00 |
| 3 | Tariff-LTC/Commercial | 97,268 | 340.26 | 2,95,985 | | - | - | | | 5.84 | 126.41 | | - | 132.24 | 3.89 |
| | 0-20 KW/Commercial Consumers | 95,411 | 268.67 | 1,99,785 | | | | | | | | | | | |
| | 1-100 Units | 48,949 | 114.26 | 74,930 | Rs./Connection/ Month | 50.00 | 3.25 | | | 2.94 | 37.13 | | - | 40.07 | 3.51 |
| | 101-200 units | 44,550 | 99.42 | 61,886 | Rs./Connection/ Month | 50.00 | 3.90 | | | 2.67 | 38.77 | | - | 41.45 | 4.17 |
| | 201-400 Units | 1,871 | 52.41 | 40,431 | Rs./Connection/ Month | 50.00 | 4.30 | | | 0.11 | 22.53 | | - | 22.65 | 4.32 |
| | Above 400 units | 42 | 2.59 | 22,538 | Rs./Connection/ Month | 50.00 | 4.70 | | | 0.00 | 1.22 | | - | 1.22 | 4.71 |
| | >20-90Kw Commercial Consumers | 1,857 | 71.59 | 96,200 | | | | | | | | | | | |
| | 1-100 Units | 909 | 28.04 | 31,881 | Rs./Connection/ Month | 50.00 | 3.25 | | | 0.05 | 9.11 | | - | 9.17 | 3.27 |
| | 101-200 units | 909 | 28.04 | 31,881 | Rs./Connection/ Month | 50.00 | 3.90 | | | 0.05 | 10.94 | | - | 10.99 | 3.92 |
| | 201-400 Units | 38 | 14.78 | 20,828 | Rs./Connection/ Month | 50.00 | 4.30 | | | 0.00 | 6.36 | | - | 6.36 | 4.30 |
| | Above 400 units | 1 | 0.73 | 11,610 | Rs./Connection/ Month | 50.00 | 4.70 | | | 0.00 | 0.34 | | - | 0.34 | 4.70 |
| 4 | LTI-Industry | 6,466 | 137.42 | 1,15,580 | | | | | | 4.16 | 47.81 | | - | 51.97 | 3.78 |
| | 0-500 Units | 339 | 7.21 | 6,064 | Rs./HP/Month | 30.00 | 3.10 | | | 0.22 | 2.24 | | - | 2.45 | 3.40 |
| | Above 500 units | 6,127 | 130.21 | 1,09,516 | Rs./HP/Month | 30.00 | 3.50 | | | 3.94 | 45.57 | | - | 49.52 | 3.80 |
| 5 | Tariff-LTP/Mixed (Hotel Industries) | 233 | 5.31 | 4,285 | Rs./kW/Month | 30.00 | 4.50 | | | 0.15 | 2.39 | | - | 2.54 | 4.79 |
| 6 | LT-Agriculture | 10,821 | 23.86 | 34,481 | | - | - | | | 0.56 | 3.13 | | - | 3.69 | 1.54 |
| | Tariff-LTAG/Agriculture (Pump Sets/Irrigation) (A) | 10,630 | 23.03 | 27,995 | Rs./HP/Month | 12.00 | 1.30 | | | 0.40 | 2.99 | | - | 3.40 | 1.48 |
| | Tariff-LTAG/Agriculture Allied (B) | 191 | 0.83 | 6,487 | Rs./HP/Month | 20.00 | 1.60 | | | 0.16 | 0.13 | | - | 0.29 | 3.48 |

ELECTRICITY DEPARTMENT - GOA

REVENUE AT EXISTING TARIFF for FY 2018-19

| Sr. No. | Category of Consumer | No of Consumers | Energy Sale/Demand (MUs) | Contracted Maximum Demand (KW/kVA) | Fixed Demand Charges | Fixed Charge (Rs/kW Rs/kVA Rs/BHP Rs/Mont) | Energy Charge (Rs/kWh) | FPPCA Charge (Rs/kWh) | Min. Charges | Revenue (Rs Crore) | | | | | Average Revenue (Rs/kWh) |
|----------|--|-----------------|--------------------------|------------------------------------|----------------------|--|------------------------|-----------------------|--------------|--------------------|-----------------|-----------------|---------------|-----------------|--------------------------|
| | | | | | Units | | | | | Fixed Charges | Energy Charges | Minimum Charges | FPPCA Charges | Total | |
| 7 | Tariff-LTPL/Public Lighting | 2,740 | 36.95 | 9,598 | Rs./kW/Month | 40.00 | 3.90 | | | 0.46 | 14.41 | | - | 14.87 | 4.02 |
| 8 | Tariff-LT Hoarding and SignBoard | 104 | 0.35 | 35.00 | Rs./kVA/Month | 60.00 | 9.90 | | | 0.00 | 0.35 | | - | 0.35 | 9.97 |
| | | | | | | - | - | | | | | | | - | |
| B | High Tension Supply | | | | | - | - | | | | | | | - | |
| 9 | Tariff HTD/Domestic | 2 | 0.28 | 193 | Rs./kVA/Month | 150.00 | 4.40 | | | 0.03 | 0.12 | | - | 0.16 | 5.64 |
| 10 | Tariff HT-Commercial | 117 | 79.05 | 42,567 | Rs./kVA/Month | 250.00 | 5.50 | | | 12.77 | 43.48 | | - | 56.25 | 7.12 |
| 11 | Tariff HTI/Industrial | 651 | 1,398.09 | 4,17,220 | Rs./kVA/Month | - | - | | | 125.17 | 599.70 | | - | 724.87 | 5.18 |
| | Connected at 11/33 kV | 646.03 | 1,250.34 | 3,46,336 | Rs./kVA/Month | 250.00 | 4.30 | | | 103.90 | 537.64 | | - | 641.55 | 5.13 |
| | Connected at 110 kV | 4.97 | 147.75 | 70,884 | Rs./kVA/Month | 250.00 | 4.20 | | | 21.27 | 62.06 | | - | 83.32 | 5.64 |
| 12 | H.T.Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive) | 37 | 582.70 | 1,14,756 | Rs./kVA/Month | 250.00 | 4.30 | | | 34.43 | 250.56 | | - | 284.99 | 4.89 |
| 13 | HT-Agriculture | 41 | 6.08 | 8,378 | | - | - | | | 0.37 | 0.98 | | - | 1.34 | 2.21 |
| | Tariff-HTAG/Agriculture (Pump Sets/Irrigation) (A) | 39 | 2.95 | 7,565 | Rs./kVA/Month | 35.00 | 1.40 | | | 0.32 | 0.41 | | - | 0.73 | 2.48 |
| | Tariff-HTAG/Agriculture (Allied Activities) (B) | 2 | 3.13 | 813 | Rs./kVA/Month | 50.00 | 1.80 | | | 0.05 | 0.56 | | - | 0.61 | 1.96 |
| 14 | H.T. MES/Defence Establishments | 12 | 26.89 | 7,080 | Rs./kVA/Month | 175.00 | 5.00 | | | 1.49 | 13.45 | | - | 14.93 | 5.55 |
| | | | | | | - | - | | | | | | | - | |
| C | Temporary Supply | | | | | - | - | | | | | | | - | |
| 15 | Tariff-LT/Temporary Domestic | 2,032 | 17.47 | 827 | Rs./kW/Month | 60.00 | 7.00 | | | 0.06 | 12.23 | | - | 12.29 | 7.03 |
| 16 | Tariff-LT/Temporary Commercial | 550 | 4.61 | 271 | Rs./kVA/Month | 100.00 | 9.90 | | | 0.03 | 4.57 | | - | 4.60 | |
| 17 | Tariff-HTTS/Temporary Supply | | | | Rs./kVA/Month | 120.00 | 9.90 | | | - | - | | - | - | |
| | | | | | | - | - | | | | | | | - | |
| D | Single Point Supply | | | | | - | - | | | | | | | - | |
| 18 | Residential Complexes | | | | Rs./kVA/Month | 100.00 | 3.10 | | | - | - | | - | - | |
| 19 | Commercial Complexes | | | | Rs./kVA/Month | 200.00 | 4.30 | | | - | - | | - | - | |
| 20 | Industrial Complexes | | | | Rs./kVA/Month | 200.00 | 3.90 | | | - | - | | - | - | |
| | | | | | | - | - | | | | | | | - | |
| | Total | 6,20,848 | 3,644.93 | 24,80,929 | | | | | | 202.11 | 1,391.64 | | - | 1,593.75 | |

ELECTRICITY DEPARTMENT - GOA

REVENUE AT PROPOSED TARIFF for FY 2018-19

| Sr. No. | Category of Consumer | No of Consumers | Energy Sale/ Demand (MUs) | Contracted Maximum Demand (KW/kVA) | Fixed Demand Charges Units | Fixed Charge (Rs/kW Rs/kVA Rs/BHP) | Energy Charge (Rs/kWh) | FPPCA Charge (Rs/kWh) | Revenue (Rs Crore) | | | | | Average Revenue (Rs/kWh) |
|----------|--|-----------------|------------------------------|------------------------------------|-----------------------------------|--|------------------------|-----------------------|--------------------|----------------|-----------------|---------------|--------|--------------------------|
| | | | | | | | | | Fixed Charges | Energy Charges | Minimum Charges | FPPCA Charges | Total | |
| A | Low Tension Supply | | | | | | | | | | | | | |
| 1 | Tariff LTD/Domestic and Non-Commercial | 4,96,725 | 985 | 14,29,336 | | | | | 24.94 | 288.82 | - | - | 313.76 | 3.19 |
| 1(a) | 0-100 units | 2,11,955 | 89 | 4,90,300 | Rs./Connection/ Month | 25.00 | 1.40 | | 6.36 | 12.50 | | - | 18.86 | 2.11 |
| 1(b) | 101-200 units | 1,32,620 | 205 | 2,81,060 | Rs./Connection/ Month | 25.00 | 2.00 | | 3.98 | 41.05 | | - | 45.03 | 2.19 |
| 1(c) | 201 to 300 units | 67,644 | 174 | 1,97,298 | Rs./Connection/ Month | 80.00 | 2.60 | | 6.49 | 45.37 | | - | 51.86 | 2.97 |
| 1(d) | 301 to 400 units | 32,879 | 120 | 1,28,900 | Rs./Connection/ Month | 80.00 | 3.30 | | 3.16 | 39.53 | | - | 42.69 | 3.56 |
| 1(e) | Above 400 units | 51,626 | 396 | 3,31,778 | Rs./Connection/ Month | 80.00 | 3.80 | | 4.96 | 150.37 | | - | 155.33 | 3.93 |
| 2 | Tariff LTD/Low Income Group | 3,049 | 1 | 338 | Rs./Connection/ Month | 40.00 | - | | 0.15 | - | | - | 0.15 | 1.33 |
| 3 | Tariff-LTC/Commercial | 97,268 | 340 | 2,95,985 | | - | - | | 7.07 | 131.92 | | - | 138.99 | 4.08 |
| | <u>0-20 KW/Commercial Consumers</u> | <u>95,411</u> | <u>269</u> | <u>1,99,785</u> | | | | | | | | | | |
| | 1-100 Units | 48,949 | 114 | 74,930 | Rs./Connection/ Month | 60.00 | 3.30 | | 3.52 | 37.70 | | - | 41.23 | 3.61 |
| | 101-200 units | 44,550 | 99 | 61,886 | Rs./Connection/ Month | 60.00 | 4.00 | | 3.21 | 39.77 | | - | 42.97 | 4.32 |
| | 201-400 Units | 1,871 | 52 | 40,431 | Rs./Connection/ Month | 60.00 | 4.80 | | 0.13 | 25.16 | | - | 25.29 | 4.83 |
| | Above 400 units | 42 | 3 | 22,538 | Rs./Connection/ Month | 60.00 | 5.20 | | 0.00 | 1.35 | | - | 1.35 | 5.21 |
| | <u>>20-90Kw Commercial Consumers</u> | <u>1,857</u> | <u>72</u> | <u>96,200</u> | | | | | | | | | | |
| | 1-100 Units | 909 | 28 | 31,881 | Rs./Connection/ Month | 90.00 | 3.30 | | 0.10 | 9.25 | | - | 9.35 | 3.34 |
| | 101-200 units | 909 | 28 | 31,881 | Rs./Connection/ Month | 90.00 | 4.00 | | 0.10 | 11.22 | | - | 11.31 | 4.04 |
| | 201-400 Units | 38 | 15 | 20,828 | Rs./Connection/ Month | 90.00 | 4.80 | | 0.00 | 7.10 | | - | 7.10 | 4.80 |
| | Above 400 units | 1 | 1 | 11,610 | Rs./Connection/ Month | 90.00 | 5.20 | | 0.00 | 0.38 | | - | 0.38 | 5.20 |
| 4 | LTI-Industry | 6,466 | 137 | 1,15,580 | | - | - | | 4.85 | 51.86 | | - | 56.71 | 4.13 |
| | 0-500 Units | 339 | 7 | 6,064 | Rs./HP/Month | 35.00 | 3.30 | | 0.25 | 2.38 | | - | 2.63 | 3.65 |
| | Above 500 units | 6,127 | 130 | 1,09,516 | Rs./HP/Month | 35.00 | 3.80 | | 4.60 | 49.48 | | - | 54.08 | 4.15 |
| 5 | Tariff-LTP/Mixed (Hotel Industries) | 233 | 5 | 4,285 | Rs./kW/Month | 35.00 | 4.60 | | 0.18 | 2.44 | | - | 2.62 | 4.94 |
| 6 | LT-Agriculture | 10,821 | 24 | 34,481 | | - | - | | 0.66 | 3.60 | | - | 4.26 | 1.79 |
| | Tariff-LTAG/Agriculture (Pump Sets/Irrigation) (A) | 10,630 | 23 | 27,995 | Rs./HP/Month | 15.00 | 1.50 | | 0.50 | 3.45 | | - | 3.96 | 1.72 |
| | Tariff-LTAG/Agriculture Allied (B) | 191 | 1 | 6,487 | Rs./HP/Month | 20.00 | 1.80 | | 0.16 | 0.15 | | - | 0.30 | 3.68 |

ELECTRICITY DEPARTMENT - GOA

REVENUE AT PROPOSED TARIFF for FY 2018-19

| Sr. No. | Category of Consumer | No of Consumers | Energy Sale/Demand (MUs) | Contracted Maximum Demand (KW/kVA) | Fixed Demand Charges Units | Fixed Charge (Rs/kW Rs/kVA Rs/BHP) | Energy Charge (Rs/kWh) | FPPCA Charge (Rs/kWh) | Revenue (Rs Crore) | | | | | Average Revenue (Rs/kWh) |
|------------------------------|--|-----------------|--------------------------|------------------------------------|-------------------------------|--|------------------------|-----------------------|--------------------|-----------------|-----------------|---------------|-----------------|--------------------------|
| | | | | | | | | | Fixed Charges | Energy Charges | Minimum Charges | FPPCA Charges | Total | |
| 7 | Tariff-LTPL/Public Lighting | 2,740 | 37 | 9,598 | Rs./kW/Month | 40.00 | 3.90 | | 0.46 | 14.41 | | - | 14.87 | 4.02 |
| 8 | Tariff-LT Hoarding and SignBoard | 104 | 0 | 35 | Rs./kVA/Month | 60.00 | 9.90 | | 0.00 | 0.35 | | - | 0.35 | 9.97 |
| B High Tension Supply | | | | | | | | | | | | | | |
| 9 | Tariff HTD/Domestic | 2 | 0 | 193 | Rs./kVA/Month | 160.00 | 4.60 | | 0.04 | 0.13 | | - | 0.17 | 5.92 |
| 10 | Tariff HT-Commercial | 117 | 79 | 42,567 | Rs./kVA/Month | 250.00 | 5.50 | | 12.77 | 43.48 | | - | 56.25 | 7.12 |
| 11 | Tariff HTI/Industrial | 651 | 1,398 | 4,17,220 | Rs./kVA/Month | - | - | | 125.17 | 629.14 | - | - | 754.31 | 5.40 |
| | Connected at 11/33 kV | 646 | 1,250 | 3,46,336 | Rs./kVA/Month | 250.00 | 4.50 | | 103.90 | 562.65 | | - | 666.55 | 5.33 |
| | Connected at 110 kV | 5 | 148 | 70,884 | Rs./kVA/Month | 250.00 | 4.50 | | 21.27 | 66.49 | | - | 87.75 | 5.94 |
| 12 | H.T.Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive) | 37 | 583 | 1,14,756 | Rs./kVA/Month | 250.00 | 4.50 | | 34.43 | 262.22 | | - | 296.64 | 5.09 |
| 13 | HT-Agriculture | 41 | 6 | 8,378 | | - | - | | 0.38 | 1.07 | - | - | 1.44 | 2.38 |
| | Tariff-HTAG/Agriculture (Pump Sets/Irrigation) (A) | 39 | 3 | 7,565 | Rs./kVA/Month | 35.00 | 1.50 | | 0.32 | 0.44 | | - | 0.76 | 2.58 |
| | Tariff-HTAG/Agriculture (Allied Activities) (B) | 2 | 3 | 813 | Rs./kVA/Month | 60.00 | 2.00 | | 0.06 | 0.63 | | - | 0.68 | 2.19 |
| 14 | H.T. MES/Defence Establishments | 12 | 27 | 7,080 | Rs./kVA/Month | 175.00 | 5.00 | | 1.49 | 13.45 | | - | 14.93 | 5.55 |
| C Temporary Supply | | | | | | | | | | | | | | |
| 15 | Tariff-LT/Temporary Domestic | 2,032 | 17 | 827 | Rs./kW/Month | 60.00 | 7.20 | | 0.06 | 12.58 | | - | 12.63 | 7.23 |
| 16 | Tariff-LT/Temporary Commercial | 550 | 5 | 271 | Rs./kVA/Month | 120.00 | 9.90 | | 0.04 | 4.57 | | - | 4.61 | 9.98 |
| 17 | Tariff-HTTS/Temporary Supply | - | - | - | Rs./kVA/Month | 120.00 | 9.90 | | - | - | | - | - | - |
| D Single Point Supply | | | | | | | | | | | | | | |
| 18 | Residential Complexes | - | - | - | Rs./kVA/Month | 100.00 | 3.30 | | - | - | | - | - | - |
| 19 | Commercial Complexes | - | - | - | Rs./kVA/Month | 200.00 | 4.30 | | - | - | | - | - | - |
| 20 | Industrial Complexes | - | - | - | Rs./kVA/Month | 200.00 | 4.10 | | - | - | | - | - | - |
| Total | | 6,20,848 | 3,644.93 | 24,80,929 | | | | | 212.68 | 1,460.01 | - | - | 1,672.69 | |