

**PETITION FOR APPROVAL OF
THE ANNUAL
REVENUE REQUIREMENT AND
TARIFF PROPOSAL
FOR FY 2017-18
UNDER SECTION 61, 62 & 64
OF
THE ELECTRICITY ACT 2003**

Submitted by:
Energy & Power Department, Government of Sikkim

GENERAL HEADINGS OF PROCEEDINGS

**BEFORE HON'BLE SIKKIM STATE ELECTRICITY REGULATORY
COMMISSION**

FILE No: _____

CASE No: _____

**IN THE MATTER OF : Petition for Approval of Annual Revenue Requirement
 (ARR) and Tariff Proposal for FY 2017-18 for The State of
 Sikkim under Sections 61, 62 and 64 of The Electricity Act
 2003**

AND

**IN THE MATTER OF: The Energy & Power Department,
THE PETITIONER Gangtok, Sikkim**

.....Petitioner

Energy & Power Department, Govt. of Sikkim (hereinafter referred to as "E&PDS"), files petition for Approval of Annual Revenue Requirement (ARR) and Tariff Proposal for FY 2017-18 under Sections 61, 62 and 64 of The Electricity Act 2003.

A F F I D A V I T

**BEFORE HON'BLE ELECTRICITY REGULATORY COMMISSION
FOR THE STATE OF SIKKIM**

FILE No: _____

CASE No: _____

IN THE MATTER OF : **Petition for Approval of Annual Revenue Requirement (ARR) and Tariff Proposal for FY 2017-18 for The State of Sikkim under Sections 61, 62 and 64 of The Electricity Act 2003**

AND

IN THE MATTER OF: **The Energy & Power Department,**
THE PETITIONER **Gangtok, Sikkim,**

.....Petitioner

I, , son of Shri (aged.....years),
(occupation) Government Service residing at.....,Gangtok, the deponent named
above do hereby solemnly affirm and state on oath as under:-

1. That the deponent is theof Energy & Power Department, Government of Sikkim, who is authorized as per the order of the Administration of the Government of Sikkim Order No. dated November, 2016 and is acquainted with the facts deposed to below.
2. I, the deponent named above do hereby verify that the contents of the accompanying petition are based on the records of the Energy & Power Department, Government of Sikkim maintained in the ordinary course of business and believed by them to be true and I believe that no part of it is false and no material has been concealed there from.

Details of enclosures:

a) Proposal for Aggregate Revenue Requirement (“ARR”) for the Financial Year 2017-18 for Determination of Tariff.

b) Petition Fee – Rs./- vide DD No. dated :

**The Energy & Power Department, Govt. of Sikkim
Petitioner**

Place: Gangtok

Dated: November, 2016

I, _____ Advocate, Gangtok, 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 day of November 2016 at a.m./p.m. 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.

**BEFORE HON'BLE ELECTRICITY REGULATORY COMMISSION
FOR THE STATE OF SIKKIM**

FILE No: _____

CASE No: _____

IN THE MATTER OF: **Petition for Approval of Annual Revenue Requirement (ARR) and Tariff Proposal for FY 2017-18 for The State of Sikkim under Sections 61, 62 and 64 of The Electricity Act 2003.**

AND

IN THE MATTER OF: **The Energy & Power Department,**
THE PETITIONER **Gangtok, Sikkim.**

.....Petitioner

PETITIONER, UNDER SECTIONS 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 APPROVAL OF THE ANNUAL REVENUE REQUIREMENT AND TARIFF PETITION OF ENERGY & POWER DEPARTMENT OF THE STATE OF SIKKIM (herein after referred to as "E&PDS") FOR FY 2017-18.

**THE ENERGY & POWER DEPARTMENT, GOVERNMENT OF SIKKIM
RESPECTFULLY SUBMITS:**

1. The Petitioner, The Energy & Power Department, Government of Sikkim has been allowed to function as Distribution Utility for the State of Sikkim.
2. Pursuant to the enactment of the Electricity Act, 2003, E&PDS is required to submit its Annual Revenue Requirement (ARR) and Tariff Petitions as per procedures outlined in section 61, 62 and 64, of EA 2003, and the governing regulations thereof.
3. E&PDS was directed by the Hon'ble Commission to file Petition under MYT Regulations. In this regard it is submitted that the FY 2017-18 for which the petition is being filed is the last year of the control period as provided in the MYT Regulations, therefore the requirement of the MYT Regulation to project the sales, purchase, T&D loss trajectory, components of ARR & investment plan for the period of three years cannot be complied with and also the objective of the MYT Regulation is not fulfilled.
4. In view of the above E&PDS is submitting its ARR and Tariff petition for the determination of tariff for the FY 2017-18 in accordance with the Sikkim State Electricity Regulatory Commission (Terms and Conditions for determination of Tariff) Regulations, 2012.
5. E&PDS prays to the Hon'ble Commission to admit the attached petition for Annual Revenue Requirement and Tariff Proposal for FY 2017-18 and would like to submit that:

PRAYERS TO THE HON'BLE COMMISSION:

1. The petition provides, inter-alia, E&PDS's approach for formulating the present petition, the broad basis for projections used, summary of the proposals being made to the Hon'ble Commission, performance of E&PDS in the recent past, and certain issues impacting the performance of E&PDS in the Licensed Area.
2. Broadly, in formulating the application for Truing-up for FY 2015-16, for Review for FY 2016-17 & ARR and Tariff Petition for the FY 2017-18, the principles specified by the Sikkim State Electricity Regulatory Commission in the notified (Terms and Conditions for determination of Tariff) Regulations, 2012 ("Tariff Regulations") have been considered as the basis.
3. In order to align the thoughts and principles behind the Truing-up, Review & ARR and Tariff Petition, E&PDS respectfully seeks an opportunity to present their case prior to the finalization of the Tariff Order. E&PDS believes that such an approach would go a long way towards providing a fair treatment to all the stakeholders and may eliminate the need for a review or clarification.
4. E&PDS may also be permitted to propose suitable changes to the petition and the mechanism of meeting the revenue on further analysis, prior to the final approval by the Hon'ble Commission.

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

- Consider the submissions and allow the provisional True-up of expenses for the FY 2015-16 and revised estimates for the FY 2016-17.
- Accept the Annual Revenue Requirement and Tariff petition for the FY 2017-18 for E&PDS formulated in accordance with the guidelines outlined in the Sikkim State Electricity Regulatory Commission (Terms and Conditions for determination of Tariff) Regulations, 2012 and the principles contained therein;;
- Approve appropriate recovery of ARR of FY 2017-18;
- Approve the category-wise tariff including fixed/ demand charges submitted by E&PDS to meet revenue requirement for FY 2017-18;
- Approve the tariff philosophy suggestions requested by E&PDS;
- Condone any inadvertent delay/ omissions/ errors/ rounding off differences/shortcomings and E&PDS may please be permitted to add/ change/ modify/ alter the petition;
- Permit E&PDS to file additional data/ information as may be necessary;
- Pass such further and other orders, as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case.

The Energy & Power Department, Govt. of Sikkim

Petitioner

Place: Gangtok, Sikkim

Dated: November, 2016

Table of Contents

1. INTRODUCTION	1
1.1 Historical Perspective	1
1.2 SSERC Formation	1
1.3 Filing of ARR and Tariff Petition for the FY 2017-18.....	2
2. OVERALL APPROACH FOR PRESENT FILING	2
2.1 Provisional True-up of FY 2015-16, Review of FY 2016-17 & Annual Revenue Requirement and Tariff Petition for FY 2017-18.....	2
2.2 Approach for the Filing	2
3. COMPLIANCE OF DIRECTIVES.....	3
4 PROVISIONAL TRUE-UP FOR FY 2015-16.....	21
4.1. Background	21
4.2. Energy Sales	21
4.3. Transmission and Distribution Losses	21
4.4. E&PDS Own Generation	22
4.5. Power Purchase.....	22
4.6. Energy Balance	22
4.7. Fuel Cost	23
4.8. Power Purchase Cost	23
4.9. Employee Cost.....	24
4.10. Repair & Maintenance Expenses	24
4.11. Administrative & General Expenses	24
4.12. Depreciation	25
4.13. Interest & Finance Charges	25
4.14. Other Income.....	25
4.15. Return on Equity	26
4.16. Revenue from sale of power	26
4.17. True-up of ARR for FY 2015-16.....	27
SECTION – II	28
5. Review for FY 2016-17.....	29

5.1.	Background	29
5.2.	Energy Sales	30
5.3.	Transmission and Distribution Losses	30
5.4.	E&PDS Own Generation	31
5.5.	Power Purchase.....	31
5.6.	Energy Balance	32
5.7.	Fuel Cost	32
5.8.	Power Purchase Cost	33
5.9.	Employee Cost.....	33
5.10.	Repair & Maintenance Expenses	33
5.11.	Administrative & General Expenses	34
5.12.	Depreciation	34
5.13.	Interest & Finance Charges	34
5.14.	Other Income.....	35
5.15.	Return on Equity	35
5.16.	Revenue from Sale of Power	35
5.17.	Review of ARR for FY 2016-17	36
	SECTION –III.....	37
6.	ANNUAL REVENUE REQUIREMENT FOR FY 2017-18.....	38
6.1.	Energy Requirement.....	38
6.1.2	Category wise Sales Forecast	39
6.1.3	Billed Demand & Number of Consumers	40
6.1.4	Distribution Losses.....	40
6.1.5	Energy Requirement & Sources of Power Purchase	40
6.2.	Capital Expenditure & Capitalisation	42
6.2.1	Capital Expenditure & Capitalisation of Assets	42
6.3.	Annual Revenue Requirement for E&PDS	43
6.3.1	Power Purchase.....	43
6.3.1.1	Source of Power	43
6.3.2	Assumption for Power Purchase Projection	44
6.3.3	Power purchase from CGS Stations	44

6.3.4	External Power Purchase/ Other Sources	45
6.3.5	Transmission, Other Charges and Rebates	46
6.4.	Operation & Maintenance Expenses.....	46
6.4.1	Employee Cost.....	46
6.4.2	Administrative & General Expenses	48
6.4.3	Repair and Maintenance Expenses	48
6.5.	Gross Fixed Assets	49
6.6.	Depreciation	50
6.7.	Capital Based Return	50
6.8.	Return on Equity	51
6.9.	6.9.1 Interest & Finance Charges	51
6.9.2	Interest on Working Capital	52
6.10.	Provision for Bad and Doubtful Debts	52
6.11.	Non-Tariff Income	52
6.12.	Annual Revenue Requirement.....	53
6.13.	Average Cost to Supply	53
6.14.	Revenue at Existing Tariff and Gap for FY 2017-18.....	54
7.	<i>TARIFF PROPOSAL FOR FY 2017-18.....</i>	55
7.1	Recovery of Revenue Gap for FY 2017-18.....	55
7.2	Proposed Tariff in FY 2017-18.....	55
7.2.1	Tariff Proposal for FY 2017-18.....	55
7.3	Revenue at Proposed Tariff in FY 2017-18.....	57
7.3.1	Impact of Tariff on Consumers.....	57
8.	<i>TARIFF SCHEDULE – FY 2017-18.....</i>	59

LIST OF TABLES

Table 4.1: Energy Sales FY 2015-16	21
Table 4.2: T&D Loss for FY 2015-16	22
Table 4.3: E&PDS Own Generation FY 2015-16	22
Table 4.4: Power Purchase Units FY 2015-16.....	22
Table 4.5: Energy Balance FY 2015-16	23
Table 4.6: Fuel Cost FY 2015-16	23
Table 4.7: Power Purchase Cost FY 2015-16.....	24
Table 4.8: Employee Cost FY 2015-16	24
Table 4.9: Repair & Maintenance Cost FY 2015-16	24
Table 4.10: Admin. & General Expenses FY 2015-16.....	25
Table 4.11: Depreciation FY 2015-16	25
Table 4.12: Interest & Finance Charges FY 2015-16.....	25
Table 4.13: Other Income FY 2015-16.....	26
Table 4.14: Return on Equity FY 2015-16	26
Table 4.15: Revenue from Sales FY 2015-16.....	26
Table 4.16: True up of ARR FY 2015-16.....	27
Table: 5.1: Energy Sales FY 2016-17	30
Table: 5.2: T&D Loss FY 2016-17	30
Table: 5.3: E&PDS Own Generation FY 2016-17	31
Table: 5.4: Power Purchase Units FY 2016-17	31
Table: 5.5: Energy Balance for FY 2016-17.....	32
Table: 5.6: Fuel Cost FY 2016-17	32
Table: 5.7: Power Purchase Cost FY 2016-17.....	33
Table: 5.8: Employee Cost FY 2016-17	33
Table: 5.9: Repair & Maintenance Cost FY 2016-17	33
Table: 5.10: Administrative & General Expense FY 2016-17	34
Table: 5.11: Depreciation FY 2016-17	34
Table: 5.12: Interest & Finance Charges FY 2016-17.....	34
Table: 5.13: Other Income FY 2016-17.....	35
Table: 5.14: Return on Equity FY 2016-17	35
Table: 5.15: Revenue from Sales FY 2016-17.....	35
Table: 5.16: Review of ARR FY 2016-17	36
Table 6.1: Projected Energy Sales – FY 2017-18.....	39
Table 6.2: No. of Consumers – FY 2017-18.....	40
Table 6.3: Energy Requirement – FY 2017-18.....	41
Table 6.4: Details of Power Procurement Sources – FY 2017-18.....	42
Table 6.5: Summary of Proposed Capital Expenditure & Capitalisation FY 2017-18.....	43
Table 6.6: Power Allocation	44
Table 6.7: Summary of E&PDS Power Purchase Expenses for FY 2017-18.....	45
Table 6.8: Operation & Maintenance Expenses for FY 2017-18	46
Table 6.9: Employee Cost for FY 2017-18.....	47
Table 6.10: Administrative & General Expenses for FY 2017-18	48
Table 6.11: Repair & Maintenance Expenses for FY 2017-18.....	49
Table 6.12: Gross Fixed Assets Movement	49
Table 6.13: Depreciation for FY 2017-18.....	50
Table 6.14: Capital Base and Return	50
Table 6.15: Return on Equity for FY 2017-18	51
Table 6.16: Interest & Finance Charges for FY 2017-18	51
Table 6.17: Information regarding Working Capital for the current and ensuing year	52
Table 6.18: Annual Revenue Requirement for the Year 2017-18	53

Table 6.19: Revenue at Existing Tariff – FY 2017-18	54
Table 6.20: Revenue GAP at Existing Tariffs – FY 2017-18.....	54
Table 7.1: Energy Charge – Existing V/s Proposed Tariff	56
Table 7.2: Comparison of Revenue from Existing Tariff with Proposed Tariff.....	57
Table 7.3: Impact of Tariff Hike FY 2017-18	57

LIST OF ABBREVIATIONS

Abbreviation	Description
A&G	Administration & General
ARR	Annual Revenue Requirement
ATE	Appellate Tribunal For Electricity
CAGR	Compound Annual Growth Rate
CD	Contract Demand
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Stations
CoS	Cost of Supply
CPSU	Central Power Sector Undertakings
Crs	Crore
D/E	Debt Equity
E&PDS	Energy & Power Department, Govt. of Sikkim
EHT	Extra High Tension
ER	Eastern Region
FAC	Fuel Adjustment Costs
FDR	Fixed Deposits Receipts
FSTPS	Farakka Super Thermal Power Station
FY	Financial Year
GFA	Gross Fixed Assets
HP	Horse Power
HT	High Tension
SSERC	Sikkim State Electricity Regulatory Commission
KhSTPS	Kahalgaon Thermal Power Station
KV	Kilovolt
KVA	Kilo volt Amps
kWh	kilo Watt hour
L.T.M.D.	Low Tension Maximum Demand
LNG	Liquefied Natural Gas
LT	Low Tension
LTC	Leave Travel Concession
MU	Million Units
MVA	Million volt Amps
MW	Mega Watt

Abbreviation	Description
NHPC	National Hydroelectric Power Corporation Ltd.
O&M	Operation & Maintenance
PGCIL	Power Grid Corporation of India Limited
PLF	Plant Load Factor
PLR	Prime Lending Rate
PTC	Power Trading Corporation of India Ltd.
R&M	Repairs and Maintenance
RoR	Rate of Return
Rs.	Rupees
S/s	Sub Station
SBI	State Bank of India
SERC	State Electricity Regulatory Commission
SPV	Special Purpose Vehicle
T&D	Transmission & Distribution
TSTPS	Talcher Super Thermal Power Station
UI	Unscheduled Interchange
WBSEDCL	West Bengal State Electricity Distribution Company Ltd.



1. INTRODUCTION

1.1 Historical Perspective

The Energy and Power Department, Sikkim (E&PDS) is responsible for power supply in the state of Sikkim. E&PDS has generation capacity of 41.59 MW, comprising of 36.6 MW & 4.992 MW of Hydro & Diesel generation respectively. The power requirements for E&PDS are met through its share from Sikkim Power Development Corporation (SPDC) and Central Sector Power Generation Stations apart from its own generation.

The State of Sikkim is located 114 kms from Siliguri. With a total area of 7096 sq. kms, the State has a population of around 6.08 Lakhs as per 2011 census, spread over towns and villages.

The present demand for Sikkim is being met by power from various central generating stations (CGS), and various Hydro Electric & Diesel generating Projects. E&PDS has projected 107529 consumers with an annual energy consumption of about 276.01 MUs for the FY 2017-18. These consumers can be broadly classified into following four categories:

Category	%
Domestic	87.30
Commercial	10.46
Industrial both HT & LT	0.87
Bulk	1.33

1.2 SSERC Formation

In exercise of the powers conferred by the Electricity Act 2003 the Government of Sikkim constituted an Electricity Regulatory Commission to be known as “Sikkim State Electricity Regulatory Commission” (SSERC) as notified on 15-11-2003.

The Hon’ble Commission is a one-member body designated to function as an autonomous authority responsible for regulation of the power sector in the State of Sikkim. The powers and the functions’ of the Hon’ble Commission are as prescribed in the Electricity Act 2003. The Head Office of the Commission presently is located at Gangtok, Sikkim.

The Sikkim State Electricity Regulatory Commission started to function with effect from 11-04-2011 with the objectives and purposes for which the Commission has been established. Presently the Hon’ble Commission is framing various regulations as mandated in the Electricity Act 2003 to facilitate its functioning.



1.3 Filing of ARR and Tariff Petition for the FY 2017-18

Under the provisions of Electricity Act, 2003, Licensee is required to submit its application for True-up, Review & ARR and Tariff Petitions as per procedures outlined in section 61, 62 and 64 of EA 2003, and the governing regulations of SSERC thereof.

E&PDS has adopted the principles of Terms and Conditions for Determination for Tariff Regulations, 2012 notified by the Sikkim State Electricity Regulatory Commission.

Accordingly, E&PDS in the present petition is filing to the Hon'ble Commission for allowing the provisional True-up of expenses for the FY 2015-16 and revised estimates for the FY 2016-17 and approval of the Annual Revenue Requirement (ARR) and Determination of Tariff for the FY 2017-18 as the Distribution Licensee as per the Electricity Act, 2003 and Terms and Conditions for Determination for Tariff Regulations, 2012 notified by the Sikkim State Electricity Regulatory Commission.

Further the actual performance for FY 2015-16 and estimated performance FY 2016-17 has been considered as base for computation of ARR for FY 2017-18.

2. OVERALL APPROACH FOR PRESENT FILING

2.1 Provisional True-up of FY 2015-16, Review of FY 2016-17 & Annual Revenue Requirement and Tariff Petition for FY 2017-18

E&PDS is filing the petition for provisional True-up of FY 2015-16, Review of FY 2016-17 and determination of Annual Revenue Requirement and Tariff Petition for the FY 2017-18 based on the past performance and expected changes in each element of cost and revenue for the ensuing year. E&PDS has studied the past trends and taken cognizance of other internal and external developments to estimate the likely performance for FY 2017-18.

2.2 Approach for the Filing

The present filing for provisional True-up of FY 2015-16, Review of FY 2016-17 and Annual Revenue Requirement and Tariff Petition for the FY 2017-18 is based on the principles enumerated by the Sikkim State Electricity Regulatory Commission (SSERC) in the terms and conditions for determining of Tariff Regulations, notified by the SSERC. The subsequent sections provide actual and revised details for FY 2015-16 and FY 2016-17 respectively and projection for various expenses, the proposed investment plan for the year and the expected revenue projections with existing tariff for FY 2017-18 based on various tariff notifications in force in the area of supply of E&PDS.

Projections of various cost components required for determination of Aggregate Revenue Requirement for FY 2017-18 along with the rationale for estimation of such cost. Further, the philosophy adopted by E&PDS for projecting sales, number of consumers and power purchase



cost for FY 2017-18 has been covered in the subsequent section.

For the purpose of projecting the financial & technical parameters for FY 2017-18, E&PDS has considered its actual performance during FY 2015-16 and estimated performance during FY 2016-17 as base and has projected the figures for FY 2017-18 with supporting rationales.

3. COMPLIANCE OF DIRECTIVES

In pursuance to the directives issued by the Hon'ble Commission in its Tariff order No. TR - 1/2016-17/SSERC dated 11.04.2016 regarding the ARR & Tariff for the Year 2016-17, the compliance is submitted as under:-

Directive – 1:

“During the course of the performance review relating to the Energy and Power Dept., the deemed Licensee in the State, for the financial year 2012-2013, it was observed that, with exception of marginal improvements recorded in some areas of operation, the compliance requirements, as enjoined in the directives issued by the Commission, have not been adequately satisfied by the licensee. The Commission reiterates the directives in this regard for the concerned Licensee to address these pertinent issues with utmost diligence and ensure compliance of the same.”

Compliance:

It is submitted that EPDS has been continuously making efforts to improve the performance as per the various directives issued by the Hon'ble Commission. However, due to certain operational constraints, there has been delay in complying with the few of the directives. The Department shall take required action in a time bound manner in this regard.

Commission's Comment:

The Commission is aware of the efforts being made by the EPDS for improving its overall performance standard. The Commission feels that the setting annual targets for achieving desired level of standard of performance and regular monitoring/review of the targets achieved and taking timely corrective measure/actions will go a long way in improving the efficiency and quality of performance of the EPDS. The Commission advises the EPDS to make relentless efforts towards achieving tangible results in the near future.

Compliance: **

Directive 2:

“The status with regard to outstanding billing arrears in respect of consumers, particularly involving Govt. Departments including Public sector Undertakings, Central Govt. / Army establishments, etc., was found to be disturbing. Immediate steps to recover such outstanding arrears need to be taken up on a war footing. The EPDS is directed to consider the option to seek legal remedies under section 56 of the Electricity Act for realization of all unsettled bills”



Compliance:

It is submitted that the EPDS has taken various steps to improve the revenue collection. Initiatives have been taken to ensure that current bills are recovered and collection efficiency for the current period improves. Accordingly, target for restricting commercial losses has been fixed and revenue recovery drives has been undertaken. The Department is also conducting revenue meeting every month with all the concerned officers to ensure effective action in this regard.

In respect of the arrears, the Department has identified the defaulting consumers and is taking recovery steps and shall be able to reduce the arrears but since the sizeable proportion of the arrears are long pending, recoverability of the same are to be assessed. The Department shall report the status to the Hon'ble Commission.

Commission's Comments:

The efforts being made by the EPDS for improving revenue collection efficiency and reducing commercial losses are noteworthy. So far as the outstanding arrears is concerned, the Commission advises the EPDS to put up a comprehensive note/proposal to the State Government for recovery of the arrears especially from the various State Government Departments/Agencies. A status report on the outstanding arrears and impact/result of the revenue collection drives may be submitted to the Commission within a period of three months from the date of this Order.

Compliance: **

Directive 3:

“The EPDS is called upon to institute effective and conscious measures to mitigate revenue shortfalls attributable to T & D losses. In this regard, the concerned deemed licensee is advised to address Critical areas viz. institutionalizing an in-built energy auditing mechanism, introduction of pre-paid billing system, unbundling of generation, transmission and distribution as distinct segments, etc. The EPDS is also advised to undertake installation of Remote Sensing Meters in all Bulk load consuming units such as Industrial Units, Star category Hotels, etc. in order to facilitate effective and efficient monitoring and billing of energy consumption. These administrative measures are underlined with the view to bringing about a tangible improvement in the overall performance of the licensees.”

Compliance:

It is submitted that EPDS has instituted measures/steps as suggested by the Hon'ble Commission in the above directive and the same is yielding results, however, the details of the achievement/result shall be analysed, tabulated and submitted shortly.

Commission's Comments:

The EPDS has not furnished the details of the measure/steps taken and the results achieved. The EPDS is directed to submit report on the measures undertaken and the results achieved by 30th June, 2016.



Compliance:

The list of measures taken to mitigate the revenue shortfall on account of T&D losses pertaining to HQ Gangtok are as follows:

1. Metering of all the 11 kv feeders
2. Metering of all the Distribution transformers.
3. Metering of all consumers with special emphasis on large industrial and commercial consumers.
4. Consumer indexing and GIS mapping of consumers and physical assets.
5. Establishment of meter data acquisition system for online monitoring of Distribution transformers and feeders.
6. Integration of billing, metering, GIS system for real time energy audit.

Directive 4:

“In the area of energy auditing, the EPDS has reportedly undertaken a pilot project for Gangtok to address issues impacting technical and commercial losses. While appreciating the initiative taken by the EPDS in this regard, it is suggested that appropriate steps be also taken to install meters covering all Feeder 132KV, 66KV and 11KV transmission lines including the distribution transformer points to facilitate effective monitoring of distribution and consumption of energy load. These measures would contribute to containing the Transmission and Distribution losses.”

Compliance:

It is submitted that EPDS has taken many measures/steps for containing the Transmission and Distribution Losses including metering of feeder. The report on above initiatives of the Department shall be submitted shortly.

Commission’s Comments:

The EPDS must take steps towards reducing the T&D losses and Commercial losses. Segregation of Technical and Commercial losses needs to be done to arrive at the correct picture of the losses. The EPDS is advised to start segregation of the Technical and Commercial losses. To begin with, the EPDS may take up such exercise in the District Headquarters/Major towns and subsequently cover other smaller towns and villages. A report on the schemes/measures undertaken or proposed to be undertaken in the near future towards metering of all feeder 132 KV, 66 KV and 11 KV transmission lines including distribution transformers may be made available to the Commission by 30th June 2016.

Compliance:

Metering of all feeders from 66kv to 11kv has been completed in Gangtok HQ area. All the distribution transformers have been metered too.

Directive 5:

“The need for instituting a mechanism for monitoring of all licensees involved in the energy generation and distribution chain vis-à-vis the parameters as envisaged in the respective Project



Implementation Agreements needs to be addressed to obviate any omissions and commissions which would be detrimental to the interest of the Govt. as well the consumers.”

Compliance:

It is submitted that EPDS has taken steps for monitoring of all licensees involved in the energy generation and distribution chain vis-a-vis the parameters as envisaged in the respective Project implementation Agreements to obviate any omissions and commissions. Accordingly, as reported earlier, the Chief Engineer (East) is appointed as a Nodal Officer and entrusted with the above responsibility. However, the report as desired by the Hon’ble Commission shall be submitted shortly.

Commission’s Comments:

The Commission advises the EPDS to have regular review meetings with the Licensees involved in the energy generation and distribution. The EPDS should undertake regular field visits/site inspections to monitor the project implementation apart from ensuring compliance of the various parameters envisaged in the Implementation Agreements. The EPDS should consider deputing its Engineers to the IPP projects especially in the projects in which the State has equity share. This will give an opportunity to the Engineers of the EPDS to sharpen their technical knowledge and also participate in the overall implementation and decision making process of the projects.

Compliance: **

Directive 6:

“The Commission observes that despite specific directives having been issued with regard to maintenance of Asset and Depreciation Register, it is regretted that the EPDS has not complied with the orders. The EPDS is hereby directed to ensure that appropriate action is taken and the requisite Document submitted to the Commission latest by the 30th September, 2013.

Compliance:

It is submitted that the updated Asset & Depreciation Register for all the three functions viz. Generation, Transmission and Distribution detailing there in, the category wise assets with accumulated depreciation, depreciation for the FY 2014-15 and WDV of respective assets shall be submitted separately.

Commission’s Comments:

The EPDS is directed to make regular updates of the Assets and Depreciation Register for all the functions. The Abstract of the updated Assets and Depreciation Register may be submitted to the Commission by 30th June, 2016.

Compliance: **



Directive 7:

On the request of the EPDS, the Commission has agreed to permit extension of the time for submission of all the prescribed documents and schedules relating to the Annual Accounts and the Balance Sheets along with the Profit and Loss Accounts as required under the Electricity (Supply / Annual Accounts) Rules 1985 and submit the same to the Commission.

Compliance:

It is submitted that the details of the assets, accumulated depreciation, annual depreciation, WDV etc. are required to be incorporated in the Annual Accounts. These figures are to be obtained from the Fixed Asset Register as explained in reply to directive 6 above. Therefore, the Annual Accounts is proposed to be submitted along with the Asset & Depreciation Register by January, 2016.

Commission's Comments:

The EPDS has not submitted the updated Assets and Depreciation Register or the Annual Accounts to the Commission as per the time frame (January, 2016) given by it. The Commission directs the EPDS to take necessary action towards auditing of its accounts for timely preparation of audited statement of accounts and updation of the Assets and Depreciation Register. The EPDS is directed to furnish a report on the action taken in this regard by 31st May, 2016.

Compliance: **

Directive 8: Management Information System (MIS)

“The EPDS has not maintained proper data in respect of sales (slab wise), with number of consumers and connected load / demand etc. for proper analysis of the past data based on actuals and estimation of proper projections for consideration in the ARR. The EPDS is directed to take steps to build Credible and accurate data base and management information system (MIS) to meet the requirements for filing ARR & Tariff Petition as per regulatory requirement. The formats, software and hardware may be synchronized with the Regulatory Information and Management System (RIMS) circulated by Central Electricity Regulatory Commission (CERC).”

Compliance:

It is submitted that the details of the Category-wise connected load, Revenue Billed, Revenue Collected and balance outstanding shall be submitted separately.

Commission's Comments:

Maintaining proper data of the different categories of consumers, details of connected load, revenue billed and revenue collected, balance outstanding etc. is of prime importance for analysing the past data for proper estimation and correct projections in the ARR. The Commission re-iterates its directives and call upon the EPDS to build credible and accurate data base of the consumers.

Compliance: **



Directive 9: Replacement of Non-Functional / Defective Meters

“Section 55 of the Electricity Act makes it mandatory for all consumers to have a meter installed at the place of residence / office. EPDS must ensure that all households in the State be properly metered. EPDS may like to avail of the assistance of the Government Undertakings like State Trading Corporation Sikkim (STCS) and Sikkim State Cooperative Supply and Marketing Federation (SIMFED) for making available standard meters that can be availed of by the consumers at a reasonable price. Metering is a pre-requisite for new service connection and EPDS is directed to complete 100% metering of consumers and shall ensure that no new service connections are provide unless metering is done. Installation of meter shall be a pre-requisite for any new service connection.

The EPDS has submitted report on % of defective meters as follow:	
Bulk supply	31.00%
HTS	7.23%
LTIS	13.11%
Commercial	11.08%
Domestic	20.42%

The situation is quite alarming. Latest information of non-functional meters may be obtained from the field offices and ensure that data is maintained correctly.

Replacement of meters shall be planned on priority wise i.e., meters of Bulk supply, Commercial, Industrial and high value domestic categories to be replaced on priority. In respect of defective meters billing may be done by adopting standard method. The data on defective meters, replacement, and pendency shall be filed with the next petition.

Compliance:

It is submitted that as reported earlier, EPDS has taken steps for replacement of defective meters with special focus on the HT and Bulk consumers. There has been substantive progress in this regard. Further, steps have also been taken for installation of new meters to unmetered consumers, either by the department directly or by the consumers. While the department is making all efforts to replace the defective meters and ensure 100% metering, the status report detailing therein the progress made till date shall be submitted shortly.

Commission's Comments:

EPDS has not furnished the details of the achievements made by it against the targets set by the Commission for replacement of defective meters. The EPDS was also directed to draw suitable plans to implement the directive of the Commission. The details of such plan drawn by the EPDS and target achieved may be furnished by 30th June, 2016.



Compliance:

- 1) Defective meters within Gangtok HQ are being proactively replaced. Large quantities of electronic meters have already been procured for this purpose and are being utilized to ensure 100% metering.
- 2) The circle offices under L/R wing have been directed to carry out work on 100% metering on consumer's premises. The work of replacement of defective energy meters have already been taken up by the concerned circles. The new energy meters have either being self procured by the consumer's or purchased departmentally. The circle heads have assured that 100% metering works on the various categories of consumer's would be completed within December 2016. No new service connection and temporary connection has been released without the installation of energy meters.

Directives 12: Interest on Consumer Security Deposit

“EPDS did not indicate the amount of security deposit collected from the consumers. EPDS is informed that as per the section 47 (4) of Indian Electricity Act 2003, the distribution licensee shall pay interest equivalent to bank rate or more as may be specified by the concerned State Commission on the consumer security deposit.

EPDS is directed to maintain consumer-wise security deposit collected. Such data shall be furnished with the next filing invariably.”

Compliance:

It is submitted that the details are being compiled and shall be submitted shortly.

Commission's Comments:

The EPDS has not given any definite time frame for submitting the details. The EPDS is directed to submit the details by 30th June, 2016.

Compliance:

Security Deposit from Industrial Consumer for 2015-16

Sl No.	Particular	Amount
1	A/C Glenmark Pharmaceutical Ltd.	Rs. 1,58,11,946/-
2	A/C M/S Mos Varaya Infrastructure Ltd.	Rs. 7,13,000/-
3	A/C M/S Varaya Infrastructure Ltd.	Rs. 7,13,000/-
4	A/C PTS Packers & Providers Ltd.	Rs. 1,46,488/-
5	A/C PTS Pharmaceutical Pvt. Ltd.	Rs. 3,21,400/-
6	A/C M/S Torrent Pharmaceutical Ltd.	Rs. 78,72,299/-
7	A/C M/S Lanco Infrastructural Ltd.	Rs. 9,89,342/-

Directive 13: Consumer Awareness/ Sensitization

EPDS is directed to carry out “Consumer Awareness / Sensitization” campaigns so as to educate the consumers and the general public on the various initiatives and subsidies announcement by the government and manner of obtaining these benefits.



EPDS is also directed to create awareness and sensitize its employees on the need to be fully aware of various acts, rules & regulations, safety practices etc., EPDS may consider imparting trainings, arrangement workshops etc. for its employees.

Compliance:

It is submitted that Energy & Power has been conducting public awareness programme through various meeting and public interactions. Further, regular training and workshops for employees are also being conducted. These steps have resulted in improvement in general awareness among public and employees. However, the suggestion of the Hon'ble Commission for public awareness and sensitization programme through Print and Electronic Media shall be undertaken and compliance shall be reported as directed.

Commission's Comments:

The EPDS may consider conducting public awareness campaign under "Energy Efficiency" program of the BEE. The EPDS is directed to explore the possibility of organizing periodical consumer awareness programs under the energy saving/energy efficiency programs of the BEE.

Compliance: **

Directives 14:

Reforms in the energy sector are absolutely necessary to overhaul the Energy Sector to make it more vibrant and commercially viable in view of the huge hydro power potential in the State. As part of the reforms envisaged the State Government will have to consider seriously the huge monopolistic role of the EPDS in the generation, transmission and distribution of electricity in the State. Most of the States have already initiated the process of unbundling their Energy / Power Departments/SEBs into separate corporate entities covering generation, transmission and distribution, even going to the extent of utilizing the private sector in the distribution of power. This is an important aspect the State Government will have to look at in order to ensure that the Power sector lives up to its expectation of becoming the State's main revenue earner. In addition the EPDS needs to examine and review the milestones agreed upon in the Memorandum of Understanding (MOU) signed with the Ministry of Power in December 2002 by the Government of Sikkim which have not been fully achieved. Necessary steps and actions need to be taken for achieving the target and commitment for implementing of reforms programme in the power sector.

Compliance:

It is submitted that EPDS has taken steps for reforms in accordance with the principles envisaged in the Act, to make the department more efficient and commercially viable. These steps are to be taken in consultation/approval of the Government. The status report on the above directive regarding steps taken/proposed to be taken shall be submitted separately.



Commission's Comments:

The Commission has already notified the SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013 vide Gazette Notification No. 204 Dated 21st May 2014 as per the guidelines of the Central Electricity Regulatory Commission. The said Multi Year Tariff Regulations had become effective from 1st April 2015. However, due to delay in un-bundling of the EPDS, the segregation of separate functions for Generation, Transmission and Distribution has not been done. As such Commission has been compelled to accept the ARR/Tariff Petition of the EPDS under single year tariff design in lieu of Multi Year Tariff. The Commission has accepted the single year tariff of the EPDS for FY 2015-16 and FY 2016-17 but in view of the MYT Regulations notified, the Commission can't continue relaxing the norms.

The EPDS is directed to put up a proposal to the Government for expediting the un-bundling of the EPDS. A definite time frame is required to be fixed by the EPDS towards its un-bundling. The EPDS is advised to undertake case studies/study tours of reforms done by States like Himachal Pradesh, Arunachal Pradesh and other States and try and replicate the successful models. This Commission will provide necessary support towards such case studies/study tours by way of seeking assistance from the Regulatory Commissions of those States.

Compliance: **

Directives 15: Energy Efficiency Measures

Consumers in the state need to be encouraged and motivated to use energy-efficient lighting systems like LED, CFL in the houses, factories etc. Municipal Corporation, Municipalities and Panchayats too need to be sensitised to take steps to provide LED bulbs for street lighting. A programme is to be chalked out to replace the existing lighting with LED lights within a period of 2 to 3 years. Requirements of such lights, type of lighting quality, etc., may be assessed. Also, the investment needs for such a programme may be worked out. A suitable plan of action may be worked out and reported to the Commission by 30th June, 2015.

Compliance:

The EPDS has taken steps to encourage the consumers to use energy –efficient lighting systems like LED, CFL in the houses, factories etc. Department is planning/executing effective actions on the Demand Side Management (DSM) front. A detailed report on the above shall be submitted shortly.

Commission's Comments:

The EPDS is directed to furnish the details of the Action Plan/Investment Plan formulated it by 30th June, 2016.



Compliance:

Energy Efficiency Measures

- 1) The Energy & Power Department, Govt. of Sikkim has been notified as the State Designated Agency (SDA) for Energy Conservation in the year 2009. Since then, the Department has been carrying out various activities related to Energy Conservation namely Awareness & Sensitization programmes, Pilot projects, Workshops, and Publicity through print & electronic media etc. under the aegis of the Bureau of Energy Efficiency, Govt. of India.

In the last financial year, one of the main target group for awareness & sensitization programme were the student from different Government schools all over the State through formation of Energy Clubs. These clubs are financially supported by the Department. Fourteen schools have formed such clubs and have held competition in painting, power point presentation, skit and models. The theme for these activities was Energy Conservation.

This year onwards the focus on awareness and sensitization programme on Energy Conservation will be towards the elected representatives of both rural & urban bodies. Recently on the 14th May 2016, one such programme was conducted at the Community Centre at Gezing where elected representatives of Gezing Municipality & Panchayats of nearby wards, students and local gentries were invited. Many such programmes are in the pipeline for this fiscal year.

Some of the recent activities done by the Department are shown in table A

TABLE A

Sl No	Year	Month	Brief Description of Event/Activity
1	2015-2016	June	330 Nos of houses at Tingmoo, Higdam, Lamaten&Mambru villages in South Sikkim have provided with 2 LED bulbs & 2 LED tube lights along with repair of damaged wiring
		August	Establishment of Energy clubs in 14 Govt. schools in the State through financial support of SDA
		September	Launching of SDA website “www.sdasikkim.com”
		October	3 days workshop on ECBC at Gangtok with resource persons from UNDP & BEE.
		December	Appeal to general public for energy conservation through local TV, FM radio, AIR and pamphlets.
		February	District level competition between the schools having Energy clubs in skit, power point presentation, models & painting. The theme was Energy Conservation.
2	2016-2017	April	On the 9 th of April, a rally of 1000 students was taken out from Deorali till Manan Kendra with placards bearing slogans on how to conserve energy. After the rally, State level competition on skit, power point presentation, model display and painting was held amongst the district winner of schools having Energy clubs.



**Petition for Approval of Annual Revenue Requirement
& Tariff Proposal for FY 2017-18**

		May	<p>a. On 14th May, Awareness cum Sensitization programme on Energy Conservation was conducted at Gezing Community Hall. It was attended by councilors of Gezing Municipality, Panchayats of nearby wards, Students and local residents. Prior to this programme a rally of school students was taken out from Community hall to Bazar and then back to community hall.</p> <p>b. Awareness programme for Officers and Staff of South circle (Jorethang) on Energy Conservation was held on 20th May at Jorethang.</p>
--	--	-----	---

153 Nos of Sodium Vapour Street Lights were replaced with 90 watts LED fittings from zero point (GICI) Gangtok till Krishi Bhawan, Tadong during December 2014. This was taken up from the provision of Demonstration project funded by Bureau of Energy Efficiency, GOI. Also, the ordinary Street Light fittings from zero point, Gangtok towards Ridge park have been replaced with LED fittings prior to the visit of Hon'ble Prime Minister to the State. Remaining 5400 Nos Street light fittings in the State as per data given by electrical circles still require replacement with LED fittings in the State. The Department had moved a proposal for same to the Government in the last fiscal year and the decision is still awaited. Another, option would be to request more fund under Demonstration projects from Bureau of Energy Efficiency and take up one town at a time. The wattage requirement in the State for LED street light fittings would be of 45 watts onwards till 150 watts. At an average rate of Rs 15000.00 per fitting, the fund requirement will be Rs. 810.00 Lakhs.

The existing power demand of Street lights in the State is around 450W. if converted to LED then the power demand is reduced to 200 KW. The annual saving is 0.86 MU.

As of now, the action plan for conversion of street light fittings into LED cannot be communicated to the Hon'ble commission due to unavailability of the source of funding. The Hon'ble commission will be informed as and when some progress is made on this matter.

- 2) The field Engineers have been directed to sensitize the Public/Consumer's of electricity in the Gram Sabhas being held in their areas for judicious use of energy. The public/consumer's electricity has been advised to use CLF bulbs/ LED lamps instead of conventional incandescent bulbs for saving of energy & low carbon emission. This information has also been apprised to consumers who have applied for new service connection and passed through concerned meter reader to every household in their areas.

Directives 16: Safety against Accidents

Electrical accidents to departmental personnel, non-departmental personnel may be analysed, together with the causes. Remedial measures to minimise such accidents should be taken at all levels of officers and employees. Workers who attend to tasks like replacement of fuses, disconnections, reconnections, giving new connections, erection of new lines, etc., have to be provided with safety devices like gloves, gauntlets, insulated shoes, earthing rods, rain coats etc., and it should be ensured that workers use these devices while on work. Danger caution boards need to be fixed at salient points for lines, equipments to caution the public not to touch



the equipments and lines. For stays being provided on lines, guy insulators are to be invariably used at the time of laying of new lines/equipment, to avoid leakage of current through the earth wire.

Details of Accidents that occurred during 2012, 2013, 2014 and 2015 (till date) are indicated below:

Year	Departmental		Others		Total
	Fatal	Non-Fatal	Fatal	Non-Fatal	
2012	3	1	-	-	4
2013	3	4	-	1	8
2014	6	2	1	-	9
2015	-	-	1	-	1
Total	12	7	2	1	22

It could be seen that number of accidents are increasing year after year. There is also a rise in the number of fatal accidents to the Departmental staff. It is imperative to analyse the causes of accidents by obtaining investigation reports from the field officers and strict remedial action shall be taken to minimum accidents. EPDS should strive to achieve nil accidents in future.

Compliance:

It is submitted that EPDS has taken safety & precautionary measures to negate/minimize chances of accidents. Department has a system of obtaining the reports of the accidents immediately. Corrective/remedial measures are taken on priority basis to avoid recurrence of such accidents. Further, EPDS is regularly imparting training and workshops to educate and create awareness among its employees on the topic of safety measure. The same is being monitored regularly.

Commission's Comments:

The Commission has taken note of the statement of EPDS. The Commission advises the EPDS to consider providing life/medical insurance coverage to those employees (linemen and workers) who attend to risky tasks of repair and maintenance of High Voltage lines and power systems. The EPDS should give top priority to safety of the precious lives of both its employees and general public. The EPDS is advised to adopt the concept of "zero tolerance" to accidents. The EPDS is also directed to strictly follow and implement the guidelines/instructions and safety measures as provided in the Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2010 and the Central Electricity Authority (Safety Requirements for Construction, Operation and Maintenance of Electrical Plants and Lines) Regulations, 2011 including subsequent amendments of these Regulations.



Compliance:

Accidents to our personnel as well as to public on account of electricity has been red flagged. All measures to mitigate such incidents by ensuring safe installation of equipment, proper maintenance of electrical hardware etc. Proper maintenance gear and safety equipment are being issued to field personnel along with training on how to work safely and effectively.

Directives 18: Consumer Grievances Redressal Forum (CGRF)

The EPDS has constituted the Consumer Grievances Redressal Forum (CGRF) only in East District, Gangtok. The EPDS directed to set up Consumer Grievances Redressal Forum (CGRF) in each district of the State to facilitate redressal of the grievances of the consumers and general public. The CGRFs in the remaining districts shall be constituted within a period of 2 months from the date of issue of this Order.

Compliance:

It is submitted EPDS has not been able to comply with the above directive and requests the Hon'ble Commission to extend time for compliance of the same.

Commission's comments:

The Commission reiterates the directive and call upon the PDS constitute the Consumer Grievances Redressal Forum (CGRF) in each district of the State within a period of two months from the date of this Order and give wide publicity for the information of the consumers and general public.

This is to inform you that in response to the directive received from the office of SERC, the Energy & Power Department, Government of Sikkim constituted a Forum for Redressal of Consumers Grievances consisting of two officers of the department namely Shri Ganesh Chettri, then Superintending Engineer as Chairperson and Shri O.P. Pradhan, Divisional Engineer as Member vide Notification no: 438/Adm dated 22/05/2013 published in Sikkim Government Gazette.

Compliance:

The said information is available in the departments official website "www.powerdepartmentofsikkim.com" and all the officers at the district level are also well aware of it. Above forum is regularly submitting the quarterly status report on the functioning of CGRF to the office of Ombudsman, Sikkim State Electricity Regulatory Commission headquartered at Deorali, Gangtok, Sikkim.

After establishment of CGRF in the department only one consumer grievance were received in the month of March 2016 and, as per provisions of the SCRC lodge, the case has been amicably settled to the full satisfaction of the consumer.

In order to spread the information at the grass root level and to provide ease and comfort of lodging the grievance, the Energy & Power Department has submitted a proposal to the government for constituting of such redressal forums at all the four districts of Sikkim with the incumbent Superintending Engineer as Chairperson and an officer of the civil society/ Account section as member. The Energy & Power Department is awaiting the approval of the said proposal for its implementation in the State.



Directive 19: Publicity/Awareness regarding CGRF, Consumer Grievance Cell and Ombudsman

The EPDS is directed to conduct awareness programs on the role, functions, etc. including the procedure for filing of grievances by the consumers and general public before the CGRF, Ombudsman and Consumer Grievance Cell. The EPDS is advised to make use of print and electronic media, Gram Sabha Meetings and other platforms to educate and give wide publicity on the role and functions of CGRF, Ombudsman and Consumer Grievance Cell so as to enable timely redressal of grievances/complaints of the consumers and the general public.

Compliance:

It is submitted EPDS shall take the steps as directed with regard to the awareness programs on the role, functions including the procedure for filing of grievances by the consumers and general public before the CGRF, Ombudsman and Consumer Grievance Cell. The compliance report of the same shall be submitted.

Commission's comments:

The Commission feels that the Gram Sabha Meetings are conducted periodically by the Gram Panchayats wherein the representatives of almost all the State Government Departments are present including that of the EPDS. The Gram Sabhas are the easiest and the most appropriate platforms to disseminate information and provide awareness to the consumers and local public. The EPDS is directed to carry out awareness campaigns in the Gram Sabha meetings regarding the functions, role and procedures of the CGRF, Ombudsman and Consumer Grievance Cell.

Compliance: **

Directive 20: Proper Monitoring of IPP Projects

In the ARR petition submitted it has been observed that the State is importing Power from central Generating Stations to meet part of its requirements as well as to trade the surplus power available with the State Utility after meeting its own requirements. The quantum of Power being imported could be reduced if the State properly monitors the implementation of the power projects given out to the Independent Power Producers (IPPs) as some of them have been unduly delayed. With the timely construction of the ongoing Power projects, the State would be getting the free power entitled to it, which would be more than sufficient to not only meet its own requirements but there would be sufficient excess power available for trading. The implementation of the Power Projects can only be expedited through proper monitoring and imposing penalties as per clause 4.7 of the Implementation Agreement signed with each of the IPPs who had been awarded the Power projects.

Compliance:

It is submitted that EPDS is monitoring the implementation of the projects and taking all efforts to expedite the completion of the same. Further, it is also submitted that a Hydro Project Monitoring Committee has been constituted and the Chief Engineer (East) is appointed as a Nodal Officer of these matters. He has been entrusted with the responsibility to be continuously in touch with the Power Developers in the State for regular updates.



Commission's comments:

The Commission appreciates the efforts made by the EPDS but at the same time advises the EPDS that the Hydro Project Monitoring Committee should take regular stock of the progress made by each developer and issue strict instructions to the IPPs for timely rectification of the possible causes for delay. The Committee should make regular site visits and make physical verifications of the progress of the works.

Compliance: **

Directive 22: Renewable Energy Projects

As the Government of India is keen on building up its Renewable Energy capacity, the State could also look at the option of taking up Renewable Energy projects to increase its overall generation capacity. As per the Solar Radiation data available with the Ministry of new and Renewable Energy, the annual average solar radiation at Gyalshing is 3.70 KWh/M²/Day); Namchi is 4.79 KWh/M²/Day) and Gangtok 2.89 KWh/M²/Day). The annual average insolation data available in the State is much better than the data shown against some of the European countries who have gone in for major solar projects.

Compliance:

It is submitted that EPDS has initiated actions for identifying the potential locations for the Renewable Energy projects at various parts of the State and steps have been taken for conducting the feasibility study of the potential projects. The department is making all efforts to take the benefit of Central Government schemes/programmes in the area of Renewable energy to exploit the potential in the State to full extent and increase its overall generation capacity.

Commission's comments:

The Commission advises the EPDS to give top priority on the development of Renewable Energy in the State. The EPDS needs to take into account the huge target set by the Government of India to produce 175 GW of Renewable Energy in the Country by 2022 and the need for every state to make effort for achieving the target.

The EPDS is advised to put up a comprehensive proposal for development of Renewable Energy in the State before the State Government for consideration. Sikkim has already become the first Organic State in the Country and is known worldwide as a green and clean State. If the entire power requirements of the State can be sourced from Renewable Energy and Green energy like Hydropower, Sikkim will have the glory of crowning itself as the first Renewable Energy State.

Compliance: **



Fresh Directives (FY 2016-17)

Directive 1: Improving Own Generation

The own generation from the various Powerhouses of the EPDS has seen a decline over the years and it is seen that most of the Powerhouses were non-operational for considerable period of time. The EPDS is directed to prepare a time bound plan for restoring the full generation of the Powerhouses to improve its own generation. The Commission has observed that EPDS has made only bare minimum provisions under the Repair Maintenance head and as such it is feared that timely repairs and requisite maintenance of the power plants are not being done. The EPDS needs to concentrate both resource and planning on the power plants having good generation capacity.

Compliance: **

Directive 2: Segregation of Technical & Commercial Loss

The EPDS is directed to take appropriate action for segregating the Technical and Commercial losses. The exercise towards segregating the losses may be done in a phase manner beginning with the major towns/cities in phase -1 and other areas in later phases.

Compliance: **

Directive 3: Growing Manpower

The Commission observes that the major contributor towards the annual revenue gap of the EPDS is the ever growing “Employee Cost”. The EPDS must take strict measure to check the growing number of its employees. The EPDS is advised to consider deputing its excess manpower to other State Government Departments and make a time bound program to reduce its employee size. The EPDS is directed to work out a plan in consultation with the Department of Personnel & Administrative Reforms and Training, Government of Sikkim.

Compliance: **

Directive 4: RPO and Solar Energy

The Government of India has revised the Tariff Policy and provisions has been made in the revised Tariff Policy for Long Term Growth Trajectory of Renewable Purchase Obligation (RPO) which inter-alia provides for gradually increasing the minimum percentage of Solar RPO to 8% of total consumption, excluding hydro by March, 2022. The MNRE has estimated that Sikkim needs to generate 5 MW Solar power in order to meets its RPO requirement.

In view of the above, the EPDS is directed to consider setting up of Solar PVs in the large Government buildings, hospitals, colleges etc. coming up in the State. The EPDS is directed to approach the Urban Development and Housing Department, Buildings and Housing Department and Commerce & Industries Department, Government of Sikkim with the proposal to review the State Building Code by incorporating relevant provisions towards mandatory installation of roof top Solar PVs in all Government Buildings, Pharmaceuticals, Industrial Units and large hotels, car parks, Hydro Power Developers etc. Mandatory provisions for installing roof tops Solar PVs by various Industrial/Manufacturing Units in their premises at a minimum defined percentage of their total consumption could made in the Building Code.



Compliance: **

Directive 5: Filing of MYT Petition

The Commission has already issued the SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013 vide Gazette Notification No. 204 Dated 21st May, 2014 as per the guidelines of the Central Electricity Regulatory Commission. The said Multi Year Tariff Regulations had become effective from 1st April, 2015. The EPDS is directed to file the next tariff petition in accordance with the said Regulations.

Compliance:

It is submitted that FY 2017-18 for which the petition is being filed is the last year of the control period as provided in the MYT regulations, therefore the requirement of the MYT Regulation to project the sales, purchase, T&D loss trajectory, components of ARR & investment plan for the period of three years cannot be complied with and also the objective of the MYT Regulation is not fulfilled. It is therefore requested that the Hon'ble Commission may kindly allow EPDS to file the petition for the FY 2017-18 as per the Sikkim State Electricity Regulatory Commission (Terms and Conditions for determination of Tariff) Regulations, 2012. EPDS shall file the Tariff Petition as per the MYT Regulation in the next FY when the new control period is notified

Directive 6: Energy Audit

The Commission has fixed the loss reduction trajectory for the FY 2017-18, FY 2018-19 and FY 2019-20. In order to achieve the loss reduction target, the EPDS is directed to conduct the energy audit to identify the high loss areas and submit a report before filing of the next petition.

Compliance: **

Note: ** - Replies to the directives are being compiled and shall be submitted separately. Hon'ble Commission may kindly allow the same.



SECTION – I

Provisional True Up for the FY 2015-16



4 Provisional True-up FOR FY 2015-16

4.1. Background

4.1.1. Tariff Order for the FY 2015-16 was issued vide order Dt. 31/03/2015

4.1.2. E&PDS submits that the Annual Accounts for the FY 2015-16 is under compilation and same shall be submitted subsequently. E&PDS requests the Hon'ble Commission to carry out the provisional true-up of expenses submitted in the petition and further submitted that a final true-up may be carried out after Annual Accounts for the year are finalized and got audited.

4.1.3. E&PDS requests the Hon'ble Commission to allow the provisional true-up of the year 2015-16 as there are significant variations in various items of ARR for the year 2015-16 as against those approved in the Tariff Order of 2015-16.

Data given in this chapter is for the entire year i.e. FY 2015-16.

4.2. Energy Sales

The actual sales for the FY 2015-16 vis-à-vis the sales approved by the Commission in its ARR/ Tariff Order for FY2015-16 is as summarized below:

Table 4.1: Energy Sales FY 2015-16

(In MUs)

Category	As approved by Commission	Provisional As per Accounts	Deviation
Domestic	94.95	74.96	-19.99
Commercial	40.28	37.43	-2.85
Public Lighting	0.38	0.15	-0.23
Temporary Supply	1.73	1.16	-0.57
HT Industrial Consumers	108.76	126.30	17.54
LT Industrial Consumers	1.64	1.34	-0.30
Bulk Supply	21.19	23.37	2.18
Outside state	431.21	475.40	44.19
Total	700.14	740.10	39.96

4.3. Transmission and Distribution Losses

The provisional values of the transmission and distribution losses for FY 2015-16 arrived at in accordance with the actual Energy Sales, Energy Purchase.



**Petition for Approval of Annual Revenue Requirement
& Tariff Proposal for FY 2017-18**

Table 4.2: T&D Loss for FY 2015-16

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Transmission & Distribution Loss	34.00%	31.50%	-2.50%
	Total	34.00%	31.50%	-2.50%

4.4. E&PDS Own Generation

- 4.4.1. The own generation approved for FY 2015-16 and actual value of own generation made by the E&PDS for FY 2015-16 in the table provided below:

Table 4.3: E&PDS Own Generation FY 2015-16

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Total Generation	10.00	11.09	1.09
	Total	10.00	11.09	1.09

4.5. Power Purchase

- 4.5.1. The power purchase approved for FY 2015-16 and pre-actual value of power purchase made by the E&PDS for FY 2015-16 in the table provided below:

Table 4.4: Power Purchase Units FY 2015-16

In (MUs)

Sl. No.	Particulars	Units As approved by Commission	Unit Provisional As per Accounts	Deviation
1	2	3	4	5
1	Power Purchase Units	837.99	857.91	19.92
	Total	837.99	857.91	19.92

4.6. Energy Balance

The actual energy balance for FY 2015-16 and the approvals accorded are compared in the table provided below:



**Petition for Approval of Annual Revenue Requirement
& Tariff Proposal for FY 2017-18**

Table 4.5: Energy Balance FY 2015-16

Energy Balance	As Approved by Commission	Provisional As per Accounts	Deviation
	MU's		
ENERGY REQUIREMENT			
Energy Sales within State	268.53	264.71	-3.82
Sales Outside State (UI)	430.89	475.40	44.51
Total Energy Sales	699.42	740.10	40.68
Overall T & D Losses %	34.00	31.50	-2.50
Overall T & D Losses (MUs)	138.33	121.72	-16.61
Total Energy Requirement	837.75	861.83	24.08
ENERGY AVAILABILITY			
Power Purchase from CGS/UI etc.	837.99	857.91	19.92
Less: Overall Pool Loss	10.24	7.17	-3.07
Generation	10.00	11.09	1.09
Total Energy Availability	837.75	861.83	24.08
ENERGY SURPLUS/(GAP)	0.00	0.00	0.00

4.7. Fuel Cost

- 4.7.1.** The values of fuel cost for the FY 2015-16 are compared with those approved by the Hon'ble Commission in the tariff order for FY 2015-16.

Table 4.6: Fuel Cost FY 2015-16

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Cost of Fuel	0.37	0.17	-0.20
	Total	0.370	0.167	-0.203

4.8. Power Purchase Cost

- 4.8.1.** The Commission in the tariff order for FY 2015-16 had approved a power purchase quantum of 837.99 MUs at a total cost of Rs. 208.18 Crores. It is submitted that the E&PDS has made a gross purchase of 857.91 MUs, at a cost of Rs. 172.49 Crores including transmission charges.



**Petition for Approval of Annual Revenue Requirement
& Tariff Proposal for FY 2017-18**

Table 4.7: Power Purchase Cost FY 2015-16

(In Rs. Crs.)

Sl. No.	Particulars	Cost As approved by Commission	Cost Provisional As per Accounts	Deviation
1	2	3	4	5
1	Power Purchase Cost	208.18	172.49	-35.69
	Total	208.18	172.49	-35.69

4.9. Employee Cost

- 4.9.1.** The employee cost approved for FY 2015-16 and pre-actual value employee cost made by the E&PDS for FY 2015-16 in the table provided below:

Table 4.8: Employee Cost FY 2015-16

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Employee Cost	53.38	96.86	43.48
	Total	53.38	96.86	43.48

4.10. Repair & Maintenance Expenses

- 4.10.1.** The repair & maintenance approved for FY 2015-16 and actual value of repair & maintenance made by the E&PDS for FY 2015-16 in the table provided below:

Table 4.9: Repair & Maintenance Cost FY 2015-16

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Repair & Maintenance Cost	34.96	24.05	-10.91
	Total	34.96	24.05	-10.91

4.11. Administrative & General Expenses

- 4.11.1.** The Administration & General approved for FY 2015-16 and actual value Administration & General made by the E&PDS for FY 2015-16 in the table provided below:



**Petition for Approval of Annual Revenue Requirement
& Tariff Proposal for FY 2017-18**

Table 4.10: Admin. & General Expenses FY 2015-16

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Administration & General Expense	2.58	2.37	-0.21
	Total	2.58	2.37	-0.21

4.12. Depreciation

- 4.12.1.** The depreciation approved for FY 2015-16 and pre-actual value of depreciation for FY 2015-16 in the table provided below:

Table 4.11: Depreciation FY 2015-16

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Depreciation	17.15	26.80	9.65
	Total	17.15	26.80	9.65

4.13. Interest & Finance Charges

- 4.13.1.** The interest & finance charges approved for FY 2015-16 and actual value of interest & finance charges made by the E&PDS for FY 2015-16 in the table provided below:

Table 4.12: Interest & Finance Charges FY 2015-16

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Interest & Finance Charges	0.00	94.66	94.66
	Total	0.00	94.66	94.66

4.14. Other Income

- 4.14.1.** The other income approved for FY 2015-16 and actual value of other income made by the E&PDS for FY 2015-16 in the table provided below:



**Petition for Approval of Annual Revenue Requirement
& Tariff Proposal for FY 2017-18**

Table 4.13: Other Income FY 2015-16

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Non Tariff Income	2.40	1.46	-0.94
	Total	2.40	1.46	-0.94

4.15. Return on Equity

- 4.15.1.** The return on equity power purchase approved for FY 2015-16 and actual value of return on equity made by the E&PDS for FY 2015-16 in the table provided below:

Table 4.14: Return on Equity FY 2015-16

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Return on Equity	0.00	40.45	40.45
	Total	0.00	40.45	40.45

4.16. Revenue from sale of power

- 4.16.1.** The revenue from sale of power approved for FY 2015-16 and actual value of revenue from sale of power made by the E&PDS for FY 2015-16 in the table provided below:

Table 4.15: Revenue from Sales FY 2015-16

(In Rs. Crs.)

Category	As approved by Commission	Provisional As per Accounts	Deviation
Domestic	20.70	19.81	-0.89
Commercial	19.70	18.50	-1.20
Public Lighting	0.16	0.06	-0.10
Temporary Supply	1.38	1.58	0.20
HT Industrial Consumers	60.87	75.09	14.22
LT Industrial Consumers	0.55	0.80	0.25
Bulk Supply	11.74	13.72	1.98
Outside state	125.05	109.60	-15.45
Total	240.15	239.15	-1.00



4.17. True-up of ARR for FY 2015-16

4.17.1. The Annual Revenue Requirement approved for FY 2015-16 and actual value of Annual Revenue Requirement for FY 2015-16 in the table provided below:

Table 4.16: True up of ARR FY 2015-16

(In Rs. Crs.)

Sl. No.	Item of Expense	As Approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Cost of Fuel	0.37	0.26	-0.11
2	Cost of Power Purchase	208.18	172.49	-35.69
3	Employee Costs	53.38	96.86	43.48
4	R&M Expenses	34.96	24.05	-10.91
5	Administration and General Expenses	2.58	2.37	-0.21
6	Depreciation	17.15	26.80	9.65
7	Interest charges	-	94.66	94.66
8	Interest on Working Capital	3.79	4.70	0.91
9	Return on NFA /Equity	-	40.45	40.45
10	Provision for Bad Debts	-	-	-
11	Total Revenue Requirement	320.41	462.63	142.22
12	Less: Non Tariff Income	2.40	1.46	-0.94
13	Net Revenue Requirement	318.01	461.17	143.16
14	Revenue from Tariff	115.05	129.55	14.50
15	Revenue from Outside State Sale	125.05	109.60	-15.45
16	Gap (13 - 14- 15)	77.91	222.02	144.11



SECTION – II

Review for the FY 2016-17



5. Review for FY 2016-17

5.1. Background

5.1.1. Tariff Order for the FY 2016-17 was issued vide order Dt. 11/04/2016

5.1.2. Regulation 14(1) of the Sikkim State Electricity Regulatory Commission (Terms & Conditions for determination of Tariff) Regulations, 2012 provides as follows:

(1) The Commission shall undertake a 'Review' of the expenses and revenues approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variation 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'.

5.1.3. E&PDS represents its submissions for the purpose of review for the financial year 2016-17 as per the provisional figures for the year. E&PDS submits that the review petition is based on actual figures upto September, 2016 and estimated figures for the period October'2016 to March'2017. E&PDS shall submit for true-up after the actual figures are available and Annual accounts for the FY 2016-17 is finalized and got audited.

5.1.4. E&PDS therefore requests the Hon'ble Commission to consider the information submitted in this petition and in the formats and allow review of expenses as prayed in this petition.

5.1.5. Data given in this chapter is for the entire year i.e. FY 2016-17.



5.2. Energy Sales

The actual sales for the FY 2016-17 vis-à-vis the sales approved by the Commission in its ARR/ Tariff Order for FY2016-17 is as summarized below:

Table: 5.1: Energy Sales FY 2016-17

(In MUs)

Category	As approved by Commission	Provisional As per Accounts	Deviation
Domestic	94.97	76.46	-18.51
Commercial	40.75	38.18	-2.57
Public Lighting	0.35	0.15	-0.20
Temporary Supply	1.45	1.18	-0.27
HT Industrial Consumers	153.21	128.83	-24.38
LT Industrial Consumers	1.45	1.37	-0.08
Bulk Supply	25.07	23.84	-1.23
Outside state	412.26	473.12	60.86
Total	729.51	743.13	13.62

5.3. Transmission and Distribution Losses

The provisional values of the transmission and distribution losses for FY 2016-17 arrived at in accordance with the actual Energy Sales, Energy Purchase

Table: 5.2: T&D Loss FY 2016-17

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Transmission & Distribution Loss	27.41%	31.03%	3.62%
	Total	27%	31%	4%



5.4. E&PDS Own Generation

- 5.4.1.** The own generation approved for FY 2016-17 and actual value of own generation made by the E&PDS for FY 2016-17 in the table provided below:

Table: 5.3: E&PDS Own Generation FY 2016-17

(In MUs)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Total Generation	10	11.50	1.50
	Total	10.00	11.50	1.50

5.5. Power Purchase

- 5.5.1.** The power purchase approved for FY 2016-17 and pre-actual value of power purchase made by the E&PDS for FY 2016-17 in the table provided below:

5.5.2.

Table: 5.4: Power Purchase Units FY 2016-17

(In MUs)

Sl. No.	Particulars	Units As approved by Commission	Unit Provisional As per Accounts	Deviation
1	2	4	6	5
1	Power Purchase Units	849.91	857.91	8.00
	Total	849.91	857.91	8.00



5.6. Energy Balance

The actual energy balance for FY 2016-17 and the approvals accorded are compared in the table provided below:

Table: 5.5: Energy Balance for FY 2016-17

Energy Balance	As Approved by Commission	Provisional As per Accounts	Deviation
	(MU's)		
ENERGY REQUIREMENT			
Energy Sales within State	317.25	270.01	-47.24
Sales Outside State (UI)	412.26	473.12	60.86
Total Energy Sales	729.51	743.13	13.62
Overall T & D Losses %	27.41	31.03	3.62
Overall T & D Losses (MUs)	119.8	121.50	1.70
Total Energy Requirement	849.31	864.63	15.32
ENERGY AVAILABILITY			
Power Purchase from CGS/UI etc.	849.91	857.91	8.00
Less: Overall Pool Loss	10.6	4.78	-5.82
Generation	10	11.50	1.50
Total Energy Availability	849.31	864.63	15.32
ENERGY SURPLUS/(GAP)	0.00	0.00	0.00

5.7. Fuel Cost

5.7.1. The values of fuel cost for the FY 2016-17 are compared with those approved by the Hon'ble Commission in the tariff order for FY 2016-17.

Table: 5.6: Fuel Cost FY 2016-17

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Cost of Fuel	0.15	0.07	-0.08
	Total	0.15	0.07	-0.08



5.8. Power Purchase Cost

- 5.8.1.** The Commission in the tariff order for FY 2016-17 had approved a power purchase quantum of 849.91 MUs at a total cost of Rs. 180.29 Crores. It is submitted that the E&PDS has made a gross purchase of MUs, 857.91 at a cost of Rs. 181.11 Crores including transmission charges.

Table: 5.7: Power Purchase Cost FY 2016-17

(In Rs. Crs.)

Sl. No.	Particulars	Cost As approved by Commission	Cost Provisional As per Accounts	Deviation
1	2	3	4	5
1	Power Purchase Cost	180.29	181.11	0.82
	Total	180.29	181.11	0.82

5.9. Employee Cost

- 5.9.1.** The employee cost approved for FY 2016-17 and pre-actual value employee cost made by the E&PDS for FY 2016-17 in the table provided below:

Table: 5.8: Employee Cost FY 2016-17

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Employee Cost	80.36	98.70	18.34
	Total	80.36	98.70	18.34

5.10. Repair & Maintenance Expenses

- 5.10.1.** The repair & maintenance approved for FY 2015-16 and actual value of repair & maintenance made by the E&PDS for FY 2016-17 in the table provided below:

Table: 5.9: Repair & Maintenance Cost FY 2016-17

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Repair & Maintenance Cost	25.26	25.26	0.00
	Total	25.26	25.26	0.00



5.11. Administrative & General Expenses

- 5.11.1. The Administration & General approved for FY 2016-17 and actual value Administration & General made by the E&PDS for FY 2016-17 in the table provided below:

Table: 5.10: Administrative & General Expense FY 2016-17

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Administrative & General Expense	2.53	3.07	0.54
	Total	2.53	3.07	0.54

5.12. Depreciation

- 5.12.1. The depreciation approved for FY 2016-17 and pre-actual value of depreciation for FY 2016-17 in the table provided below:

Table: 5.11: Depreciation FY 2016-17

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Depreciation	21.36	30.16	8.80
	Total	21.36	30.16	8.80

5.13. Interest & Finance Charges

- 5.13.1. The interest & finance charges approved for FY 2016-17 and actual value of interest & finance charges made by the E&PDS for FY 2016-17 in the table provided below:

Table: 5.12: Interest & Finance Charges FY 2016-17

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Interest & Finance Charges	0	0	0.00
	Total	0.00	0.00	0.00



**Petition for Approval of Annual Revenue Requirement
& Tariff Proposal for FY 2017-18**

5.14. Other Income

5.14.1. The other income approved for FY 2016-17 and actual value of other income made by the E&PDS for FY 2016-17 in the table provided below:

Table: 5.13: Other Income FY 2016-17

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Non Tariff Income	0.94	1.50	0.56
	Total	0.94	1.50	0.56

5.15. Return on Equity

5.15.1. The return on equity approved for FY 2016-17 and actual value of return on equity made by the E&PDS for FY 2016-17 in the table provided below:

Table: 5.14: Return on Equity FY 2016-17

(In Rs. Crs.)

Sl. No.	Particulars	As approved by Commission	Provisional As per Accounts	Deviation
1	2	3	4	5
1	Return on Equity	0.00	44.68	44.68
	Total	0.00	44.68	44.68

5.16. Revenue from Sale of Power

5.16.1. The revenue from sale of power approved for FY 2016-17 and actual value of revenue from sale of power made by the E&PDS for FY 2016-17 in the table provided below:

Table: 5.15: Revenue from Sales FY 2016-17

(In Rs. Crs.)

Category	As approved by Commission	Provisional As per Accounts	Deviation
Domestic	22.91	20.20	-2.71
Commercial	20.35	18.87	-1.48
Public Lighting	0.14	0.06	-0.08
Temporary Supply	1.05	1.05	0.00
HT Industrial Consumers	87.64	76.28	-11.36
LT Industrial Consumers	0.70	1.12	0.42
Bulk Supply	13.88	13.31	-0.57
Outside state	126.52	109.27	-17.25
Total	273.19	240.15	-33.04



**Petition for Approval of Annual Revenue Requirement
& Tariff Proposal for FY 2017-18**

5.17. Review of ARR for FY 2016-17

5.17.1. The Annual Revenue Requirement approved for FY 2016-17 and actual value of Annual Revenue Requirement for FY 2016-17 in the table provided below:

Table: 5.16: Review of ARR FY 2016-17

(In Rs. Crs.)

Sl. No.	Item of Expense	As Approved by Commission	Provisional As per Accounts	Deviation
1	2		3	4
1	Cost of Fuel	0.15	0.07	-0.08
2	Cost of Power Purchase	180.29	181.11	0.82
3	Employee Costs	80.36	98.70	18.34
4	R&M Expenses	25.26	25.26	-
5	Administration and General Expenses	2.53	3.07	0.54
6	Depreciation	21.36	30.16	8.80
7	Interest charges	-	95.60	95.60
8	Interest on Working Capital	4.82	4.78	-0.04
9	Return on NFA /Equity	-	44.68	44.68
10	Income Tax	-	-	-
11	Total Revenue Requirement	314.77	483.43	168.66
12	Less: Non Tariff Income	0.94	1.50	0.56
13	Net Revenue Requirement	313.83	481.92	168.09
14	Revenue from Tariff	146.67	130.88	-15.79
15	Revenue from Outside State Sale	126.52	109.27	-17.25
16	Gap (13 - 14- 15)	40.64	241.77	201.13



SECTION –III

Annual Revenue Requirement & Tariff Proposal for the FY 2017-18



6. ANNUAL REVENUE REQUIREMENT FOR FY 2017-18

This section outlines the Annual Revenue Requirement of the E&PDS for FY 2017-18, which takes into consideration:

- i. Actual Performance in FY 2015-16;
- ii. Estimated Performance in FY 2016-17;
- iii. Projection for FY 2017-18 based on the Actual performance in FY 2015-16 & Estimated performance of 2016-17;
- iv. Principles outlined in Tariff Regulations of SSERC;

Past trends have been taken into cognizance in case of certain elements as deemed necessary. The present section has been structured in the following manner:

- Determination of Energy Requirement
 - Sales Projections
 - Loss Trajectory
 - Energy Balance
- Proposed Capital Expenditure and capitalization
 - Scheme wise detail
 - Capital Expenditure
 - Asset Capitalisation
- Determination of the Annual Revenue Requirement
 - Power Purchase Costs
 - Transmission Charges
 - Operation and Maintenance Expenses
 - Administration & General expenses
 - Depreciation
 - Interest charges (including interest on working capital)
 - Return on NFA/Equity
 - Provision for Bad and Doubtful Debts
 - Return on Equity

6.1. Energy Requirement

The energy requirement of the license area is determined based on the expected sales in the area during the period under consideration and the expected transmission & distribution losses in the network. Accordingly, the energy requirement projected by the E&PDS for the FY 2017-18 is as given in the succeeding paragraphs.

6.1.1. Approach for Sales Projection

The consumer base of E&PDS consists of Domestic consumers, Commercial Consumers, Bulk & Industry. Sales mix is primarily dominated by Domestic & Industrial consumers, followed by Commercial consumers. The total consumption w.r.t total sales for Domestic, Industrial &



Commercial consumers may be summarized as:

Category	%
Domestic	28.33
Commercial	14.14
Industrial both HT & LT	48.21
Bulk	8.83

Rest is contributed by other categories of consumers. Thus, the sales forecast would mainly depend on the sales expected in these consumer categories.

The sales forecast is based on the trends observed in the sales pattern of various categories over the past years, new developments on account of Government Policies, Socio economic changes, industrial growth, etc. that would affect consumption across various categories of consumers. In addition to this, the growth trend in number of consumers and connected load have been taken as guiding factors in arriving at the requirement of demand and energy.

It is submitted that sales forecast using the CAGR as the basis for projections is a tried and tested method and is used extensively across states and accepted by the Regulators. However, the CAGR considering the sales for last 5 years presented an abnormal trend and hence normalisation has been undertaken for such categories for forecasting sales for FY 2017-18.

6.1.2 Category wise Sales Forecast

Based on the methodology outlined above, the projected energy sales to various categories of consumers for FY 2017-18 are given below:

Table 6.1: Projected Energy Sales – FY 2017-18

(In MU)

Category	2013-14 (Actual)	2014-15 (Actual)	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
Domestic	83.98	78.93	74.96	76.46	78.20
Commercial	35.43	35.33	37.43	38.18	39.02
Public Lighting	0.35	0.29	0.15	0.15	0.16
Temporary Supply	1.61	1.36	1.16	1.18	1.21
HT Industrial Consumers	97.11	110.49	126.30	128.83	131.66
LT Industrial Consumers	1.15	1.37	1.34	1.37	1.40
Bulk Supply	17.74	20.98	23.37	23.84	24.36
Total	237.37	248.75	264.71	270.01	276.01



6.1.3 Billed Demand & Number of Consumers

The actual number of consumers for the FY 2010-11 and FY2015-16 & estimated number for the FY 2016-17& projected numbers FY 2017-18 are tabulated below:

Table 6.2: No. of Consumers – FY 2017-18

Category	2014-15 (Actual)	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
Domestic	87681	91122	92489	93876
Commercial	10449	10917	11081	11247
Public Lighting	33.00	46	47	48
Temporary Supply	-	-	-	-
HT Industrial Consumers	388	428	434	441
LT Industrial Consumers	456	476	483	490
Bulk Supply	1269	1385	1406	1427
Total	100276	104374	105940	107529

6.1.4 Distribution Losses

E&PDS has achieved a reduction in distribution losses during recent years. E&PDS submits that the system improvement works executed every year under the plan schemes have contributed to the reduction of distribution losses. However, it may also be noted that reduction of distribution losses has been low as very high proportion of consumption is in the domestic segment with low individual consumption and spread over wide geographical area. The distribution losses in the E&PDS distribution network have been in the range of approximately 31% to 31.50% in the past. For the purpose of FY 2017-18 ARR, the losses have been retained at 30.48%.

6.1.5 Energy Requirement & Sources of Power Purchase

Accordingly, the energy requirement for E&PDS is estimated based on the retail sales projections, grossed up by estimated loss levels.

Further, to estimate the energy requirement, the PGCIL losses based on the average of losses observed in the year 2015-16 have been considered. Accordingly the energy balance expected for the FY 2017-18 is as given below:



Table 6.3: Energy Requirement – FY 2017-18

Energy Balance	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
	MU's		
ENERGY REQUIREMENT			
Energy Sales within State	264.71	270.01	276.01
Sales Outside State	475.40	473.12	467.82
Total Energy Sales	740.10	743.13	743.83
Overall T & D Losses %	31.50	31.03	30.48
Overall T & D Losses (MUs)	121.72	121.50	121.01
Total Energy Requirement	861.83	864.63	864.83
ENERGY AVAILABILITY			
Power Purchase from CGS/UI etc.	857.91	857.91	857.91
Less: Overall Pool Loss	7.17	4.78	5.08
Generation	11.09	11.50	12.00
Total Energy Availability	861.83	864.63	864.83
ENERGY SURPLUS/(GAP)	0.00	0.00	0.00

The energy requirement of E&PDS is mainly met from the allocation of power of Central Generating Stations. However, for meeting the requirement at peak demand period, it has to purchase power from other sources/ open market/ power exchanges, etc.



Petition for Approval of Annual Revenue Requirement & Tariff Proposal for FY 2017-18

The expected power procurement sources for FY 2017-18 are provided in the table below

Table 6.4: Details of Power Procurement Sources – FY 2017-18

(In MU)

Sl. No.	Source	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
	Central Sector			
1	FSTPP, NTPC	85.78	85.78	85.78
2	BSTPP, NTPC	14.53	14.53	14.53
3	KHSTPP-I, NTPC	52.86	52.86	52.86
4	KHSTPP-II, NTPC	23.83	23.83	23.83
5	TSTPP, NTPC	169.74	169.74	169.74
6	RANGIT-III, NHPC	5.05	5.05	5.05
7	TEESTA -V, NHPC	32.93	32.93	32.93
	Others			
8	CHUKHA, PTC	39.60	39.60	39.60
9	WBSEDCL	53.83	53.83	53.83
10	SPDC	29.38	29.38	29.38
12	Free Power	350.37	350.37	350.37
	TOTAL	857.91	857.91	857.91

It is requested to Hon'ble Commission to kindly approve the power purchases as outlined below. The estimated cost for such power purchases has been discussed in section 4.3.4 of the filing.

6.2. Capital Expenditure & Capitalisation

6.2.1 Capital Expenditure & Capitalisation of Assets

The objective of incurring the capital expenditure is to upgrade and strengthen the distribution network to meet the desirable standards of performance and provide better network reliability and sustainable performance to the consumers of E&PDS.

The capital expenditure plan envisaged will also assist in reducing system losses. E&PDS proposes to incur the capital expenditure of Rs. 192.12 Crores for FY 2017-18. Rs. 170.37 Crores are to be capitalized during the FY-2017-18.

The details of the capital expenditure schemes proposed in FY 2017-18 are outlined in Format-15.



Petition for Approval of Annual Revenue Requirement & Tariff Proposal for FY 2017-18

Summary of the proposed capital expenditure and capitalisation is outlined below:

Table 6.5: Summary of Proposed Capital Expenditure & Capitalisation FY 2017-18
(Rs. in Crores)

Sl. No.	Particulars	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
1	2	3	4	5
1	Opening Balance	29.80	37.46	63.91
2	Add: New Investments	82.18	153.56	192.12
3	Total	111.98	191.02	256.03
4	Less: Investment Capitalized	74.52	127.11	170.37
5	Closing Balance	37.46	63.91	85.66

6.3. Annual Revenue Requirement for E&PDS

Based on the provisions of the Tariff Regulations, the estimate for the Annual Revenue Requirement (ARR) would consist of the following elements:

- Power Purchase Costs
- Transmission Charges
- Operation and Maintenance Expenses
- Administration & General Expenses
- Depreciation
- Return on NFA/Equity
- Interest charges (including interest on working capital)
- Provision for Bad and Doubtful Debts

The above Annual Revenue Requirement is netted off for Non-Tariff Income for determining the net ARR for E&PDS.

6.3.1 Power Purchase

6.3.1.1 Source of Power

E&PDS has fourteen own Hydro & Diesel generating stations with installed capacity of 41.59 MW and therefore meets rest of its energy requirement from its allocation from the Central Generating Stations (CGS) and other sources. E&PDS receives power from CGS like NHPC, NTPC as per allocation from time to time.



The present power allocation of E&PDS is as listed below:

Table 6.6: Power Allocation

Sl. No.	Source	Capacity	Allocation	
		MW	%	MW
	Central Sector			
1	FSTPP, NTPC	1600	1.63%	26.08
2	BSTPP, NTPC	1320	1.52%	20.06
3	KHSTPP-I, NTPC	840	1.55%	13.02
4	KHSTPP-II, NTPC	1500	0.33%	4.95
5	TSTPP, NTPC	1000	2.40%	24.00
6	RANGIT-III, NHPC	60	13.33%	8.00
7	TEESTA -V, NHPC	510	13.19%	67.27
	Others			
8	CHUKHA, PTC	270	2.22%	5.99
9	WBSEDCL	50	20%	10.00
	TOTAL			179.37

6.3.2 Assumption for Power Purchase Projection

The merit order dispatch principles are typically adopted when determining the power purchases from various generating stations. However, in a power deficit scenario, these principles do not play a significant role as the utilities will try and purchase all the power that is available at its disposal. Accordingly, E&PDS has considered purchase of the entire power available from all the possible sources during FY 2017-18 to meet the demand to the extent possible.

Power Purchase cost is a function of the energy requirement and price of available power from the different sources for meeting the energy requirement. The energy requirement of E&PDS for FY 2017-18 is proposed to be met from central generating stations and external power purchase as discussed below.

Power purchase cost for FY 2017-18, is determined on the following parameters:

- The quantum of power allocated to E&PDS from central generating station is based on the declared allocation;
- Power purchases from the CGS stations are accounted at the net energy availability at E&PDS periphery;
- PLF is assumed same as per FY 2015-16;

6.3.3 Power purchase from CGS Stations

E&PDS has projected that the quantum of power purchase from CGS stations will be based on the firm & infirm allocations. The details of the computation of power purchases from CGS stations are provided in Format-D3 & D4 of the formats submitted along with the filing.



6.3.4 External Power Purchase/ Other Sources

Based on the Energy balance and trend of energy requirement during peak demand period it is estimated that in addition to the firm as well as infirm allocation of power from various CGS, there will be shortfall of energy to the tune of 133.51 MU's which is approximately 15.56% of the total projected energy requirement for FY 2017-18. This additional energy requirement has to be met from external power purchase source/other sources like WBSEDCL, PTC, SPDC & UI in order to meet the present demand of the consumers. E&PDS has been continuously experiencing similar shortfall of power in the past which was met through Unscheduled Interchange (UI) as there was no alternate source of power available. In FY 2015-16, E&PDS had procured 10.70 MU's of energy through UI mechanism. This scenario is likely to continue in the period of FY 2017-18 also till E&PDS gets additional allocation from CGS and other sources. For the purpose of estimation of power purchase cost, E&PDS has considered an escalation of 5% cost year over year. However, in the current high demand supply gap scenario across the country the weighted average price may further shoot up for FY 2017-18.

Considering the above facts, the Hon'ble Commission is requested to allow the power purchase costs as estimated by E&PDS for FY 2017-18:

Table 6.7: Summary of E&PDS Power Purchase Expenses for FY 2017-18

Sl. No.	Source	Purchase (MU)	Rate (₹/ KWh)	Total Cost in ₹ Crores
1	2	3	4	5
1	NTPC			
A	FSTPP I	85.78	4.54	38.98
B	FSTPP III	-		-0.0001
C	BSTPP	14.53	14.95	21.73
D	KHSTPP-I	52.86	4.08	21.59
E	KHSTPP-II	23.83	3.91	9.32
E	TSTPP	169.74	2.31	39.15
2	NHPC			
A	RANGIT-III	5.05	4.32	2.18
B	TEESTA -V	32.93	2.75	9.04
3	PTC			
	CHUKHA	39.60	2.03	8.04
4	Other sources			
	WBSEDCL	53.83	1.41	7.60
	SPDC	29.38	4.11	12.06
	UI Purchase (Included in Drawal from CGS & Other Sources)	10.70		1.39
5	Total Energy Purchase	507.54		171.09



Further, it is submitted that any changes in the power purchase expenses during the year may be allowed to be recovered by E&PDS from its consumers through a Fuel and Power Purchase Cost Adjustment Mechanism that may be notified by the Hon'ble Commission. This would ensure that such increased expenses do not affect the financial viability of the department and at the same time do not accumulate for true up at the end of the year as this can have a significant impact on the tariffs in the subsequent years. Such mechanisms are prevailing in the neighboring state of Assam & West Bengal and have been envisaged in the Electricity Act 2003 (Section 62 (4)) also. The relevant section of the Act is reproduced below:

“62. (4) No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified.”

6.3.5 Transmission, Other Charges and Rebates

The Transmission charges payable to PGCIL are estimated based on the quantum of power proposed for wheeling during the FY 2017-18 & per unit cost actually incurred in FY 2015-16. Accordingly transmission & other charges for the FY 2017-18 has been projected at Rs. 20.30 crores, and rebate is projected at 1.22 crores, an escalation of 5%, year over year

6.4. Operation & Maintenance Expenses

Operation & Maintenance Expenses comprises of Employee Cost, Repair & Maintenance Expenses and Administrative & General Expenses. The methodology adopted by the E&PDS for projecting the values of these components for FY 2017-18 has been explained in following section. Table below summarises the Operation & Maintenance Expenses for FY 2017-18.

Table 6.8: Operation & Maintenance Expenses for FY 2017-18
(Rs. in Crores)

Sl. No.	Particulars	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
1	Employee Cost	96.86	98.70	114.74
2	Repair & Maintenance Expenses	24.05	25.26	25.41
3	Administration & General Expenses	2.37	3.07	3.08
4	Total Operation & Maintenance Expenses	123.28	127.03	143.23

6.4.1 Employee Cost

The expense head of employee cost is indication of cost of man power which includes salary and allowance, bonus, LTC & honorarium, leave salary etc. Employee cost for the FY 2016-17 has been estimated based on the actual employee cost for the FY 2015-16 & other factors effecting the employee structure & cost of E&PDS. Similarly, Employee cost for the FY 2017-18 has been projected by escalating the employee cost for the FY 2016-17 after considering all



**Petition for Approval of Annual Revenue Requirement
& Tariff Proposal for FY 2017-18**

the factors.

The Hon'ble Commission may consider the above facts while allowing the employee cost indicated in the table below.

Table 6.9: Employee Cost for FY 2017-18

(In Rs. Crores)

Sl. No.	Particulars	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
1	2	3	4	5
	SALARIES & ALLOWANCES			
1	Basic Pay	38.19	39.00	42.85
2	Dearness Pay	-	-	-
3	Dearness Allowance	46.97	47.50	58.70
4	House Rent Allowance	5.73	5.90	6.30
5	Fixed Medical Allowance	-	-	-
6	Medical Reimbursement Charges	1.50	1.65	1.80
7	Over Time Payment	-	-	-
8	High Altitude Allowance	0.15	0.15	0.15
a)	Spl. Border Compensatory Allowance	3.82	3.85	4.20
9	Generation incentive	-	-	-
10	Bonus	-	-	-
11	Sub Total	96.36	98.05	114.00
	TERMINAL BENEFITS			
12	Leave Encashment	0.50	0.65	0.74
13	Gratuity	-	-	-
14	Commutation of Pension	-	-	-
15	Workman Compensation	-	-	-
16	Ex- gratia	-	-	-
17	Sub Total	0.50	0.65	0.74
	PENSION PAYMENT			
18	Basic Pension	-	-	-
19	Dearness Pension	-	-	-
20	Dearness Allowance	-	-	-
21	Any other expenses (Medical)	-	-	-
22	Sub Total	-	-	-
23	Total (11+17+22)	96.86	98.70	114.74
24	Amount Capitalised	-	-	-
25	Net amount	96.86	98.70	114.74
26	Add prior period expenses	-	-	-
	Grand Total	96.86	98.70	114.74



6.4.2 Administrative & General Expenses

The Administration & General (A&G) expenses include computerization, communication, Travelling & Conveyance, Rent, Professional and technical fees, etc. Administrative & General expenses for the year 2016-17 has been estimated based on the actual expenses for the FY 2015-16. Table below provides A & G expenses incurred by the E&PDS in FY 2015-16 & estimates of FY 2016-17 along with the projections for FY2017-18.

Table 6.10: Administrative & General Expenses for FY 2017-18
(Rs. in Crores)

Sl. No.	Particulars	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
1	Rent, Rates & Taxes	-	-	-
2	Insurance	-	-	-
3	Telephone, Postage & Telegrams	0.06	0.06	0.06
4	Consultancy Fees	-	-	-
5	Technical Fees	-	-	-
6	Other Professional Charges	0.15	0.15	0.15
7	Conveyance & Travel Expenses	0.21	0.21	0.22
8	Electricity & Water Charges	0.10	0.10	0.10
9	Others	1.85	2.55	2.55
10	Freight	-	-	-
11	Other material related expenses	-	-	-
12	Total Expenses	2.37	3.07	3.08
13	Less Capitalised	-	-	-
14	Net expenses	2.37	3.07	3.08
15	Add Prior period*	-	-	-
	Total Expenses Charged to Revenue	2.37	3.07	3.08

In view of the above submissions, the Hon'ble Commission is requested to allow the above mentioned A & G Expenses.

6.4.3 Repair and Maintenance Expenses

Repair & Maintenance (R & M) expenses include expenses on operation and repairs & maintenance of electrical equipment, distribution system, vehicles, furniture and fixtures, office equipment, buildings, etc. The E&PDS has projected Repair & Maintenance expenses for the FY 2017-18 taking growth based on Actual Expense for the FY 2015-16 & estimated expense for FY 2016-17.

Table below depicts the R&M expenses incurred by the E&PDS in FY 2015-16 & estimated expenses for FY 2016-17 and projected R&M Expenses for FY 2017-18.



**Petition for Approval of Annual Revenue Requirement
& Tariff Proposal for FY 2017-18**

Table 6.11: Repair & Maintenance Expenses for FY 2017-18

(Rs. in Crores)

Sl. No.	Particulars	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
1	Plant and Machinery	4.08	4.09	4.08
2	Building	0.93	0.95	0.96
3	Hydraulic works & Civil works	-	-	-
4	Line, Cable & Network	17.49	18.40	18.49
5	Vehicles	0.43	0.45	0.43
6	Furniture & Fixtures	0.16	0.17	0.18
7	Office Equipments	-	-	-
8	Operating Expenses	0.96	1.20	1.27
9	Total	24.05	25.26	25.41
10	Less Capitalized	-	-	-
11	Net Repair & Maintenance Expenses	24.05	25.26	25.41

The Hon'ble Commission is requested to allow the R&M expenses proposed by the E&PDS in the above table to the fullest extent in order to ensure better & timely maintenance of distribution network under the purview of the E&PDS and subsequently, to have better consumer services and higher consumer satisfaction.

6.5. Gross Fixed Assets

Gross Fixed Assets value as on 01.04.2015 has been taken from the Asset register as opening GFA for 2015-16 and thereafter, works capitalized during FY 2016-17 has been added and GFA has been computed for FY 2016-17. The GFA movement is given in the table below:

Table 6.12: Gross Fixed Assets Movement

(Rs. In Crores)

Financial Year	Opening Balance (₹ Crores)	Addition during the year (₹ Crores)	Closing Balance (₹ Crores)
FY 2015-16	925.80	74.52	1000.32
FY 2016-17	1000.32	127.11	1127.43
FY 2017-18	1127.43	170.37	1297.80



6.6. Depreciation

The E&PDS has applied rate of depreciation as prescribed in the regulations of SSERC for FY 2017-18. The rates have been applied on opening GFA of FY 2017-18 and 50% of capital additions proposed during FY 2017-18. The table below indicates the methodology adopted by the E&PDS for projecting depreciation for FY 2017-18.

Table 6.13: Depreciation for FY 2017-18

(Rs.in Crores)

Sl. No.	Particulars	2017-18 (Projected)
1	Gross Block in Beginning of the year	1127.43
2	Additions during the Year	170.37
3	Cumulative Depreciation at the Beginning of the Year	615.27
4	Average Rate of Depreciation	
5	Depreciation for the Year	38.01
6	Cumulative Depreciation at the End of the Year	653.28
7	Net Block in the Beginning of the Year	512.16
	Net Block in the End of the Year	644.53

6.7. Capital Based Return

On the basis of SSERC Regulation for determination of tariff the capital based return has been computed as outline below.

Table 6.14: Capital Base and Return

(Rs. in Crores)

	Particulars	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
1	2	3	4	5
1	Gross Block at beginning of the year	925.80	1000.32	1127.43
2	Less: Accumulated Depreciation	547.10	577.26	615.27
3	Net Block at beginning of the year	378.70	423.06	512.16
4	Less: Accumulated Consumer Contribution	0.00	0.00	0.00
5	Net Fixed Assets at beginning of the year	378.70	423.06	512.16
	Reasonable return @3% of NFA	11.36	12.69	15.36



6.8. Return on Equity

The E&PDS has computed the Return on Equity considering a rate of return at 14% on the Average equity for the fiscal year as per the provisions of the Tariff Regulations. For calculating Return on Equity, opening equity has been taken as 30% of GFA for the FY 2016-17. Thereafter 30% of assets proposed to be capitalized during FY 2017-18 has been added.

The computation methodology adopted by the E&PDS for determination of Return on Equity for FY 2017-18 is indicated below.

Table 6.15: Return on Equity for FY 2017-18

(Rs.in Crores)

Sl. No.	Particulars	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
1	2	3	4	5
1	Opening Equity	277.74	300.09	338.23
2	Equity Addition (30% Capex for the FY)	22.35	38.13	51.11
3	Closing Equity	300.09	338.23	389.34
4	Average Equity	288.92	319.16	363.79
5	Rate of Return on Equity	14%	14%	14%
	Return on Equity	40.45	44.68	50.93

6.9. 6.9.1 Interest & Finance Charges

The E&PDS has considered an Interest on loan at the rate of 14.75% which is SBI PLR as on 1 April 2015. For calculating Interest & Finance Charges, opening Loan has been taken as 70% of GFA for the FY 2016-17. Thereafter 70% of assets proposed to be capitalized during FY 2017-18 has been added. The Interest on Loan computed on the above methodology has been indicated in the Table below:

Table 6.16: Interest & Finance Charges for FY 2017-18

(Rs. InCrores)

Sl. No.	Particulars	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
1	2	3	4	5
1	Opening Loan	648.06	635.42	660.85
2	Loan Additions (70% Capex for the FY)	52.16	88.98	119.26
3	Repayment	64.81	63.54	72.44
4	Closing Loan	635.42	660.85	707.68
5	Average Loan	641.74	648.13	684.26
6	Wt. Avg Interest on Loan	14.75%	14.75%	14.75%
7	Interest on Loan	94.66	95.60	100.93
	Total Interest & Finance Charges	94.66	95.60	100.93



The Hon'ble Commission is requested to allow the above interest on loan for FY 2017-18.

6.9.2 Interest on Working Capital

The E&PDS has computed the Interest on Working Capital for FY 2017-18 on normative basis. As per the SSERC Tariff Regulations, for the purpose of computation of normative working and Interest on working capital, the components of working capital are as follows:

- One month's Employee Costs
- One month's Administration & General Expenses
- One month's R&M Cost
- Two Month's Receivables

The rate of interest on working capital has been considered as per SBI Prime lending rate as on 1st April of the respective year, which is 14.75% as on 1st April 2015.

The interest on normative working capital for FY 2017-18 works out to Rs. 5.03 Crores and is given in the table below:

Table 6.17: Information regarding Working Capital for the current and ensuing year

(Rs. In Crores)			
Sl. No.	Particulars	2016-17 (Estimated)	2017-18 (projected)
1	2	3	4
1	One month's Employee Costs	8.23	9.56
2	One month's Administration & General Expenses	0.26	0.26
3	One month's R&M Cost	2.11	2.12
4	Maintenance Spares	-	-
5	Two month's Receivables	21.81	22.18
6	Total	32.40	34.11
7	Rate of Interest	14.75%	14.75%
	Interest on Working Capital	4.78	5.03

The Hon'ble Commission is requested to approve the interest on working capital of Rs. 5.03 Crores on normative basis for FY 2017-18.

6.10. Provision for Bad and Doubtful Debts

E&PDS has not considered provision for bad and doubtful debts in determination of Tariff for the FY 2017-18.

6.11. Non-Tariff Income

Based on the FY 2015-16, it is assumed that non-tariff Income in form of Meter Rent, Late payment charges & miscellaneous charges will be Rs 1.55 Crores from various categories of consumers.



6.12. Annual Revenue Requirement

Based on the above estimates and projections, the ARR for E&PDS for FY 2017-18 works out as under:

Table 6.18: Annual Revenue Requirement for the Year 2017-18
(Rs. in Crores)

Sl. No.	Item of Expense	2016-17 (Estimated)	2017-18 (Projected)
1	2	3	4
1	Cost of Fuel	0.07	0.18
2	Cost of Power Purchase	181.11	190.17
3	Employee Costs	98.70	114.74
4	R&M Expenses	25.26	25.41
5	Administration and General Expenses	3.07	3.08
6	Depreciation	30.16	38.01
7	Interest Charges	95.60	100.93
8	Interest on Working Capital	4.78	5.03
9	Return on NFA /Equity	44.68	50.93
10	Income Tax	-	-
11	Total Revenue Requirement	483.43	528.48
12	Less: Non Tariff Income	1.50	1.55
13	Net Revenue Requirement	481.92	526.93
14	Revenue from Tariff	130.88	133.07
15	Revenue from Outside State Sale	109.27	108.50
16	Gap (13 - 14- 15)	241.77	285.36
17	Revenue surplus carried over	-	-
18	Additional revenue from proposed tariff	-	21.74
19	Regulatory asset	-	-
	Energy sales (MU)	270.01	276.01

6.13. Average Cost to Supply

Based on the above computed Net ARR of Rs. 526.93 Crores and after deducting revenue from sale of surplus power of Rs. 108.50 Crores, net cost of supply of energy sales projection of 276.01 MUs within state works out to be Rs. 418.42 Crores, hence the Average Cost to Supply works out to Rs. 15.16 per unit for FY 2017-18.



6.14. Revenue at Existing Tariff and Gap for FY 2017-18

The estimated revenue at Existing Tariff for FY 2017-18 for each of the consumer category excluding Surplus/Outside State sale is computed at Rs. 133.07 Crores. The average realisation rate or average revenue per unit for estimated sales of 276.01 MUs for FY 2017-18, works out to Rs. 4.82.

The summary of the category-wise revenue is as shown in the table below:

Table 6.19: Revenue at Existing Tariff – FY 2017-18

(Rs. in Crores)

Sl. No.	Particulars	2015-16 (Actual)	2016-17 (Estimated)	2017-18 (Projected)
1	2	3	4	5
1	Domestic	19.81	20.20	20.65
2	Commercial	18.50	18.87	19.29
3	HT Industrial Consumers	75.09	76.28	77.58
4	LT Industrial Consumers	0.80	1.12	0.84
5	Bulk Supply	13.72	13.31	13.60
6	Public Lighting	0.06	0.06	0.06
7	Temporary Supply	1.58	1.05	1.05
8	TOTAL	129.55	130.88	133.07
9	Outside State	109.60	109.27	108.50
10	TOTAL	239.15	240.15	241.57

Based on the Aggregate Revenue Requirement and net revenue from existing tariffs for FY 2017-18, the resultant GAP works out to Rs. 285.36 Crores which is approximately 54.15% of the ARR as depicted in the table below:

Table 6.20: Revenue GAP at Existing Tariffs – FY 2017-18

(Rs. In Crores)

Sl. No.	Particulars	2016-17 (Estimated)	2017-18 (Proposed)
1	2	3	4
1	Revenue from Sale of Power	130.88	133.07
2	Revenue from Surplus power sales (Outside State)	109.27	108.50
3	Total Revenue at Existing Tariff	240.15	241.57
4	Net Annual Revenue Requirement	481.92	526.93
5	(Gap)/ Surplus	-241.77	-285.36
6	Covered by Previous year's surplus carried over	-	-
7	Additional Revenue at Proposed Tariff	-	21.74
	Net (GAP)/Surplus	-241.77	-263.62



7. TARIFF PROPOSAL FOR FY 2017-18

E&PDS in the previous sections has discussed the estimated performance for the FY2017-18 based on the past years performances and certain assumptions explained at appropriate places to determine the Aggregate Revenue Required for FY 2017-18.

7.1 Recovery of Revenue Gap for FY 2017-18

The estimated gap in the FY 2017-18 has been computed by deducting the ARR from Revenue at Existing Tariff.

E&PDS has projected ARR for FY 2017-18 at Rs. 526.93 Crores and the revenue at existing tariff from projected sales and revenue from sale of surplus power compute to Rs. 241.57 Crores. Thus the resultant gap works out to Rs. 285.36 Crores.

Tariff is a sensitive subject having substantial impact on social, economic and financial wellbeing of the public at large as well as the viability and growth of power sector. In view of the above E&PDS proposes to recover only Rs. 21.74 crores out of Total Revenue Gap of Rs. 285.36 Crores as these may result in huge burden on the consumers.

Regulatory Asset

The Hon'ble Commission is requested to allow the remaining gap of Rs. 263.62 Crores left after increase in tariff to be considered as a Regulatory Assets as specified under the National Tariff Policy as well as Tariff related regulations of various State Electricity Regulatory Commissions which includes provisions for maintaining Regulatory Assets and its recovery in future period. Also, as specified in the National Tariff Policy, the carrying cost of Regulatory Asset is proposed to be charged at SBI PLR rates prevailing as on 1st April 2015.

7.2 Proposed Tariff in FY 2017-18

7.2.1 Tariff Proposal for FY 2017-18

The basic requirement of any Tariff proposal is that it has to be transparent and justifiable against various policy guidelines and the framework evolved by the SSERC and various SERCs. In the light of the experience gained by other utilities in implementation of the tariff orders and regulatory requirements specified under various states and policy guidelines, an attempt has been made to improve upon the present tariff design. Considering the above, the tariff proposal for FY 2017-18 for individual categories is given below alongwith the comparison of existing and proposed energy charges.



**Petition for Approval of Annual Revenue Requirement
& Tariff Proposal for FY 2017-18**

Table 7.1: Energy Charge – Existing V/s Proposed Tariff

Sl. No.	Category of Consumers	Existing Rate Paisa/KWH	Proposed Rate Paisa/KWH
1	2	3	4
1	Domestic		
a)	Up to 50 units	110	116
b)	51 to 100 units	234	246
c)	101-200 units	365	383
d)	201 to 400 units	457	480
e)	401 & above	493	518
2	Commercial		
a)	Up to 50 units	330	347
b)	51 to 200 units	561	589
c)	201 to 400 units	594	624
d)	401 & above	635	667
3	Public lighting		
	Rural Areas	270	284
	Urban Areas	500	525
4	Industrial		
A	HT		
a)	HT (AC) above 3.3 KV		
b)	Upto 100 KVA	320	336
c)	100 - 250 KVA	370	389
d)	250- 500 KVA	437	459
e)	500 KVA & above	472	496
B	LT (Rural)		
a)	Up to 500 units	250	263
b)	501 - 1000 units	440	462
c)	1001 & above	580	609
C	LT (Urban)		
a)	Up to 500 units	528	554
b)	501 - 1000 units	616	647
c)	1001 & above	713	749
5	Bulk supply		
a)	LT	594	624
b)	HT	644	676



7.3 Revenue at Proposed Tariff in FY 2017-18

Based on the tariff proposed above, following is the summary of the revenue from various consumer categories at the proposed tariff rates, which is being compared with the consumer category-wise revenue at existing tariff:

**Table 7.2: Comparison of Revenue from Existing Tariff with Proposed Tariff
(Rs. in Crores)**

Sl. No.	Particulars	Revenue At Existing Tariff	Revenue At Proposed Tariff
1	2	3	4
1	Domestic	20.65	23.30
2	Commercial	19.29	22.05
3	LT Industrial Consumers	0.84	0.95
4	HT Industrial Consumers	77.58	90.94
5	Bulk Supply	13.60	16.16
6	Public Lighting	0.06	0.07
7	Temporary Supply	1.05	1.35
8	TOTAL	133.07	154.80

7.3.1 Impact of Tariff on Consumers

The revenue gap and the average tariff hike proposed are presented in the table below:

Table 7.3: Impact of Tariff Hike FY 2017-18

Sl. No.	Particulars	Units	FY 2017-18	
			Existing	Proposed
1	2	3	4	5
1	ARR for FY 2017-18	Rs. Crores	526.93	526.93
2	Revenue from tariff for FY 2017-18		133.07	154.80
3	Revenue from sale of surplus power for FY 2017-18	Rs. Crores	108.50	108.50
4	Total Revenue		241.57	263.31
5	Gap (1 – 2 - 3)	Rs. Crores	285.36	263.62
6	Sales within State	MU's	276.01	276.01
7	Sale of Surplus power through Trading/UI	MU's	467.82	467.82
8	Total Sales		743.83	743.83
9	Average Cost of Supply within state (1-3) /6 x 10	Rs. per kWh	15.16	15.16
10	Average Revenue (2 /6 x 10)	Rs. per kWh	4.82	5.61
11	Pure Gap (9-10)	Rs. per kWh	10.34	9.55
12	Average Hike in Tariff			0.79
13	Hike in Tariff %			16.34%



It is submitted that the average tariff hike required to recover the gap attributable to FY 2017-18 is Rs.0.79 per unit.

The Hon'ble Commission is requested that considering the above and wholesale price index (all commodities) for the period, the hike in tariff be allowed.



8. TARIFF SCHEDULE – FY 2017-18

I. Domestic Supply (DS)

Type of consumer

Power supply to private house, residential flats, Government residential buildings for light heating/electrical appliances, fans etc., for domestic purpose. This schedule can also be made applicable to the charitable organization after verifying the genuineness of their non- commercial aspects by the concerned Division office.

(a) Nature of service:

Low Tension AC 430/230 volts, 50 cycles/sec (Hz)

(b) Rate

Units Consumption	Paisa per kWh (Unit)
Up to 50	116
51 to 100	246
101 to 200	383
201 to 400	480
Consumption exceeding 400 units	518

(c) Monthly Minimum Charge:

Single Phase Supply	Rs. 40.00
Three Phase Supply	Rs 200.00

(d) Monthly Rebate if paid within due dates

5% on Energy Charge

(Due date shall be 10 days which shall be reckoned from the date of issue of the bill)

(e) Annual Surcharge (charge on the gross arrear outstanding every March end):
10%

If electricity supplied in domestic-premises is used for commercial purpose, the entire supply shall be charged under commercial supply.

Free supply of electricity for consumption up to 100 units applicable to all the domestic consumers in rural areas under Gram Panchayat Unit (GPU) as notified by the Rural Management and Development Department as per clause 1 of Government Gazette Notification No. 500 dated 26.11.2014 shall be determined on the basis of assessment recorded through energy meter only and assessment accounted on average basis shall not be entertained for subsidy. In the event of crossing the subsidized limit of 100 units of electricity in any month, the entire consumption for the month shall be charged to such consumer as per prevailing tariff.



II. COMMERCIAL SUPPLY (CS)

Type of consumer

Supply of energy for light, fan, heating and power appliances in commercial and non-domestic establishments such as shops, business houses, hotel, restaurants, petrol pumps, service stations, garages, auditoriums, cinema houses, nursing homes, dispensaries, doctors clinic which are used for private gains, telephone exchange, nurseries, show rooms, x-ray plants, libraries, banks, video parlors, saloons, beauty parlors, health clubs or any house of profit as identified by the Assistant Engineer/Executive Engineer concerned of the Department. In the event of exceeding connected load of any premises beyond 25 KVA, the Demand charge at the following rates shall be imposed. The seasonal consumers with connected load more than 25 kVA and above are allowed to install MDI meter for assessment of their monthly load profile.

(a) Nature of supply:

Low Tension AC 430/230volts, 50 cycles/sec (Hz)

(a) Rate:

Consumption range	Paisa per Kwh (Unit)	
Up to 50	347	
51 to 200	589	
201 to 400	624	
Consumption exceeding 400	667	
Demand Charges- For those establishments whose sanctioned load is more than 25 KVA and does not have independent transformer but run their unit through shared transformers.	Rural Areas	Urban Areas
	Rs.60/kVA/Month plus energy charges as mentioned above	Rs.100/kVA/Month plus energy charges as mentioned above

If electricity supplied in domestic premises is used for commercial purpose, the entire supply shall be charged under commercial supply.



(c) Monthly Minimum Charge:

Details	Rate
Single Phase Supply	Rs. 200.00
Three Phase Supply	Rs. 500.00

(d) Monthly Rebate if paid within due date

5% on Energy Charges

(Due date shall be 10 days which shall be reckoned from the date of issue of the bill)

**(e) Annual Surcharge (charge on the gross arrear outstanding every March end):
10%**

III. LOW TENSION INDUSTRIAL SUPPLY (LTIS):

Type of consumer

Power supply to the industries like poultry, Agriculture load, ***Fabrication & Sheet metal works*** or any other units of such kind under small-scale industries having connected load not exceeding 25kVA in total. In the event of exceeding connected load beyond 25 kVA, the Demand charge at the following rates shall be imposed.

(a) Nature of service:

Low Tension AC 430/230volts, 3 phase/single phase, 50 cycles/Sec (Hz)

(b) Rate:

Units Consumption	Paissa per kWh	
Area	Rural	Urban
Upto 500	263	554
501 to 1000	462	647
1001 & Above	609	749
Demand Charge – For those establishments whose sanction load is more than 25 KVA & does not have independent transformer but run their unit through shared transformers.	Rs. 60/kVA/Month plus energy charges as shown above	Rs. 100/kVA/Month plus energy charge as shown above

(c) Monthly Minimum Charge:

Rural Areas	Rs. 120 /KVA/Month
Urban Areas	Rs. 200 /KVA/Month

(d) Monthly Rebate (if paid within due date):

5% on Energy Charges



*(Due date shall be 10 days which shall be
reckoned from the date of issue of the bill)*

(e) Annual Surcharge (charge on the gross arrear outstanding every March end):
10%

IV. HIGH TENSION SUPPLY (HTS):

Type of consumer

All types of supply with contract demand at single point having 3 phase supply and voltage above 3.3 kV.

(a) Nature of supply:

High Tension AC, above 3.3 kV, 3 phase, 50 cycles/Sec (Hz)

Executive Engineer should sanction the demand in the Requisition and Agreement form of the Department before the service connection is issued based on the availability of quantum of Power. The demand sanctioned by the Executive Engineer will be considered as the contract demand. A maximum demand indicator will be installed at the consumer premises to record the maximum demand on monthly basis. If in a month, the recorded maximum demand exceeds the contract demand, that portion of the demand in excess of the contract demand will be billed at twice the prevailing demand charges. In case recorded maximum demand exceeds the contract demand for three consecutive months the demand charges will be payable on the basis of installed capacity of the transformer.

Energy meters are compulsorily to be installed on HT side of all transformers having capacity equal to or above 200 kVA. The meters are also allowed to install on LT side of those consumer having transformer capacity less than 200 kVA, but in such case the assessed energy consumption shall be grossed up by 4% to account for as transformation loss.

(b) Rate:

Units Consumption	Tariff
Up to 100 kVA: Demand Charges plus Energy Charges	Rs. 210/kVA/Month + 336 Paisa/Unit
101 to 250 kVA: Demand charges Plus Energy Charges	Rs. 263/kVA/Month + 389 Paisa/Unit
251 kVA to 500 kVA Demand Charges Plus Energy Charges	Rs. 305 /kVA/Month + 459Paisa/Unit
Above 500 kVA Demand Charges Plus Energy Charges	Rs. 578 /kVA/Month + 496 Paisa/Unit



(c) Monthly Minimum Charges:

Demand Charges

(d) Monthly Rebate if paid within due date:

2% on Energy Charges

(Due date shall be 20 days which shall be reckoned from the date of issue of the bill)

**(e) Annual Surcharge (charge on the gross arrear outstanding every March end):
15%**

(f) Power Factor Adjustment charges:

(i) Penalty for poor Power Factor: The Power factor adjustment charges shall be levied at the rate of 1% on the total Energy charge for the month for every 1% drop or part thereof in the average power factor during the month below 95%.

V. BULK SUPPLY (BS) (NON – COMMERCIAL SUPPLY):

Type of consumer

Available for general mixed loads to M.E.S. and other Military Establishments, Borders Road Organisations, Sikkim Armed Police Complex (SAP), all Government Non-residential buildings, Hospitals, Aerodromes and other similar establishments as identified as such supply by the Concerned Executive Engineer.

(a) Nature of service: Low Tension AC 430/230 volts or High tension above 3.3 kV

Executive Engineer should sanction the demand in Requisition and Agreement form of the Department before service connection is issued.

(b) Rate:

All Consumptions	Paisa/Unit
LT (430/230 V)	624
HT (11 kV or 66 kV)	676

(c) Monthly Minimum Charge:

Details	Tariff
LT (430/230 Volts)	Rs. 200 /kVA/Month of Sanction Load
HT (11kV or 66 kV)	Rs. 200/kVA/Month of Sanction Load



(d) Monthly Rebate (if paid within due date): 2% on Energy Charges
(Due date shall be 20 days which shall be reckoned from the date of issue of the bill)

(e) Annual Surcharge (charge on the gross arrear outstanding every March end):
15%

VI. SUPPLY TO ARMY PENSIONERS

Type of Consumer

Provided to the army pensioners or their surviving widows based on the list provided by Sikkim Rajya Sainik Board.

(a) Nature of service: Low Tension AC 230/430 volts, 50 cycles/Sec (Hz)

(b) Rate Domestic supply rate is applicable

- | | |
|----------------------------|--|
| (i) Up to 100 units | To be billed to Secretary, Rajya Sainik Board |
| (ii) 101 and above | To be billed to the Consumer |

Minimum charges, surcharges, and rebate etc., will be applicable as per domestic supply category.

VII. SUPPLY TO BLIND

Type of consumer

Service connection provided to a house of a family whose head of the family is blind and the same is certified by the National Association for Blinds.

(a) Nature of service:

Low Tension AC 230/430 volts, 50 cycles/Sec (Hz)

(b) Rate Domestic supply rate is applicable

- | | |
|----------------------------|---|
| (i) Up to 100 units | To be billed to Secretary, Social Welfare Department |
| (ii) 101 and above | To be billed to the Consumer |

Minimum charges, surcharges, and rebate etc., will be applicable as per domestic supply category.

VIII. SUPPLY TO THE PLACES OF WORSHIP (PW)



Type of consumer

Supply of power to Gumpas, Manilakhangs, Tsamkhangs, Mandirs, Churches, and Mosques as identified by the State Ecclesiastical Department.

(a) Nature of service:

Low Tension 430/230 volts, 50 cycles/Sec (Hz).

b) Rate

Unit Consumption slab	Paisa per kWh (Unit)
Places of worship: (i) Having 3 lights points: A) up to 100 units B) Above 101 units	Domestic rate is applicable.
(ii) Having 4 to 6 lights points. A) Up to 150 units B) Above 151 units	
(iii) Having 7 to 12 points A) Up to 300 units B) Above 301 units	
(iv) Having 13 and more light points A) Up to 500 units B) Above 501 units	
A) To be billed to Secretary, Ecclesiastical Department and to be submitted to the head of Department in the District. B) To be billed to the Head of Place of worship.	

Minimum charges, surcharges, and rebate etc. will be applicable as per domestic supply category.

IX. PUBLIC LIGHTING ENERGY CONSUMPTION CHARGES

It has been decided that the electrical energy consumption charges of public lighting street light etc. in urban area shall be paid by the Urban Development & Housing Department. Similarly the consumption of electrical energy for street light etc. in rural areas shall be paid by the concerned Panchayat / Rural Management & Development Department. The necessary meter/metering equipment shall be provided



by Energy & Power Department and for which the standard (Tariff Schedule) charges is also applicable in accordance with rules and regulations of the Department.

(a) Rate:

Category	Rate
Rural Areas	284 Paisa/kWh
Urban Areas	525 Paisa/kWh

X. TEMPORARY SUPPLY

Type of consumer

Available for temporary purposes and for the period not exceeding two months in the first instance but can be extended further for a period not exceeding one month on each occasion. The Assessment of energy consumption shall be on the basis of recorded meter reading and not on average basis, however if the connection is being taken for less than one month, an advance payment should be taken from the consumer as per his/her connected load based on the average system of calculation shown in the tariff schedule.

Approval of the Temporary Supply and its duration will be the discretion of the Assistant Engineer of the Department.

If the temporary connection is more than approved period, such use of electricity will be treated as theft of power.

(a) Nature of Service:

Low tension AC 430/230 volts, 50 cycle/sec (Hz) /H.T. 11 kV whichever is applicable and possible at the discretion of the Department:

(b) Rate

Twice the Tariff under schedule DS/CS/LTIS/HTS for corresponding permanent supply (**Temporary supply connection shall not be entertained without energy meter**). Two months assessment on sanction load shall have to be paid in advance as security deposit before taking the connection.



XI. SCHEDULE FOR MISCELLANEOUS CHARGES

1. Service Connection

Following procedures should be strictly followed while giving the new service connection. On receipt of written application with requisite Revenue Stamp from any intending consumer addressed to the Assistant Engineer (Commercial/Revenue) the Department will issue the Requisition and Agreement form. This form will be issued on production of BR for Rs. 25/- (Rupees twenty five) only. He/ She will complete the form in all respect and submit to the office of the Assistant Engineer. Assistant Engineer will issue the service connection estimate with the approval of the Executive Engineer. If the Substation of the area or any other connected Electrical network is under capacity, the Department can decline the service connection till the capacity is increased as required. If the demand is more than 25 kVA the Department reserves the right to ask the applicant to provide suitable substation at his/her cost.

The Energy & Power Department also reserves the right to disconnect the service connection of any consumer if he/she increases the load above sanctioned load without written approval of the Department and will be treated such cases as theft of power.

(a) Single connection will be provided to the legal landlord of the building. However, an additional connection can also be given in the name of his legal heir subject to production of valid agreement by the landlord stating that he/she shall take the responsibility to clear all the electricity dues created thereof by his/her legal heir before the close of every financial year.

(b) In case the flat or part of the private building is occupied by Government / Semi Government/Government Undertakings offices, separate service connection in the name of head of office can be given with the approval of the concerned Executive Engineer.

(c) Rs. 50 per certificate shall be charged for issuing NDC (No dues certificate) , NOC(No objection certificate) or any other kind of certificate to be issued to the consumer by the Department.

XII. METER RENT / Month

(i)	Energy Meter	
(a)	Single Phase	Rs. 40.00
(b)	Three phase	Rs. 80.00
(ii)	Maximum demand indicator	Rs.200.00
(iii)	Time switch	Rs.150.00



X III. TESTING OF METERS

i)	Energy Meters 1 Ph/ 3 Ph	Rs. 200
ii)	Other Metering Instruments	Rs. 250

XIV. DISCONNECTION & RECONNECTION

(i)	DS and CS category	Rs.150.00
(ii)	LTIS, HTS & BS category	Rs.250.00

Replacement of meters or shifting the position of meter boards etc. can be entertained exclusively on the specific written request by the consumer against a payment of Rs. 100.00 each time, but this does not include the cost of materials and labour payment.

XV. REPLACEMENT OF FUSES

Service for replacement of fuses in the main cut-outs available against the following Payments:-

(i)	Low tension	Single phase	Rs.30.00
		Three phase	Rs.40.00
(ii)	High tension	Three Phase	Rs.50.00

XVI. RESEALING OF METERS

If by any reason the seal affixed in the meter or cutouts installed and secured by the Department are found tampered, the Department reserves the right to disconnect the service connection immediately and impose penalty as applicable under The Indian Electricity Act, 2003. In addition the consumer is liable for payment for resealing charge @ Rs.50.00 per call of such services.

XVII. SECURITY DEPOSIT

Security deposit shall be deposited by the consumer in the following rates for the meters provided by the Department.

1	Electronic Meter	3 phase	Rs.500.00
		1 phase	Rs.200.00
2	Electromagnetic Meters	3 phase	Rs. 150.00
		1 phase	Rs. 75.00



The Security deposit will be forfeited and the line will be disconnected if the consumer tampers the meter. The line will be reconnected only after the fresh security deposit is deposited and other applicable charges are paid.

XVIII. OTHER CONDITIONS FOR SUPPLY OF ELECTRICAL ENERGY

(a) Meter found out of order

In the event of meter being found out of order (which includes meter ceasing to record, running fast or slow, creeping or running reverse direction) and where the actual errors on reading cannot be ascertained, the meter will be declared faulty and the correct quantum of energy consumption shall be determined by taking the average consumption for the previous three months.

If the average consumption for the three months cannot be taken due to the meter ceasing to record the consumption or any other reason, then the correct consumption will be determined based on the average consumption for succeeding three months (after installation of meter) where any differences or dispute arise as to the correctness of meter reading or bill amount etc then the matter shall be decided by the concerned Chief Engineer of the department upon the written intimation either from the concerned Executive Engineer or from concerned consumer. However, the bill should be paid on or before the due date. The amount so paid will be considered as advance to the credit of the consumer's account until such time as the billed amount in dispute is fully settled. After determining the correct consumption due billing will be made and necessary adjustment shall be done in the next bill issued. This method shall be applicable to all categories of consumers.

(b) Defaulting consumer

The Department shall not give any type of service connection to a defaulting consumer.

(c) Fixing the position of meter/metering equipment

During the inspection of Assistant Engineer of the Department the point of entry of supply of mains and position of meter, cut-out/metering equipment etc. will be decided and should not be changed later on without written permission from the Department. The Department will in no case fix neither the meter, main cut-out or metering equipment nor allow the same to remain in any position where the employees are prohibited from entering into or where there is difficulty of access for employees.

(d) Application/Notice before connection

The consumer must submit an application for new service connection or should apply for additional power supply well in advance for domestic and commercial purpose. In case of HTS, LTIS and BS consumers, long period notices which may extend to six months or more may be required to enable the Department to make necessary arrangement for such supply, which will subject to its availability in the system. Assistant Engineer of the area will issue seven clear day notice to the applicant for inspecting his/her premises to verify the feasibility of providing power supply.



(e) Sketch of the premises

(i) A neat sketch of the premises should also submit the proposed internal electrification of the building showing the light points, light plug points, power plug points, fan/exhaust fan points, main isolator position, distribution Control system location and other fittings etc.

(ii) In the case of industrial/workshop etc the consumer should submit a neat sketch showing the location of all E&M equipment and its motor capacity if any etc in addition to the above.

(f) Load sanction

Depending on the availability of the quantum of electrical energy in the system, the load shall be sanctioned for all categories of consumers by the authorized officer of the Department.

XIX. LAND - Free of cost for service connection and other associated facilities:

The consumer shall provide the necessary land to the Department belonging to his/her on free of cost basis and afford all reasonable facilities for bringing in the direct cables or over headlines from the Department's T&D system for servicing the consumers but also cables or overhead lines connecting 'the Department's other consumers and shall permit the Department to provide all requisite switch gear thereto on the above premises and furnish supply to such other consumers through cables/overhead lines and terminals situated on the consumer's premises.

XX. ACCESS TO PREMISES AND APPARATUS

- (a) If any consumer obstructs or prevents Departments authorized officers/employees in any manner, from inspecting his/her premises at any time to which the supply is afforded or where the electrical installations or equipment belonging to the Department or the consumers situated in such premises and if there is scope of suspecting any malpractice, the authorized officer; employees of the Department may disconnect the power supply forthwith without notice and keep such power supply disconnected till the consumer affords due facilities for inspection. If such inspection reveals nothing to undertake any malpractice or pilferage, the Department then restore power supply to his/he premises.
- (b) If such inspection reveals any commission of malpractice as specified in the "Malpractice clauses mentioned below, this may be dealt as per the relevant clauses which are indicated in the sub-head of malpractice.
- (c) The Department shall not be responsible for any loss or damage or inconvenience caused to the consumer on account of such disconnection of supply.



XXI. INTERFERENCE WITH SUPPLY MAINS AND APPARATUS

- (a) A consumer shall not interfere with the supply main or apparatus including the metering arrangement, which may have been installed in his/her premises.
- (b) The consumer shall not keep connected to the Department supply system if any apparatus to which the Department has taken reasonable objection or which the Department may consider likely to interfere or affect injudiciously the Departmental equipment installed in his/her premises or the Department's supply to other consumer.
- (c) The consumer shall not keep the unbalanced loading of three phase supply taken by him/her from the Department.
- (d) The consumer shall not make such use of supply given to him/her by the Department as to act prejudicially to the department's supply system in any manner whatsoever,

XXII. MALPRACTICE

- (i) Contravention of any provision of the terms conditions of supply the Indian electricity Act 2003, the Indian Electricity Rules 1956 or any other law/rule governing the supply and use of electricity regulating order shall be treated as malpractice and the consumer indulging in any such malpractice shall be liable at law/rule/order. Subject to generality as above.
- (ii) Cases mentioned hereunder, shall be generally treated as malpractice:-
 - (a) Exceeding the sanctioned/contract load without the permission of the Department.
 - (b) Addition, alteration and extension of electrical installation in the consumer's premises without permission of the Department or extension to any premises other than the one for which supply sanctioned/contracted for.
 - (c) Unauthorized supply of electricity to any service which is including the service line disconnected by the Department against electricity revenue arrear or any other offended clauses and the same service line reconnected without permission of the Department.
 - (d) Non-compliance of orders in force imposing restriction of use of energy for rational and equitable distribution thereof.
 - (e) Use of electricity for any purpose other than that for which supply is contracted /sanctioned for.
 - (f) Resale of energy without the permission of the Department,
 - (g) Theft of energy.
 - (h) Obstruction to lawful entry of authorized officer/employee of the Department into consumer's premises.
 - (i) Interfering and tampering with the meter and metering system.



XXIII. PAYMENT OF COMPENSATION FOR MALPRACTICES

Where a consumer is found to be indulging in malpractice with regard to use of electricity and use of device to commit theft of energy etc. the Assessing Authority of the Department will decide about the payment of compensation amount to be imposed against such consumer as per the relevant rules and regulations.

XXIV. INSTITUTION OF PROSECUTION

Any officer employee authorized to inspect and deal with cases of malpractice and theft of energy may launch prosecution as an aggrieved person as mentioned in section 135 & 150 of the Indian Electricity Act 2003.

XXV. READING OF METER AND PREPARATION OF BILL

- (a) The meter reading will be taken once in a month. The reading of meter will be recorded by meter reader in a card provided near the meter and open to inspection by consumer. Bill for energy consumption charges will be prepared based on the reading noted in the reading book & meter reading card.
- (b) Any complaint with regard to the accuracy of the bill the same shall be intimated immediately by the consumer to the Assistant Engineer, who has issued the bill quoting the bill number/ account number date etc.
- (c) If the consumer does not receive the electricity bill he shall inform the Assistant Engineer concerned about non-receipt of his bill and in such representation, a copy will be supplied to him.

XXVI. DISCONNECTION OF SUPPLY FOR NON-PAYMENT OF ELECTRICITY BILL AND LEGAL ACTION

If the consumer fails to pay any bill presented to him/her the Department shall be at liberty to take action under sub- section (1) of section 56 of Indian Electricity Act 2003 for disconnection of supply. The disconnection notice is printed in the bill form and further notice will not be issued by the Department for disconnection.

XXVII. FAILURE OF POWER SUPPLY

The Department shall not be responsible for loss, damage or compensation what so ever out of failure of supply.

XXVIII. RESTRICTION OF POWER SUPPLY

The supply of electricity is liable to be curtailed or staggered or cut off all together as may be ordered by the State Government or any other enactment as amended from time to time governing the supply and use of electricity.

XXIX. CONSUMER NUMBER



Consumer number is given to all the consumers. The same is written in the Meter reading card also. Consumer must know his/her consumer number and should quote the same while corresponding with the Department for prompt attention by the Department.

XXX. FUSE CALL

In case the Department's main fuse or fuses fail, the consumer or his representative may give the intimation in the adjacent control room either in person or through phone. Employees bearing the identity cards of the Department are allowed to replace those fuses. Consumers are not allowed to replace those fuses and if they will render themselves shall be liable to pay heavy penalty if the department's seals are found broken.

In attending the fuse – off calls. Top most priority will be given to cases of fire due to short circuit, accident, arcing in consumer's main etc.

XXXI. THEFT OF POWER

Theft of power is a criminal offence under electricity Act. Whoever commit the theft of power shall be punishable under relevant section of I.E. Act 2003.

XXXII. SUPPLY WITHOUT METER

Where a supply to the consumer is given without meter the consumption of Electrical Energy in kWh will be computed in the manner indicated below.

1. Government office building:

$$\text{Sanctioned load (kW)} \times 6 \text{ hrs} \times 30 \text{ days} \times 60 / 100$$

2. Other Consumers:

$$\text{Sanctioned load (kW)} \times 8 \text{ hrs} \times 30 \text{ days} \times 60 / 100$$