TARIFF ORDER

True-up of the FY 2016-17, Annual Performance Review of the FY 2017-18, Approval of Aggregate Revenue Requirements (ARR) and Determination of retail tariff for the FY 2018-19

Petition No. 254/2018

For

Chandigarh Electricity Department (CED)

28th March, 2018

JOINT ELECTRICITY REGULATORY COMMISSION
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Table of Contents

1. Chapter 1: Introduction 13

1.1. About Joint Electricity Regulatory Commission (JERC) 13

1.2. About Chandigarh Electricity Department (CED) 13

1.3. Multi Year Distribution Tariff Regulations, 2014 13

1.4. Filing and Admission of the Present Petition 13

1.5. Interaction with the Petitioner 13

1.6. Notice for Public Hearing 14

1.7. Public Hearing 15

2. Chapter 2: Summary of Suggestions/Objections received, Response from the Petitioner and the Commission's Views 16

2.1. Regulatory Process 16

2.2. Suggestions/ Objections, Response of the Petitioner and Commission's Comments 16

3. Chapter 3: True-up for the FY 2016-17 32

3.1. Background 32

3.2. Energy Sales 32

3.3. Open Access Sales and Purchase 33

3.4. Inter-State Transmission Loss 33

3.5. Intra-State Distribution Loss 34

3.6. Renewable Purchase Obligation (RPO) 35

3.7. Power Purchase Quantum & Cost 37

3.8. Energy Balance 39

3.9. Operation & Maintenance Expenses 40

3.10. Gross Fixed Assets (GFA) and Capitalisation 42

3.11. Capital Structure 42

3.12. Depreciation 43

3.13. Interest on Loan 44

3.14. Return on Equity (RoE) 46

3.15. Interest on Security Deposits 47

3.16. Interest on Working Capital 48

3.17. Income Tax 49

3.18. Provision for Bad & Doubtful Debts 50

3.19. Non-Tariff Income (NTI) 50

3.20. Incentive/Disincentive towards over/under achievement of norms of distribution losses 51

3.21. Aggregate Revenue Requirement (ARR) 52

3.22. Revenue at existing Retail Tariff 52

3.23. Standalone Revenue Gap/ Surplus 53

4. Chapter 4: Annual Performance Review for the FY 2017-18 **54**

4.1. Background 54

4.2. Approach for the Review for the FY 2017-18 54

4.3. Energy Sales 54

4.4. Inter-State Transmission Loss 55

4.5. Intra-State Distribution Loss 56

4.6. Power Purchase Quantum & Cost 56

4.7. Renewable Purchase Obligations (RPOs) 61

4.8. Energy Requirement at State/UT Periphery 63

4.9. Operation & Maintenance Expenses 64

4.10. Gross Fixed Assets (GFA) and Capitalisation 66

4.11. Capital Structure 66

4.12. Depreciation 67

4.13. Interest on Loan 68

4.14. Return on Equity (RoE) 69

4.15. Interest on Security Deposits 70

4.16. Interest on Working Capital 70

4.17. Income Tax 71

4.18. Provision for Bad & Doubtful Debts 72

4.19. Non-Tariff Income 72

4.20. Aggregate Revenue Requirement (ARR) 72

4.21. Revenue at existing Retail Tariff 73

4.22. Standalone Revenue Gap/Surplus 75

5. Chapter 5: Determination of Aggregate Revenue Requirement for the FY 2018-19 **76**

5.1. Background 76

5.2. Approach for determination of ARR for the FY 2018-19 76

5.3. Projection of Number of consumers, Connected Load and Energy Sales 76

5.4. Inter-State transmission loss 80

5.5. Intra-State Distribution Loss 80

5.6. Power Purchase Quantum & Cost 81

5.7. Renewable Purchase Obligations (RPOs) 90

5.8. Energy Balance 91

5.9. Operation & Maintenance Expenses 92

5.10. Gross Fixed Assets (GFA) and Capitalisation 94

5.11. Capital Structure 95

5.12. Depreciation 96

5.13. Interest on Loan 97

5.14. Return on Equity (RoE) 98

5.15. Interest on Security Deposits 98
5.16. Interest on Working Capital 99
5.17. Income Tax 100
5.18. Provision for Bad & Doubtful Debts 100
5.19. Non-Tariff Income 100
5.20. Aggregate Revenue Requirement (ARR) 101
5.21. Revenue at existing Retail Tariff 101
5.22. Standalone Revenue Gap/ Surplus 103

6. Chapter 6: Tariff Principles and Design 104

6.1. Overall Approach 104
6.2. Applicable Regulations 104
6.3. Cumulative Revenue Gap/ Surplus 105
6.4. Treatment of the cumulative Gap/ Surplus and Tariff Design 107

7. Chapter 7. Open Access Charges for the FY 2018-19 117

7.1. Determination of Wheeling Charges 117
7.2. Determination of Additional Surcharge 118
7.3. Cross-Subsidy Surcharge 119

8. Chapter 8: Tariff Schedule 122

8.1. Tariff Schedule 122
8.2. Applicability 123
8.3. General Conditions of HT and LT Supply 127
8.4. Schedule of Other Charges 131
8.5. Schedule for service connection charges and service rentals 135

9. Chapter 9. Fuel and Power Purchase Adjustment Mechanism 139

9.1. Legal Provisions 139
9.2. Existing formula 140
9.3. Need to review the existing mechanism 142
9.4. New formula 144

10. Chapter 10: Directives 148

10.1. Directives continued in this Order 148
10.2. Directives dropped in this Order 151
10.3. New Directives issued in this Order 153

Annexures 155

Annexure 1: Public Notices published by the Petitioner 155
Annexure 2: Public Notices published by the Commission 158
Annexure 3: List of Stakeholders 166

Annexure 4: Sample calculation for advance payment rebate 168

List of Tables

Table 1: Timelines w.r.t the Petition filed for True-up of the FY 2016-17, APR of the FY 2017-18 and ARR of the FY 2018-19 11
Table 2: Details of Public Notices published by the Petitioner 14
Table 3: Details of Public Notices published by the Commission 14
Table 4: Energy Sales (MU) Trued-up by the Commission 33
Table 5: Inter-State Transmission Loss (%) 34
Table 6: Intra-State Distribution Loss calculation 34
Table 7: Intra-State Distribution Loss approved (%) 35
Table 8: RPO compliance submitted by the Petitioner 35
Table 9: Details of solar RPO compliance submitted by the Petitioner 35
Table 10: Effective energy sales (except hydro) for calculation of RPO 35
Table 11: Compliance status of Renewable Purchase Obligation (RPO) 36
Table 12: Cost towards compliance of Renewable Purchase Obligation (In Rs Cr) 37
Table 13: Power Purchase quantum and cost submitted by the Petitioner 38
Table 14: Energy requirement submitted (in MU) 39
Table 15: Energy balance approved (in MU) 39
Table 16: Employee Expenses approved by Commission (In Rs Cr) 40
Table 17: A&G Expenses approved by Commission (In Rs Cr) 41
Table 18: R&M Expenses approved by Commission (In Rs Cr) 41
Table 19: O&M Expenses approved by Commission (In Rs Cr) 42
Table 20: Capitalisation approved by Commission (In Rs Cr) 42
Table 21: GFA addition approved by Commission (In Rs Cr) 43
Table 22: Normative Loan addition (In Rs Cr) 43
Table 23: Normative Equity addition (In Rs Cr) 43
Table 24: Depreciation approved by Commission (In Rs Cr) 44
Table 25: Interest on Loan approved by Commission (In Rs Cr) 46
Table 26: RoE approved by Commission (In Rs Cr) 47
Table 27: Interest on Consumer Security Deposits approved by Commission (In Rs Cr) 47
Table 28: Interest on Working Capital submitted by Petitioner (In Rs Cr) 48
Table 29: Interest on Working Capital approved by Commission (In Rs Cr) 49
Table 30: Income Tax approved by Commission (In Rs Cr) 50
Table 31: Non- Tariff Income approved by Commission (In Rs Cr) 51
Table 32: Disincentive due to under-achievement of Intra-State Distribution Loss (In Rs Cr) 51
Table 33: Aggregate Revenue Requirement approved by Commission for the FY 2016-17 (In Rs Cr) 52
Table 34: Revenue at existing tariff approved by Commission for the FY 2016-17 (In Rs Cr) 53
Table 35: Standalone Revenue Gap/ Surplus for the FY 2016-17 (In Rs Cr) 53
Table 36: Energy Sales (MU) approved by the Commission for the FY 2017-18 55
Table 37: Inter-State Transmission Loss (%) 56
Table 38: Intra-State Distribution Loss (%) 56
Table 39: Power Purchase quantum (MU) and cost (In Rs Cr) submitted by the Petitioner 57
Table 40: Power Purchase Quantum (MU) and cost (Rs Cr) approved by the Commission 59
Table 41: RPO compliance status submitted by Petitioner 61
Table 42: Effective energy sales (adjusted for hydro) (in MU) 61
Table 43: Summary of Renewable Purchase Obligation (RPO) (MU) 62
Table 44: Cost towards compliance of Renewable Purchase Obligation through REC (In Rs Cr) 62
Table 45: Energy Requirement of the System (MU) 63
Table 46: Energy Balance approved (MU) 63
Table 47: Employee Expenses approved by Commission (In Rs Cr) 65
Table 48: A&G Expenses approved by Commission (In Rs Cr) 65
Table 49: R&M Expenses approved by Commission (In Rs Cr) 65
Table 50: O&M Expenses approved by Commission (In Rs Cr) 66

Table 51: Revised submission for capitalisation (In Rs Cr) 66
Table 52: Capitalisation approved by the Commission (In Rs Cr) 66
Table 53: GFA addition approved by Commission (In Rs Cr) 67
Table 54: Normative Loan addition (In Rs Cr) 67
Table 55: Normative Equity addition (In Rs Cr) 67
Table 56: Depreciation approved by Commission (In Rs Cr) 68
Table 57: Interest on Loan approved by Commission (In Rs Cr) 69
Table 58: RoE approved by Commission (In Rs Cr) 70
Table 59: Interest on Security Deposits approved by Commission (In Rs Cr) 70
Table 60: Interest on Working Capital approved by Commission (In Rs Cr) 71
Table 61: Income tax approved by Commission (In Rs Cr) 72
Table 62: Non-Tariff Income approved by Commission (In Rs Cr) 72
Table 63: Aggregate Revenue Requirement approved by the Commission for the FY 2017-18 (In Rs Cr) 73
Table 64: Revenue at existing tariff computed by Commission (In Rs Cr) 73
Table 65: Standalone Revenue Gap/ Surplus at existing tariff (In Rs Cr) 75
Table 66: Energy sales, number of consumers and connected load submitted by the Petitioner 77
Table 67: Growth in No. of consumers 77
Table 68: Growth in Connected Load 78
Table 69: Growth in Energy Sales 78
Table 70: No. of consumers 78
Table 71: Connected Load (kW) 79
Table 72: Energy Sales (MU) 79
Table 73: Inter-State transmission loss (%) 80
Table 74: Intra-State Distribution Loss (%) 81
Table 75: Energy Allocation as submitted by the Petitioner (MW) 81
Table 76: Station wise power purchase submitted by Petitioner 83
Table 77: Power Purchase quantum (MU) and Cost (In Rs Cr) submitted by Petitioner 85
Table 78: Transmission charges submitted by Petitioner (In Rs Cr) 86
Table 79: Power Purchase Quantum (MU) and cost (Rs Cr) approved by the Commission 88
Table 80: Effective energy sales (adjusted for hydro) (in MU) 90
Table 81: Summary of Renewable Purchase Obligation (RPO) (MU) 91
Table 82: Cost towards compliance of Renewable Purchase Obligation through REC (In Rs Cr) 91
Table 83: Energy Balance submitted by Petitioner (MU) 91
Table 84: Energy Balance approved by Commission (MU) 92
Table 85: Employee Expenses approved by Commission (In Rs Cr) 93
Table 86: A&G Expenses approved by Commission (In Rs Cr) 93
Table 87: R&M Expenses approved by Commission (In Rs Cr) 94
Table 88: O&M Expenses approved by Commission (In Rs Cr) 94
Table 89: Capitalisation achieved by Petitioner over the years (In Rs Cr) 95
Table 90: Capitalisation approved by the Commission (In Rs Cr) 95
Table 91: GFA addition approved by the Commission (In Rs Cr) 95
Table 92: Normative Loan addition (In Rs Cr) 95
Table 93: Normative Equity addition (In Rs Cr) 96
Table 94: Depreciation approved by Commission (In Rs Cr) 97
Table 95: Interest on loan approved by Commission (In Rs Cr) 97
Table 96: RoE approved by Commission (In Rs Cr) 98
Table 97: Interest on Security Deposits approved by Commission (In Rs Cr) 98
Table 98: Interest on Working Capital approved by Commission (In Rs Cr) 99
Table 99: Income Tax approved by Commission (In Rs Cr) 100
Table 100: Non -tariff Income approved by Commission (In Rs Cr) 100
Table 101: Aggregate Revenue Requirement approved by Commission for FY 2018-19 (In Rs Cr) 101
Table 102: Revenue at existing tariff computed by Commission (In Rs Cr) 102
Table 103: Standalone Revenue Gap/ Surplus at existing tariff (In Rs Cr) 103
Table 104: Revenue Gap/ Surplus submitted by Petitioner (In Rs Cr) 105

Table 105: Standalone Revenue Gap/ Surplus determined by Commission (In Rs Cr) 106
Table 106: Consolidated Revenue Gap/ Surplus determined by Commission (In Rs Cr) 107
Table 107: Retail tariff proposed by the Petitioner (In Rs Cr) 108
Table 108: Existing and approved tariff 111
Table 109: Revenue from approved retail tariff determined by Commission (In Rs Cr) 112
Table 110: Tariff increase approved by Commission 114
Table 111: Revenue Gap/ Surplus without Regulatory Surcharge (In Rs Cr) 114
Table 112: Revised Revenue Gap/ Surplus with Regulatory Surcharge approved by Commission (In Rs Cr) 115
Table 113: Allocation matrix approved by Commission 117
Table 114: Parameters assumed for voltage wise allocation of wheeling charges 118
Table 115: Wheeling Charges approved by Commission 118
Table 116: Additional Surcharge approved by Commission 119
Table 117: Energy Input at each voltage level (MU) 120
Table 118: Parameters used for allocation of fixed costs 120
Table 119: Voltage Wise Cost of Supply (VCoS) 120
Table 120: Cross-Subsidy Surcharge 120
Table 121: Tariff Schedule 122
Table 122: Applicability of Tariff Schedule 123
Table 123: Key Takeaways 143

List of abbreviations

Abbreviation	Full Form
A&G	Administrative and General
ACoS	Average Cost of Supply
Act	The Electricity Act, 2003
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal of Electricity
BPL	Below Poverty Line
CAGR	Compound Annualized Growth rate
Capex	Capital Expenditure
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievance Redressal Forum
CGS	Central Generating Stations
COD	Commercial Operation Date
Cr	Crores
Discom	Distribution Company
CED	Chandigarh Electricity Department
DSM	Deviation Settlement Mechanism
EA 2003	The Electricity Act, 2003
ED	Electricity Department
EHT	Extra High Tension
ERP	Enterprise Resource Planning
FPPCA	Fuel and Power Purchase Cost Adjustment
FY	Financial Year
GFA	Gross Fixed Assets
HT	High Tension
IEX	Indian Energy Exchange Limited
IPP	Independent Power Producer
ISTS	Inter State Transmission System
JERC	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
JKPDD	Power Development Department , Jammu and Kashmir
LT	Low Tension
MU	Million Units
MYT	Multi Year Tariff
NFA	Net Fixed Assets
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance
PGCIL	Power Grid Corporation of India Limited

Abbreviation	Full Form
PLF	Plant Load Factor
PLR	Prime Lending Rate
POSOCO	Power System Operation Corporation Limited
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
REC	Renewable Energy Certificate
RLDC	Regional Load Despatch Centre
RoE	Return on Equity
RPO	Renewable Purchase Obligation
SBI PLR	SBI Prime Lending Rate
SERC	State Electricity Regulatory Commission
SLDC	State Load Despatch Center
SOP	Standard of Performance
T&D	Transmission & Distribution Loss
TVS	Technical Validation Session
UI	Unscheduled Interchange
UT	Union Territory
WART	Weighted Average Retail Tariff

Before the

Joint Electricity Regulatory Commission

For the State of Goa and Union Territories, Gurugram

QUORUM

Sh. M. K. Goel (Chairperson)

Smt. Neerja Mathur (Member)

Petition No. 254/2018

In the matter of

Approval for the True-up of the FY 2016-17, Annual Performance Review for the FY 2017-18 and Aggregate Revenue Requirements (ARR) and Tariff proposal for the FY 2018-19.

And in the matter of

Chandigarh Electricity Department (CED)...Petitioner

ORDER

Dated: 28th March 2018

a) This Order is passed in respect of a Petition filed by the Chandigarh Electricity Department for approval of True-up of the FY 2016-17 and Annual Performance Review of the FY 2017-18, Aggregate Revenue Requirements (ARR) and Tariff proposal for the FY 2018-19.

b) On receipt of the Petition, the Commission scrutinised its contents and requisitioned further information/clarifications on the data gaps observed in the Petition to take a prudent view of the Petition. The Commission also held a Technical Validation Session to determine its sufficiency and the veracity of the information submitted. Further, suggestions /comments/objections were invited from the public/stakeholders. A Public Hearing was held and the stakeholders/Public were heard there. The schedule of activities performed in the course of this quasi-judicial process are given below:

Table 1: Timelines w.r.t the Petition filed for True-up of the FY 2016-17, APR of the FY 2017-18 and ARR of the FY 2018-19

Particular	Details
Date of Admission	18th January 2018
Public Hearing	13th February, 2018
Technical Validation Session	6th March, 2018

c) The tariff, as detailed in the Chapter "Tariff Schedule", Open Access Charges and other provisions as approved in this Order shall come into force from 1st April 2018 and shall remain valid till further Orders of the Commission.

d) The licensee shall publish the revised Tariff Schedule and the salient features of tariff within one week of receipt of the Order in three daily newspapers in the respective local languages of the region, besides English, having wide circulation in their respective areas of supply.

e) Ordered as above, read with the attached document giving detailed reasons, grounds and conditions.

-Sd-	-Sd-
Neerja Mathur	**M.K. Goel**
(Member)	**(Chairperson)**

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

Place: Gurugram
Date: 28th March 2018

(Certified Copy)

Keerti Tewari

1. Chapter 1: Introduction

1.1. About Joint Electricity Regulatory Commission (JERC)

In exercise of powers conferred by the Electricity Act 2003, the Central Government constituted a Joint Electricity Regulatory Commission for all the Union Territories except Delhi to be known as "the Joint Electricity Regulatory Commission for the Union Territories" vide notification no. 23/52/2003-R&R dated 2 May, 2005. Later with the joining of the State of Goa, the Commission came to be known as "Joint Electricity Regulatory Commission for the State of Goa and Union Territories" (hereinafter referred to as "the JERC" or "the Commission") vide notification no. 23/52/2003-R&R (Vol. II) dated 30th May, 2008.

JERC is an autonomous body responsible for regulation of the Power Sector in the State of Goa and the Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry, consisting of generation, transmission, distribution, trading and use of electricity. Its primary objective includes taking measures conducive to the development of the electricity industry, promoting competition therein, protecting interest of consumers and ensuring supply of electricity to all areas.

1.2. About Chandigarh Electricity Department (CED)

The Electricity Department of UT Administration of Chandigarh, hereinafter referred to as 'CED' or as the 'Petitioner', a deemed licensee under Section 14 of the Electricity Act 2003, is carrying out the business of transmission, distribution and retail supply of electricity in Chandigarh (UT). The CED has been allowed to function as an integrated distribution licensee of the Union Territory of Chandigarh. The CED procures most of its power through its allocation from central generating stations NTPC, NHPC, NPCIL BBMB, SJVNL and THDC. The CED also buys short term power for meeting the demand-supply shortfall during peak hours.

Chandigarh has been divided into various sectors and all the sectors of Chandigarh are electrified and any desiring consumer can avail power supply by submitting a requisition in the prescribed form to the appropriate office of the Department subject to fulfillment of the requisite conditions and payment of charges. The CED is under the control of the Administration of the Union Territory of Chandigarh.

1.3. Multi Year Distribution Tariff Regulations, 2014

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi-Year Distribution Tariff) Regulations, 2014 on 30th June 2014 applicable for a three year Control period starting from FY 2015-16 till FY 2017-18. The Commission subsequently notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi-Year Distribution Tariff) (First Amendment) Regulations, 2015 on 10th August 2015 shifting the MYT Control Period to FY 2016-17 to FY 2018-19. These Regulations are applicable to all the distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry.

1.4. Filing and Admission of the Present Petition

The present Petition was filed vide letter dated 12th January 2018, received at the Commission's office on 12th January 2018, admitted on 18th January 2018 and marked as Petition No. 254/2018.

1.5. Interaction with the Petitioner

The Order has referred at numerous places to various actions taken by the "Commission." It may be mentioned for the sake of clarity that the term "Commission," except for the Hearing and Orders, denotes the Secretariat of the Commission responsible for carrying out technical due diligence and validation of data of the Petitions filed by the utilities, obtaining and analysing information/clarifications received from the utilities, and submitting relevant issues for consideration of the Commission.

A preliminary scrutiny/analysis of the Petition was conducted and certain deficiencies were observed. Accordingly, deficiency notes were issued to the Petitioner. Further, additional information/clarifications were solicited from the Petitioner as and when required. The Commission and the Petitioner also discussed various concerns of the Petitioner and key data gaps, which included retail sales, revenue from retail tariff, capitalisation, tariff proposal etc. The Petitioner submitted its response on the issues through various letters/emails.

The Commission conducted the Technical Validation session (TVS) with the Petitioner at the Commission' office in Gurugram, during which the discrepancies in the Petition were conveyed and additional information required by the Commission was sought. Subsequently, the Petitioner submitted replies to the issues raised in these sessions and provided documentary evidence to substantiate its claims regarding various submissions. The following table provides the list of interactions with the Petitioner along with the dates:

Table 1: List of interactions with the Petitioner

S. No	Subject	Date
1	Issue of First Discrepancy Note	2^{nd} February, 2018
2	Public hearing	13^{th} February, 2018
3	Reply received from Petitioner	10^{th} February, 2018
		5^{th} March, 2018
4	Technical Validation Session	6^{th} March, 2018
5	Issue of 2^{nd} Discrepancy Note	6^{th} March, 2018
6	Reply received from Petitioner	13^{th} March, 2018
		14^{th} March, 2018
		16^{th} March, 2018
		17^{th} March, 2018
		18^{th} March, 2018

1.6. Notice for Public Hearing

Public notices were published by the Petitioner for inviting objections/ suggestions from stakeholders on the Tariff Petition as given below:

Table 2: Details of Public Notices published by the Petitioner

Sr.No.	Date	Name of Newspaper	Place of circulation
1	23^{rd} January 2018	Ajit	Chandigarh
2	23^{rd} January 2018	Dainik Bhaskar	Chandigarh
3	23^{rd} January 2018	The Tribune	Chandigarh

Copy of the Public Notices published by the Petitioner are attached as Annexure 1 of this Order.

The Commission also published Public Notices in the leading newspapers as tabled below, giving due intimation to the stakeholders, consumers and the public at large about the Public Hearing to be conducted by the Commission on 13^{th} February 2018 from 10 AM onwards at Auditorium Hall, Government Museum and Art Gallery, Chandigarh:

Table 3: Details of Public Notices published by the Commission

S.No.	Date	Name of Newspaper	Place of Circulation
1	19^{th} January 2018	Ajit	Chandigarh
2	19^{th} January 2018	Dainik Bhaskar	Chandigarh
3	19^{th} January 2018	Dainik Jagran	Chandigarh
4	19^{th} January 2018	The Tribune	Chandigarh
5	5^{th} February 2018	Ajit	Chandigarh
6	5^{th} February 2018	Dainik Bhaskar	Chandigarh
7	5^{th} February 2018	Dainik Jagran	Chandigarh

S.No.	Date	Name of Newspaper	Place of Circulation
8	5th February 2018	The Tribune	Chandigarh

Copies of the Public Notices published by the Commission for intimation of the Public Hearing are attached as Annexure 2 to this Order. This notice was also uploaded on the Commission's website.

1.7. Public Hearing

The Public Hearing was held on 13th February 2018 at the Auditorium Hall, Government Museum and Art Gallery to discuss the issues related to the Petition filed by the Petitioner. The issues and concerns raised by the stakeholders in writing and as voiced by them during the Public Hearing have been examined by the Commission. The major issues discussed, the responses of the Petitioner thereon and the views of the Commission, have been summarized in Chapter 2.

2. Chapter 2: Summary of Suggestions/Objections received, Response from the Petitioner and the Commission's Views

2.1. Regulatory Process

On admitting the Petition, the Commission directed the Petitioner to make copies of the Petition available to the public, upload the Petition on the website and also publish the same in the newspapers in an abridged form in the given format duly inviting comments/objections from the public as per the provisions of the MYT Regulations, 2014.

The Public Hearing was held at Auditorium Hall, Government Museum and Art Gallery, Chandigarh on 13th February 2018 on Petition for the True-up of the FY 2016-17, APR of the FY 2017-18 and ARR of the FY 2018-19. During the Public Hearing, a few of the stakeholders who had submitted their comments in writing also presented their views in person before the Commission. Other participants from the general public, who had not submitted written objections earlier, were also given an equal opportunity to present their views/suggestions in respect to the Petition.

The list of the Stakeholders is attached as **Annexure 3** to this Order.

2.2. Suggestions/ Objections, Response of the Petitioner and Commission's Comments

The Commission is appreciative of the efforts of various stakeholders in providing their suggestions/comments/observations to make the Electricity Distribution Sector responsive and efficient. The Commission has noted the concerns of all the stakeholders and has tried to address them to the extent possible in the Chapters on tariff design and Directives. Relevant observations have been suitably considered by the Commission while finalising the Tariff Order. The submissions of the stakeholders, response of the Petitioner and views of the Commission are summarized below:

2.2.1. Procedure for Open-Access

Stakeholder's Comment:

In Chandigarh, well defined Open Access Regulations followed by Open Access Charges are in place but till date, the procedure of the same has not been defined by the SLDC. Due to this, the procurement of power through Open Access in Chandigarh is not possible as consumers don't have guidelines/procedures for the same. However in other UTs regulated by the JERC, the said procedures are in place. The CED should also prepare procedure for procurement of Power from Power Exchanges on Day-Ahead basis by Consumers so that they can buy power at competitive rates.

Petitioner's Response:

The procedure for Short-Term Open Access and Long-Term Access is under active consideration of Chandigarh Administration and the same would be notified shortly.

Commission's View:

Open Access has to be permitted as per provisions of the Electricity Act 2003 and the regulations are already in place. The statutory right of the consumers for Open Access cannot be delayed/denied and a provision for deemed NOC has been provided in the JERC (Connectivity and Open Access in Intra-state Transmission and Distribution) Regulations, 2017 in case the SLDC/Discom delays the NOC. Till the operationalization of SLDC, the Petitioner is directed to immediately appoint an officer responsible for receipt and processing of Open Access applications.

2.2.2. Industrial Consumers be spared from hike in tariff

Stakeholder's Comment:

Industrial and business tariffs of converted plot owners should be spared from hike in the power tariff. Rebate of 7.5% on electricity bills for such consumers should be re-instated considering the huge investments already made on transformers etc.

Petitioner's Response:

As per the supply code and applicable tariff order for the FY 2017-18 approved by the Hon'ble Commission, the supply on 11KV is applicable on the consumers having load above 100kW. The surcharge @ 20% on the tariff shall be levied for all the existing consumers who are being given supply at 400 Volts. A consumer getting supply at 33KV and above will get a rebate of 3%. However surcharge @17.5% on the tariff shall be levied for all the arc furnace consumers which are being given supply at 11kV. This surcharge @17.5% shall also be levied on other industrial consumers having contract demand exceeding 5000kVA and running at 11kV.

Commission's View:

The Commission has duly considered the submission of the stakeholders and accordingly reduced the variable charges and rationalized the fixed charges for this crucial consumer category.

2.2.3. Recovery of Arrears from Defaulters

Stakeholder's Comment:

The CED should recover arrears from defaulters before proposing tariff hikes.

Petitioner's Response:

The CED regularly makes rigorous efforts to recover arrears from the defaulters. However, the data of arrears of defaulters every financial year is a part of the financial statement of Electricity Wing of Engineering Department which gets audited by AG UT and is accordingly submitted to Hon'ble Commission in the respective year of Tariff Petition.

Commission's View:

The Commission recognises the concerns of the stakeholder and the Commission has accordingly not allowed the provision for bad and doubtful debts to the Petitioner in the True-up of the FY 2016-17 and the projections for the FY 2017-18 and the FY 2018-19. Thus the inefficiency of the Petitioner is not passed on to the consumer tariffs. Further, the Commission observes that the defaulters of arrears are liable to pay late payment surcharge at 18% per annum. The Petitioner is directed to take action against the defaulters by disconnecting the supply of defaulting consumers as per Section 56 of the Electricity Act, 2003.

2.2.4. Kundi Connections

Stakeholder's Comment:

The CED must stop power theft by removing all kundi/ illegal connections before proposing tariff hikes.

Petitioner's Response:

The Electricity Wing is regularly removing the Kundis, however, the same resurface again and is becoming a Law and Order problem. However, the Enforcement Wing regularly checks the electricity connection with respect to any type of irregularity and the penalty is imposed on the defaulting consumers under the various sections of Electricity Act. All Sub-Divisions and Enforcement Cell of the Electricity Wing carry out the routine checking and a quarterly report is submitted to the Hon'ble Commission. Number of connections and the amount recovered for such irregularity up to November 2017 is tabulated below:

No. of connections checked	No. of connections wherein discrepancy is found	Amount charged (In Rs Cr)
585	281	2.08

Commission's View:

The stakeholders are informed that the Commission has already fixed the target T&D Losses for the Petitioner and the impact of any additional losses is to borne by the Petitioner as per the provisions of the MYT Regulations, 2014. Further, the Commission observes that only 581 connections have been checked till November 2017. The CED should strengthen the enforcement activities. Theft prone areas should be checked regularly. The defaulters should be prosecuted under the provisions of Section 135 of the EA, 2003.

2.2.5. Power Tariff Hike

Stakeholder's Comment:

The CED must not hike tariffs for industrial consumers considering the competitive tariffs of neighboring states like Punjab.

Petitioner's Response:

The Proposed a hike in tariff is proposed based on the calculated revenue gap. The existing and proposed Tariff for Industrial Consumers is as under:-

INDUSTRIAL				
TARIFF CATEGORY	EXISTING TARIFF		PROPOSED TARIFF	
	Variable Cost (Rs./kWh)	Fixed Cost (Rs./kw/ Month)	Variable Cost (Rs./kWh)	Fixed Cost (Rs./kw/ Month)
Large Supply	5.65	100	7.00	122
Medium Supply	5.35	100	6.45	122
Small Power	5.30	20	6.40	24

Commission's View:

The Commission has duly addressed this matter in detail in Chapter 6 and Chapter 8 of this Order.

2.2.6. FPPCA Charges

Stakeholder's Comment:

FPPCA charges are very high in Chandigarh. This results in an indirect method of escalation in tariff. The same should be replaced by a fixed surcharge as consumers can't understand the FPPCA formulae.

Petitioner's Response:

It is submitted that the JERC vide its Order Dated 27.06.2012 in Petition No.79/2012 (Suo Moto) has specified a Fuel and Power Purchase Cost Adjustment (FPPCA) Formula and directed the Electricity Wing of the Engineering Department, U.T., Chandigarh. Accordingly, FPPCA is being computed. The FPPCA per unit as calculated is then multiplied by K factor as approved by the Hon'ble Commission in the respective Tariff Order.

It is further mentioned that FPPCA issue has already been dealt by the Hon'ble commission , on the basis of public objections as elaborated in last tariff order dated-4th May,2017, wherein the Hon'ble commission has decided as under :-

"The present FPPCA mechanism was approved after detailed deliberations with the stakeholders across various UTs. However, the stakeholders are requested to formally submit the specific issues and discrepancies (if any) in the existing methodology for consideration of the commission (if any)."

In view of above, it is considered that FPPCA reflects the true picture of Power Purchase. The FPPCA for the 2nd Quarter of FY 2017-18 was on negative side, therefore, a refund was reflected in the consumers' bills for the period w.e.f. 1st November, 2017 to 31st January, 2018.

However, considering various representations of stakeholders, a special section has been included in the ARR petition of this year for further consideration by the Hon'ble Commission.

Commission's View:

The Commission has duly considered the concerns of the stakeholders and accordingly revised and simplified the FPPCA calculation. The Commission has also capped the FPPCA charges at 10% of the applicable tariff. The details of the same are discussed in Chapter 9 on Fuel and Power Purchase Cost Adjustment of this Order.

2.2.7. Power Purchase Planning and Cost

Stakeholder's Comment:

The increasing population and needs of the UT demand for a clear planning of power procurement. The procurement of the demand gap from external sources is a burden for domestic and industrial consumers. Thus, the CED must prepare a concrete case for projecting the power requirements of the UT for at least the next 10 years vis-à-vis the availability of power through firm allocation from the Central Generating Stations.

Petitioner's Response:

In this connection it is submitted that the Electricity Department has made elaborate arrangements for procurement of power for Chandigarh. At present the Department is receiving power from 38 Central Generating Stations of NTPC, NHPC, NPCIL, BBMB and many others. Further, Electricity Wing has entered into power purchase agreements from future upcoming Central Power Generating Stations. It is pertinent to mention here that the Chandigarh Administration and the Ministry of Power, Government of India has undertaken in joint initiative to prepare the Generation Plan, Distribution Plan and Transmission Plan to provide "24x7 Power for All" and as per this Road Map Document, the Electricity Wing of Chandigarh is adequate in Generation, Distribution and Transmissions Plans. This Road Map Document is available in Public Domain.

In view of the above, the extra demand of power in summer season is being met from the unallocated quota of Ministry of Power/ GoI which has been increased from 4% to 10% during last summer season. To meet any further requirement the Electricity Wing is buying power from Power Exchanges at very competitive rates.

Additionally, the CED has already carried out a Load Forecasting study. In the Load Forecasting Study, action plan for Short term (2-5 years), Medium Term (7-10 years) and Long Term (15-25 years) has been prepared and the department is acting accordingly. This study report has already been approved by the Hon'ble Commission in petition No-216/2016 vide order on Dt-16.09.2016.

Further, Hon'ble Commission has got a Manpower Study carried out and the same has also been approved by the Hon'ble Commission. To run the Department in a professional manner, separate verticals have been created and accordingly the posts have been approved which are under sanction with the Govt. of India. Special attention has been given by creating a post of SE (Commercial) who will exclusively look after power procurement.

Commission's View:

The Commission notes the concerns of the stakeholders and also the actions taken by the Petitioner. The Commission has observed that although the Petitioner has carried out a load forecasting study, the Petitioner has not been using any scientific method to project the power purchase quantum and cost in its Tariff Petitions. The Commission directs the Petitioner to ensure that its future submissions regarding power purchase cost are based on detailed analysis of the past trends and applicable tariffs of the power sources available.

2.2.8. Power Tariff Reduction for MSME's

Stakeholder's Comment:

The CED must maintain the tariffs for MSME's in line with the costs incurred. Subsidies for a class of consumers must be passed on via the Government instead of burdening other consumers. Subsidies in tariff results in increase of K factor of industrial connections.

Petitioner's Response:

The tariff of all consumers is being fixed by the Hon'ble Commission as per the National Tariff Policy notified by the Govt. of India. In view of various reports of the stakeholders of the Electricity Wing, the matter has been brought to the notice of the Hon'ble Commission for their consideration and further decision.

Commission's View:

The Commission is guided by the Tariff Policy, 2017 and the EA, 2003 and has accordingly rationalised the tariff for Industrial consumers, especially medium and small industrial consumers. The Commission has addressed this matter in detail in Chapter 6 and Chapter 8 of this Order.

2.2.9. Fixed Charges

Stakeholder's Comment:

Levy of Fixed Charges is totally unjustified since such charges are recovered at the time of release of connections and no such charge is existing in the Tariff structure of the neighboring States of Punjab and Haryana.

Petitioner's Response:

In this connection, it is submitted that fixed charge is a universal phenomenon and all generating stations are charging the same to Electricity Wing, whether power is drawn or not. The Recovery of Fixed Charges is as per policy of Central Generating Stations (CGS) like NTPC, SJVNL and NHPC whose tariff is approved by the CERC.

Commission's View:

The Commission acknowledges the concerns of the consumers. However, it is pertinent to note that the Petitioner has to incur expenditure towards the capacity charges of Power Purchase and O&M Expenses which are fixed in nature in contrast to the energy charges which are payable for purchase of energy per unit. These expenses have to be recovered from the consumers and this is done by having a two-part tariff, other-wise the entire recovery will have to be made through the energy charges.

2.2.10. Carrying Cost Charges

Stakeholder's Comment:

The failure of a one-time settlement from the Government followed by charges on carrying costs at 14.05% is objectionable. The CED must not generate hypothetical assets in the balance sheet, instead it must be considered as working capital.

Petitioner's Response:

It is submitted that the rate of carrying cost and the interest is being charged as per MYT Regulations notified by the JERC. It is further submitted that expenditure of Rs 208.17 Cr has already been made from the Consolidated Funds under proper appropriation and sanctioned from the Govt. of India in anticipation of recovery through tariff. This expenditure can only be recovered from an equivalent tariff and accordingly, the whole position has been made clear in the ARR Petition, which may kindly be pursued. To ensure that the financial viability of the Electricity Wing is maintained, revenue gap of Rs 208.17 Cr is required to be recovered from the equivalent tariff only.

Commission's View:

The Commission observes that the Petitioner has approached the Government for budgetary support as per the directions of the Commission. Following the request of the Petitioner, the Finance Secretary cum Secretary (Engineering), being the competent authority of the Chandigarh Administration, has conveyed the inability of the government to provide this budgetary support and has requested the JERC that the order regarding disallowance of revenue gap of 208.17 Cr. may be reconsidered to ensure financial viability of the Petitioner.

In light of these facts the Commission has decided to consider the revenue gap of 208.17 Cr disallowed in the earlier Orders. However, the Commission notes that due to reasons attributable to the Petitioner, there was a delay in preparation and submission of audited accounts and Fixed Asset Register (still under process), and therefore it would not be prudent to burden the consumers with the carrying cost on this amount. The Commission has thus not considered any carrying cost on the gap of Rs 208.17 Cr.

2.2.11. True-Up of the FY 2016-17

Stakeholder's Comment:

The work being done by a Chartered Accountant for preparation of Fixed Asset Register for period prior to 2005 has not been completed. Also, it is not known for certain whether audited accounts of FY 2016-17 have been submitted to the Hon'ble Commission after completion of audit from AG/UT Chandigarh. Chandigarh Electricity Department (CED) has promised to incorporate details of assets prior to 2005 in the True up for the FY 2017-18.

Petitioner's Response:

It is submitted that a Chartered Accountant firm has been appointed for preparing the Asset Register prior to 2005 and the work is in process. It is further clarified that audited accounts of the financial year 2016-17 have been submitted to AG (UT) on 08.12.2017 and the audit of the same is under process by AG (UT). The audit certificate will be submitted to Hon'ble Commission shortly.

Commission's View:

The Commission has carried out the True-up of the FY 2016-17 only after receiving the audited accounts of the Petitioner. With regard to incorporating the details of the assets prior to 2005 in the FAR of the Petitioner, the Commission has noted the progress made by the Petitioner. The same shall be accounted for once the FAR is finalised.

2.2.12. Inter-State Transmission Losses

Stakeholder's Comment:

Every year transmission loss of 3 to 4% occurs. It is understood that 220KV/ 66 KV sub-station at Hallomajra is under construction by M/s PGCIL. Timeframe for completion may be realistically fixed to bring down the inter-state transmission losses.

Petitioner's Response:

It is submitted that construction of 220KV Sub-Station at Hallomajra as an Interstate Transmission Point (ISTS) by the PGCIL is under full swing and it is likely to be completed within next 12 months.

Commission's View:

The stakeholders are informed that the Commission has set the trajectory for Inter-State Transmission Loss in the MYT Order dated 28th April 2016. Thus the inefficiency of the Petitioner is not passed on to the consumer tariffs. The Commission further directs the Petitioner to follow-up with PGCIL and expedite the construction work.

2.2.13. Transmission & Distribution Losses

Stakeholder's Comment:

T&D losses have been stagnating between 15.24% and 13.65% from the FY 2013-14 to the FY 2016-17. One of the primary reasons for stagnation given by CED is the dominance of domestic category in the sales increase which is not a satisfactory reason for the stakeholder.

Petitioner's Response:

For reduction of T&D loss, it is well known that voltage level has to be increased but since in Chandigarh 87% consumers are under Domestic category (LT supply at 440/230V). Therefore, Electricity Wing is facing difficulty in reducing the loss

Commission's View:

The Commission has already fixed the target of T&D Losses for the Petitioner and the impact of any additional losses is to be borne by the Petitioner as per the provisions of the MYT Regulations, 2014. The Commission has accordingly imposed a penalty in the form of a disincentive of Rs 3.13 Cr in the True-up of the FY 2016-17.

2.2.14. Pre-paid Electric Meters & Smart Meters

Stakeholder's Comment:

Despite the directions given by the JERC, the consumers have still not been provided an option to install the pre-paid meters and to seek refund of their security. Installing Pre-paid Meters will lead to advance payment being received by the Electricity Department and also reduction in the bad debts. The CED can also give advance payment to the suppliers and can get rebate for the same. However, some stakeholders also submitted that since now smart meters are being installed, exercise on installation of pre-paid meters should be halted.

Petitioner's Response:

It is submitted that pilot work to install 30,000 Smart Meters (which has provision for Prepaid Metering) in Electricity 'OP' Sub Div No. 5, Industrial Area, Chandigarh, has already been allotted to M/s RECPDCL (a Public Sector Undertaking) and they had called the tenders which had to be cancelled in view of a case in Delhi High Court. Fresh tenders have been called and tenders are under process. The work is likely to be completed within 18 months after the award of contract by M/s RECPDCL. Further, DPR for installation of Smart Meters all over Chandigarh for Rs. 350 Crore has already been submitted to the Ministry of Power under National Smart Grid Mission (NSGM) of Govt. of India which is under sanction.

Commission's View:

The Petitioner is advised to expedite the process of procurement and installation of smart meters. The Commission directs the Petitioner to implement the mechanism of advance payment rebate without further delay under intimation to the Commission as per the Tariff Schedule notified by the Commission in this Order.

2.2.15. Format of Electricity Bill

Stakeholder's Comment:

The format of the Electricity Bill should be changed so that it doesn't get mixed-up with water and sewage bill.

Petitioner's Response:

The new electricity bill format has been supplied by M/s NIELIT in which water bill details have been deleted and in the next cycle, the electricity bill will be printed in this new format.

Commission's View:

The Commission has noted the concerns of the stakeholders and the action taken by the Petitioner. The Commission directs the Petitioner to release the new format of the electricity bill containing the details of CGRF, Ombudsman and tariff applicable in accordance with the Electricity Supply Code, under intimation to the Commission.

2.2.16. Rebate on Electricity Bills for Solar Energy

Stakeholder's Comment:

The Electricity Department is taking unusual time in affording credit in respect of portion of the solar energy which is being sent to the Grid. There is no Nodal Agency to deal with this problem. Credits being reflected (as negative bills) should carry an interest of 1% till finally the adjustment is made in future consumptions.

Petitioner's Response:

The calculations for Advance payment was submitted to Hon'ble Commission vide this office Memo No. 2302 Dated 01.09.2017 as there were many issues in its implementations. However, considering all such ambiguities, it has been requested to the Hon'ble Commission to approve the amendments as proposed in this ARR Petition. Further action will be taken accordingly.

As regards the solar bills, it is informed that separate software has been developed for net metering of solar bills and being first bills, there were some mistakes and now all the net metering bills have been audited which reflect the import/export reading and the necessary adjustments of the export reading is being done in the bill itself. With regard to surplus solar units at the end of September & March of each year, the necessary payment shall be made by cheque/RTGS as applicable. With regard to gross metering bills, the payment of these is being made regularly.

Commission's View:

The Commission directs the Petitioner that a suitable nodal officer be designated for the redressal of problems faced by solar generators on either gross metering or net metering.

2.2.17. Manpower Requirement

Stakeholder's Comment:

The commission had directed the petitioner to arrange follow up at the level of Secretary (Power) of UT with Govt. of India. Status report was to be given to JERC by 30 September 2017. The Stakeholder believes that recruitment of LDCs, Lineman and ALMS on outsourcing basis is not sufficient and that the CED must recruit personnel at an Executive level who will be responsible for the delays, if any.

Petitioner's Response:

The recruitment of manpower is conducted as per approval given by the JERC and is currently under consideration of the Chandigarh Administration.

Commission's View:

The Commission notes that the Petitioner has repeatedly failed to comply with the Commission's directive in this regard. The Commission advises that the Chief Engineer and the Secretary (Power) take up the matter at their level to convince the competent authority in this regard in the interest of the consumers.

2.2.18. Non-Utilization of 66 kV Transformer at Sector 34 Grid Sub-Station

Stakeholder's Comment:

Works for laying 66 kV underground cable from Sector 32 Grid Sub-station to Sector 34 Grid Sub-station as approved by the JERC in the Business Plan for the FY 2015-16 to FY 2018-19 has still not been completed. The CED should fix responsibility for the delay in completion of work and should make the name public. Further the CED should the inform target date of commissioning of the said grid sub-station.

Petitioner's Response:

The work has been allotted to M/s RECPDCL and they have awarded the work to M/s Sterlite Power Transmission Ltd. The 66KV cable is under manufacturing and as per the Pert Chart supplied by M/s RECPDCL, the work is likely to be completed before June 2018.

Commission's View:

The Commission notes the dismal performance of the Petitioner with regard to achieving its capitalisation targets. The Commission observes that the said work was slated to be completed by the FY 2016-17 but is still under execution. The Petitioner is directed to undertake necessary/appropriate actions so as to ensure that the works approved in the Business Plan Order are completed as per the schedule committed, without any cost overrun.

2.2.19. Energy Audit

Stakeholder's Comment:

The CED has not furnished action plan for Energy Audit and loss reduction measure to the Commission. The response of the CED should be made time bound with maximum period of one year. In the absence of energy audit the entire issue of tariff is non-transparent.

Petitioner's Response:

The difficulty faced by the Electricity Wing in implementing this Directive has already been explained in the Petition, which may kindly be pursued.

Commission's View:

The Commission has noted the submissions of the Petitioner and is of the view that the Petitioner is well equipped to carry out the Energy Audit in its territory. The Commission thus directs the Petitioner to carry out the Energy Audit at the earliest and submit the same to the Commission along with the next Tariff Petition.

2.2.20. Corporatisation of Electricity Department

Stakeholder's Comment:

The CED's Tender for Corporatisation was uploaded on 16 June 2016, however no bidder turned up in response. The case was forwarded by CED to the higher authorities of Chandigarh Administration for logical conclusion. The Stakeholder requests an update on the situation.

Petitioner's Response:

The proposal for Corporatisation of Electricity Department is under consideration with the competent authority of the Chandigarh Administration.

Commission's View:

The Commission notes the submission made by the Petition and directs the Petitioner to follow-up with the competent authority. Till the time the Corporatisation of the CED is finalised, the Petitioner is directed to form a separate SLDC which is ring fenced from the CED. The Petitioner is directed to deploy suitable employees dedicated to the SLDC operations, which are independent from the CED.

2.2.21. Smart City

Stakeholder's Comment:

The Commission had advised CED to follow up with appropriate Govt. bodies so as to extract maximum benefit for consumers from implementation of the Smart City Project. The Stakeholder requests indication of the present position for benefit of consumers.

Petitioner's Response:
At present, no funds have been allocated to Electricity Wing for any work under Smart City.

Commission's View:

The Commission advises the Petitioner to follow-up with appropriate government bodies to extract maximum benefits for consumers from implementation of the Smart City Project.

2.2.22. Upgradation of the CED Website

Stakeholder's Comment:

The CED should upgrade its website to make it user friendly and more informative.

Petitioner's Response:

The tenders are being floated for designing the website. The formal approval for registration of website with the concerned agency of Govt. is also under process.

Commission's View:

The Petitioner is directed to develop its own separate website on priority basis within the next 6 months to make it more informative and consumer friendly in line with the websites of progressive utilities. The last updation date of the website should also appear on the website.

2.2.23. Voluntary Disclosure Scheme

Stakeholder's Comment:

As per section 10.8 of the Supply Code, no case of theft is to be registered with the police in case a consumer voluntarily discloses a tampered meter. A scheme should be floated by the department for voluntary disclosure of tampered meter so as to replace all such meters in one go. Similarly a scheme should also be floated to deposit long pending outstanding amount of electricity bill without paying surcharge amount. A similar scheme was successfully introduced in Haryana.

Petitioner's Response:

The CED is required to follow the Regulations notified by the JERC in true spirit. As per Supply Code notified by the JERC, it has been provided under Clause 4.13(2) that Licensee shall send format of Self Declaration of connected load along with electricity bills to all consumers once in six months. Accordingly, we are following the directions of the Hon'ble Commission for wider publicity.

Commission's View:

The Petitioner is advised to widely publicize similar provisions of the Regulations/Code periodically and also to send the relevant extract of the same with the bill for load enhancement.

2.2.24. Solar Tariff Policy

Stakeholder's Comment:

The CED should formulate a comprehensive Tariff Policy for Solar Power in order to promote solar power generation in Chandigarh.

Petitioner's Response:

M/s CREST of the Chandigarh Administration and the Electricity Wing is promoting the solar power plants in Chandigarh. All the details are available on the website of CREST and Engineering Department. The reduction of fixed charges on account of installation of Solar Plant is required to be examined by the Hon'ble Commission.

Commission's View:

The Commission has noted the stakeholder's concerns. Fixed charges are levied on the consumers on the basis of sanctioned load/connected load as required by the consumer. The same can be reduced/enhanced as per the requirement of the consumers as per the Electricity Supply Code.

2.2.25. Subsidy to Farmers

Stakeholder's Comment:

The CED must provide subsidy to farmers in the UT.

Petitioner's Response:

There are negligible agricultural consumers (119 nos.) in Chandigarh. No subsidy is being provided to any category of consumers in Chandigarh

Commission's View:

The agricultural consumers in Chandigarh are already being provided the benefits of cross subsidy. The Average Cost of Supply for the UT of Chandigarh is Rs 5.11/kWh while the agricultural consumers are only being charged Rs 2.90/kWh as the tariff.

2.2.26. Incentive for Prompt Payment of Bills

Stakeholder's Comment:

The CED has not implemented provision for rebate for prompt payment despite the directions given by JERC. CED should also do a publicity exercise for the same.

Petitioner's Response:

The prompt payment rebate has already been started from December 2016 and is reflecting in the electricity bill of consumers.

Commission's View:

The Petitioner is advised to take appropriate actions for wider publicity of the benefits available to the consumers on this account as this will also help them in early recovery and ensure liquidity. In this Order the Commission has also provided clarity over advance payment of bills in Section 8.3: 'General Conditions of Tariff'.

2.2.27. Interest on Security Deposit

Stakeholder's Comment:

The CED has held consumer's security deposit and booked an interest on it. This should not be allowed as expense as it is the amount earned by the CED on the deposits made by the consumers. The CED is also paying

14.05% on the amount borrowed by them for Working Capital and hence the same should be paid as interest on consumers' security deposit.

Petitioner's Response:

With regard to Interest on security deposit, it is submitted that this issue has been addressed earlier also by the Hon'ble JERC in Tariff Order dated 4th May 2017 and the relevant part is reproduced below:
"Commission's view:
The consumer security deposit amount is considered as the amount available with the Petitioner to meet its Working Capital requirement and is accordingly adjusted by the Commission while computing the net Working Capital requirements for the year.
Further, the Commission has considered the treatment of amount of the consumer Security Deposit and interest thereon as per the applicable provisions of the JERC (Electricity Supply Code) Regulations, 2010."

Commission's View:

The consumer security deposit amount is considered as the amount available with the Petitioner to meet its Working Capital requirement and it is accordingly reduced by the Commission while computing the net Working Capital requirements for the year. As a result, the Commission has not approved any interest on working capital requirement for the FY 2016-17, FY 2017-18 and the FY 2018-19. Further, the Commission has considered the treatment of amount of the consumer Security Deposit and interest thereon as per the applicable provisions of the JERC (Electricity Supply Code) Regulations, 2010.

2.2.28. Access to the accounts of consumers to curb theft

Stakeholder's Comment:

An access may be given to the bills for everyone to see the monthly consumption of anyone. A reward scheme may also be introduced to prevent the theft of electricity. Correct information of theft for electricity to the vigilance cell of the electricity department may prevent revenue loss to the department.

Petitioner's Response:

As per rules in force, access to bills to see the consumption of any consumer cannot be granted as it violates the privacy norms. However, anybody can provide information regarding theft of electricity to the concerned Executive Engineer and Sub-Divisional Officer. Information can also be provided to Executive Engineer (Planning & Design) and Asstt. Executive Engineer (Enforcement) O/o Superintending Engineer, Electricity 'OP' Circle, Sector-9, UT Chandigarh. The identity of the informer shall not be disclosed. Additionally, JERC may introduce some reward scheme.

Commission's View:

The Commission has taken note of the Petitioner's response. Regarding introduction of reward scheme, the Petitioner may approach the Commission with a separate proposal for the same.

2.2.29. Demand Side Management & Energy Conservation

Stakeholder's Comment:

The Stakeholder is concerned about the effectiveness of DSM activities carried out by the CED.

Petitioner's Response:

The post of Asstt. Executive Engineer (System Improvement Cell) in the office of S.E. Electy. 'OP' Circle, Chandigarh already exists and the assigned individual is looking after the DSM Cell.

Commission's View:

The Commission directs the Petitioner to further strengthen the DSM Cell and widely publicize the various schemes and initiatives undertaken by the Petitioner.

2.2.30. Filing and Admission of Petition

Stakeholder's Comment:

There has been considerable delay in filing of the Petition every year. The Petition is to be filed on or before 30th November of the respective year. However, this year JERC extended the date of submission of Petition till 15th January 2017 on the request of the CED. Even then CED missed the deadline and submitted the Petition to the Commission on 18th January 2017.

Petitioner's Response:

The delay in filing the petition has already been explained while requesting the extension in time to the Hon'ble Commission on dated 17th November 2017.

Commission's View:

The Commission has taken a serious view of the delay in filing of Petition by the CED. The Petitioner is directed to file the subsequent Tariff Petitions before 30th November of the respective year as per the applicable provisions of the MYT Regulations 2014.

2.2.31. Aggregate Estimates for Demand

Stakeholder's Comment:

The aggregate estimates for demand have been 8 to 10% different than the actual, this creates confusion while calculating the aggregate requirement

Petitioner's Response:

For estimation purposes the CAGR is the best acceptable criterion and is being followed by all regulatory commissions.

Commission's View:

The Commission has observed that the monthly sales details for each consumer category and sub-category is not being maintained by the Petitioner and this in turn affects the quality of projections made. The Commission has been constrained to make suitable assumptions in the light of this limitation. The Commission directs the Petitioner to ensure that monthly sales details for each consumer category and sub-category are maintained and a scientific process is followed for the projection of demand in the future Tariff Petitions.

2.2.32. Working Capital Calculation

Stakeholder's Comment:

The Stakeholder has queries on the methodology followed for calculation of Interest of Working Capital where in the receivables of 2 months of billing has been considered

Petitioner's Response:

The working capital is calculated as per regulations notified by Hon'ble Commission.

Commission's View:

The Commission has calculated the interest on working capital as per the MYT Regulations, 2014 and the methodology followed is detailed in the relevant sections of this Order.

2.2.33. Bad Debt Provision

Stakeholder's Comment:

The provision for bad debt beyond 0.1 percentage is not admissible.

Petitioner's Response:

This is as per regulation notified by Hon'ble Commission.

Commission's View:

As per Regulation 29 of the MYT Regulations, 2014:

"Bad and Doubtful Debts shall be limited to 1% of receivables in the True-up, subject to the condition that amount of bad and doubtful debts have actually been written off in the licensee books of accounts."

The Commission has followed the above mentioned regulation and no amount has been approved under bad debt since the same has not been written off in the books of accounts of the Petitioner.

2.2.34. Solar Net Metering Protocol

Stakeholder's Comment:

The Stakeholder has a query regarding the rate of credit being given against Solar Net Metering Protocol and compensation for minimum connection charges for Solar Net Metering Protocol.

Petitioner's Response:

The tariff is fixed after taking in to account various factors as per detailed calculations as mentioned in the Annexure-I of JERC order in the matter of Generic Levelised Solar PV Generation Tariff for the FY-2016-17 and the FY 2017-18. The recovery of fixed charges/ minimum connection charges is as per the standard policies being followed by all Central Generating Centers such as NTPC, NHPC, SJVNL, etc. whose tariff also approved by Central Regulatory Commission.

Commission's View:

The credit for solar power generated under solar net metering arrangement by consumer with the CED is adjusted against the consumption by the consumer. Export net surplus during any financial year is accounted for as per the model net metering agreement.

3. Chapter 3: True-up for the FY 2016-17

3.1. Background

Under the first MYT regime of the JERC, Order on Aggregate Revenue Requirement (ARR) (the FY 2016-17 to the FY 2018-19) and Wheeling & Retail Supply Tariff for the FY 2016-17 was issued by the Commission on 28th April 2016 (hereinafter referred to as the "MYT Order"). The Tariff Order determining the Aggregate Revenue Requirement (ARR) and tariff for the FY 2017-18, True-up for the FY 2015-16 and Annual Performance review (APR) of the FY 2016-17 was issued on 04th May 2017 (hereinafter referred to as the "APR Order").

The True up for the FY 2016-17 has to be carried out in accordance to Regulation 8(2) of the MYT Regulations, 2014, stated as following:

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

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

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

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

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

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

The Commission in this Chapter now carries out the True-up of the FY 2016-17, the first year of the Control Period, in accordance with the principles laid down in the MYT Regulations, 2014.

3.2. Energy Sales

Petitioner's Submission

The Petitioner has submitted the total quantum of energy sales for the FY 2016-17 as 1,591.43 MU as against an approved energy sales quantum of 1,637.33 MU in the APR Order.

Commission's Analysis

Regulation 9.1 of the MYT Regulations 2014 provides:

"The "uncontrollable factors" shall comprise of the following factors which were beyond the control of, and could not be mitigated by the applicant:

(a) *Force Majeure events, such as acts of war, fire, natural calamities, etc.*
(b) *Change in law;*

(c) *Taxes and Duties;*
(d) *Variation in sales; and*
(e) *Variation in the cost of power generation and/or power purchase due to the circumstances specified in these Regulations;"*

The Commission had approved the energy sales of 1,637.33 MU in the APR Order, against which actual energy sales of 1591.43 MU have been submitted by the Petitioner now.

The quantum of energy sales was verified from the audited accounts submitted by the Petitioner and the same were found to be in order.

The table below provides the energy sales approved by the Commission in the APR Order, the Petitioner's submission and quantum of energy sales now Trued-up by the Commission.

Table 4: Energy Sales (MU) Trued-up by the Commission

S. No	Category	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Domestic	748.70	721.70	721.70
2	Commercial	508.05	498.68	498.68
3	Large Industrial supply	124.66	126.74	126.74
4	Medium Industrial supply	122.24	116.08	116.08
5	Small Industrial supply	20.21	19.53	19.53
6	Agriculture	1.43	1.30	1.30
7	Public lighting	21.09	21.83	21.83
8	Bulk supply	85.34	80.60	80.60
9	Temp. Supply	5.61	4.98	4.98
	Total	**1,637.33**	**1,591.43**	**1,591.43**

The Commission approves 1,591.43 MU as sale of energy for the FY 2016-17.

3.3. Open Access Sales and Purchase

Petitioner's Submission

The Petitioner has not made any submissions in this regard.

Commission's Analysis

The Commission notes that sale and purchase through Open Access has not been institutionalized in the UT of Chandigarh till date due to pending government approvals. The Petitioner is thus directed to expedite the approval process and allow Open Access to the stakeholders.

3.4. Inter-State Transmission Loss

Petitioner's submission

The Petitioner has submitted the Inter-State Transmission Loss of 3.73%, as against the approved value of 3.75% in the APR of the FY 2016-17.

Commission's analysis

Based on the power purchased by the Petitioner and the power available to the Petitioner at the state periphery, the Commission finds the Inter-State Transmission Loss as submitted by the Petitioner to be in order.

The following table provides the Inter-State Transmission Loss as approved in the APR Order, the Petitioner's submission and now approved by the Commission.

Table 5: Inter-State Transmission Loss (%)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Inter-State Transmission Loss	3.75%	3.73%	3.73%

The Commission approves the Inter-State Transmission Loss at 3.73% for the FY 2016-17.

3.5. Intra-State Distribution Loss

Petitioner's submission

Intra-State Distribution Loss for the FY 2016-17 has been arrived at 13.65% as compared to 13.25% approved by the Commission in its Order dated 04th May, 2017. The Intra-State Distribution Losses have stagnated in spite of an increase in the overall sales because maximum increase in sales has happened in the domestic category resulting in a higher proportion of the overall sales as compared to industrial consumers where the sales have remained stagnant leading to a reduction in overall share in percentage terms.

Further, the energy input to the UT is metered outside its territory and hence the CED has to bear the additional losses of Inter-State circuit due to not having any Inter-State point at its boundary.

Therefore, the Petitioner submits that the T&D loss target approved for the FY 2016-17 as well as for MYT Control Period is unrealistic and requests the Commission to restate the loss targets.

Commission's analysis

The Commission has considered net energy available for sales to retail consumers by the Petitioner as 1,843.10 MU as per Deviation Settlement Account (DSA) including 2.18 MU procured from Solar sources within the UT. The Commission has further considered actual sales of 1,591.43 MU. Considering the difference in energy available at the periphery of the Petitioner and the sales approved, actual Intra-State Distribution Loss of the FY 2016-17 stands at 13.65%, as shown in the table below:

Table 6: Intra-State Distribution Loss calculation

S. No	Particulars	Trued-up by Commission
1	Energy Sales within the UT	1,591.43
2	Energy Required at State Periphery	1843.10
3	T&D Losses	251.67
4	**T&D Loss (%)**	**13.65%**

The Commission accepts the actual Intra-State Distribution Loss level of 13.65% for the FY 2016-17 based on actual energy sales and the energy available at the periphery. However, the Commission has not considered the Petitioner's request for revising the Intra-State Distribution Loss trajectory and has maintained the same loss trajectory based on the previous Order and used the same for calculation of disincentive on non-achievement of T&D loss target. The Commission is of the view that the Intra-State Distribution Loss in the similar urban distribution companies, like BRPL, BYPL, TPDDL, Tata Power Mumbai, CESC, where majority of the sales is happening in LT level, is lower than the Intra-State Distribution Loss of the CED, hence there is significant potential of Intra-State Distribution Loss reduction in the CED license area.

Since, the Petitioner has not been able to achieve the Intra-State Distribution Loss target for the year, the disincentive for the same has to be borne by the Petitioner in accordance with the MYT Regulations, 2014. The calculation of the same has been discussed in detail in "Section 3.20: Incentive/Disincentive towards over/under-achievement of norms of distribution losses section" of this Order.

The following table provides the Intra-State T&D loss approved in the APR of FY 2016-17, the Petitioner's submission and as approved by the Commission now.

Table 7: Intra-State Distribution Loss approved (%)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Intra-State Distribution Loss	13.25%	13.65%	13.65%

The Commission, while Truing-up for the FY 2016-17 has considered the actual intra state T&D loss of 13.65% for the FY 2016-17 and imposed disincentive on the petitioner in accordance to the MYT regulations, 2014 for under achievement of Intra-State Distribution Loss trajectory for the FY 2016-17 approved by the commission in the APR Order.

3.6. Renewable Purchase Obligation (RPO)

Petitioner's submission

The CED has been able to meet its RPO for the FY 2016-17 (solar and non-solar). Besides the REC purchase, it has also purchased energy from solar plants under gross metering and net metering, details of which are as below:

Table 8: RPO compliance submitted by the Petitioner

Particulars	RPO (%)	Target		Compliance including REC (equivalent MU)
		Sales (MU)	Units (MU)	
Solar	1.65%	446.26	7.36	27.29
Non-Solar	3.20%	446.26	14.28	24.00
Total	**4.85%**	**-**	**21.64**	**51.29**

Table 9: Details of solar RPO compliance submitted by the Petitioner

Particulars	2016-17 (MU)
Power Generated/ Procured	20.95
Power Procured from CREST	2.04
Solar REC Purchase	4.30
Total Solar RPO Met	**27.29**

Commission's analysis

As per Clause 1, Sub-clause (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

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

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and revised the RPO targets, according to which the Petitioner had to purchase 4.85% of its total consumption (excluding hydro) from renewable sources for the FY 2016-17.

The effective energy sales used for calculation of the RPO have been arrived at as follows:

Table 10: Effective energy sales (except hydro) for calculation of RPO

S.No.	Particular	Formula	FY 2016-17
1	Energy Sales within UT	a	1,591.43
2	Hydro Power Purchase FY 2016-17	b	1,145.17
3	Inter-State Loss (%)	c	3.73%

S.No.	Particular	Formula	FY 2016-17
4	Inter-State Loss (MU)	d= c*b	42.72
5	Intra-State Loss (%)	e	13.65%
6	Intra-State Loss (MU)	f=e*(b-d)	150.49
7	Hydro Power Sale (MU)	g=b-d-f	951.97
8	Conventional Power Sale	h= a-g	639.46

For the FY 2016-17, the Petitioner had a standalone target of 31.01 MU quantum of energy comprising of 10.55 MU Solar and 20.46 MU Non Solar. Against the target, the Petitioner has purchased 22.99 MU of solar power. The Petitioner has also purchased REC's equivalent to 4.30 MU of Solar Power and 24.00 MU of Non-Solar power.

Based on the above, the Commission has computed the cumulative RPO compliance at the end of the FY 2016-17 as shown in the following table:

Table 11: Compliance status of Renewable Purchase Obligation (RPO)

S. No	Particulars	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17
1	Solar Target	0.25%	0.30%	0.40%	0.40%	0.60%	0.85%	1.65%
2	Non Solar Target	0.75%	1.70%	2.60%	2.60%	2.70%	2.70%	3.20%
	Total Target	**1.00%**	**2.00%**	**3.00%**	**3.00%**	**3.30%**	**3.55%**	**4.85%**
3	Sales Within UT (MU)	1285.33	1301.48	1376.43	1423.04	1512.54	1491.32	639.46
	RPO Target							
5	Solar (MU)	3.43	3.90	5.51	5.69	9.08	12.68	10.55
6	Non Solar (MU)	9.64	22.13	35.79	37.00	40.84	40.27	20.46
	Total RPO Target (MU)	**13.07**	**26.03**	**41.29**	**42.69**	**49.91**	**52.94**	**31.01**
	RPO Compliance (Actual Purchase)							
7	Solar (MU)	0.00	0.00	0.00	0.00	0.00	3.45	22.99
8	Non Solar (MU)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total RPO Compliance (Actual Purchase in MU)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.45**	**22.99**
	RPO Compliance (REC Certificate Purchase)							
9	Solar (MU)	0.00	0.00	2.36	15.89	8.54	9.60	4.30
10	Non Solar (MU)	0.00	10.75	52.73	42.48	36.60	43.80	24.00
	Total RPO Compliance (REC Certificate)	**0.00**	**10.75**	**55.09**	**58.37**	**45.14**	**53.40**	**28.30**
	RPO Compliance (REC+ Actual)							
11	Solar (MU)	0.00	0.00	2.36	15.89	8.54	13.05	27.29
12	Non Solar (MU)	0.00	10.75	52.73	42.48	36.60	43.80	24.00
	Total RPO Compliance (MU)	**0.00**	**10.75**	**55.09**	**58.37**	**45.14**	**56.85**	**51.29**

S. No	Particulars	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17
	Cumulative Requirement till current year							
13	Solar (MU)	3.43	7.33	12.84	18.53	27.61	40.28	50.83
14	Non Solar (MU)	9.64	31.77	67.55	104.55	145.39	185.66	206.12
	Total (MU)	**13.07**	**39.10**	**80.39**	**123.08**	**173.00**	**225.94**	**256.95**
	Cumulative Compliance till current year							
15	Solar (MU)	0.00	0.00	2.36	18.25	26.79	39.84	67.13
16	Non Solar (MU)	0.00	10.75	63.48	105.96	142.56	186.36	210.36
	Total (MU)	**0.00**	**10.75**	**65.84**	**124.21**	**169.35**	**226.20**	**277.49**
	Net Shortfall in RPO Compliance till current year							
17	Solar (MU)	3.43	7.33	10.48	0.28	0.82	0.44	-16.30
18	Non Solar (MU)	9.64	21.02	4.07	-1.41	2.83	-0.70	-3.54
	Total (MU)	**13.07**	**28.35**	**14.55**	**-1.13**	**3.65**	**-0.26**	**0.00***

*The Commission has not considered the surplus RPO achievements MU while arriving at the cumulative shortfall.

The following table provides the cost towards compliance of RPO approved in the FY 2016-17.

Table 12: Cost towards compliance of Renewable Purchase Obligation (In Rs Cr)

Description	RPO (MU)	Total Cost (Rs Cr)
Solar	**27.29**	**-**
Power purchase		
CREST	*2.04*	*1.38*
Pvt. Solar (Net metering)		
Gross generated	*20.95*	*0.12*
Gross consumed	*20.81*	
REC		
Solar REC	*4.30*	*1.51*
Non-Solar	**24.00**	**-**
Power purchase		
Power purchase	0.00	-
REC		
Non-solar REC	24.00	*3.68*
Total	**51.29**	**6.69**

The Commission approves Rs 6.69 Cr towards compliance of RPO in the True-up of the FY 2016-17.

3.7. Power Purchase Quantum & Cost

Petitioner's submission:

The CED meets its requirement from allocations from central generating stations like NTPC, NHPC, NPCIL and other generating stations such as BBMB, SJVNL, THDC including bilateral agreement and banking arrangements. The allocation from CGS consists of a fixed share of allocation for a year, and the Govt. of India changes the variable share of allocation from the unallocated quota, time to time. Since, during the peak summer seasons the allocation of power from various sources is inadequate, therefore the CED procures power from short–term sources i.e. power exchange, UI, banking etc.

The table below shows the summary of actual Power Purchase from various sources for the FY 2016-17 including Transmission Charges, UI charges and purchase from short term sources i.e. power exchange, UI, etc.

Table 13: Power Purchase quantum and cost submitted by the Petitioner

Source	Quantum (MU)	Total Charges (Rs Cr)
NTPC	435.05	146.04
NHPC	215.11	69.19
NPCIL	116.19	35.18
SJVNL	77.29	23.76
BBMB	649.75	206.31
APCPL	80.92	16.37
THDC	168.03	92.76
Bilateral/Exchange	85.43	10.22
CREST	2.04	1.38
Pvt. Solar	0.13	0.12
UI Overdrawl	151.47	35.66
Others (PGCIL Charges, Reactive Power, NRLDC)	-	29.07
REC Cost	-	5.19
LC Charges	-	-
Total of Charges	**1,981.41**	**671.26**
Revenue from sale	**36.45**	**9.06**
Net total	**1,944.96**	**662.20**

Commission's analysis

The MYT Regulations, 2014 stipulate that any variation in the cost of power generation and/or power purchase shall be treated as an uncontrollable factor. Regulation 9.1 of the MYT Regulations stipulates the following:

"The "uncontrollable factors" shall comprise of the following factors which were beyond the control of, and could not be mitigated by the applicant:

(a) Force Majeure events, such as acts of war, fire, natural calamities, etc.
(b) Change in law;
(c) Taxes and Duties;
(d) Variation in sales; and
(e) Variation in the cost of power generation and/or power purchase due to the circumstances specified in these Regulations;"

The Petitioner procures power mainly from NTPC Stations, Hydro Stations, NPCIL stations, and IPPs. The Petitioner has submitted the overall power purchase cost as Rs 671.26 Cr against a procurement of 1,981.41 MU, inclusive of transmission cost but exclusive of revenue due to sale of surplus power.

The revenue on account of surplus power sale/UI underdrawl has been considered as a revenue item by the Petitioner. In line with the Petitioner's submission, the Commission has considered revenue of Rs 9.06 Cr on account of surplus power sale/UI underdrawl as per the audited accounts of the Petitioner and the same has been subtracted from the power purchase cost to arrive at the net power purchase cost.

The Petitioner has submitted that the total power purchase cost is inclusive of the cost incurred towards compliance of the Renewable Purchase Obligation (RPO) target for the FY 2016-17. The Commission has considered the total cost of Rs 6.69 Cr including Rs 5.19 Cr towards purchase of RECs, in the total power purchase cost approved for FY 2016-17.

The Commission approves power purchase cost of Rs 662.20 Cr (adjusted for sale of surplus power) in the True-up of FY 2016-17.

3.8. Energy Balance

Petitioner's submission

The Petitioner has submitted the energy requirement as shown in the following table.

Table 14: Energy requirement submitted (in MU)

Particulars	Petitioners submission
Units Procured	1,948.99
Less: Outside Sale Trading	36.76
Energy Available	1,912.22
Inter-State Transmission Loss (%)	3.73%
Transmission Loss (MUs)	71.30
Net Energy Available at UT Periphery	1,840.92
Power Available within UT	
Power procured from Gross/NET Metering Mode (MUs)	2.18
Total Energy Available	**1,843.10**
Actual Energy Sales (MUs)	**1,591.43**
T&D Loss (%)	13.65%
T&D Loss (MUs)	251.67
Total Energy required at UT Periphery (MUs)	**1,843.10**

Commission's analysis:

The information submitted by the Petitioner on power purchase quantum, UI over/ under drawl, IEX/ Bilateral purchase has been studied and accordingly the energy balance has been derived for FY 2016-17.

The following table provides the energy balance approved in the APR Order, submitted by the Petitioner and now approved by the Commission.

Table 15: Energy balance approved (in MU)

Particulars	Formula	Approved in ARR Order	Petitioner's Submission	Now Approved
Energy requirement				
Energy sales in the UT	a	1637.33	1591.43	1591.43
Distribution losses (%age)- as per approved trajectory	b	13.25%	13.65%	13.65%
Gross Energy required for the Territory (MU)	c=a/(1-b)	1,887.41	1843.10	1843.10
Solar Power adjusted/Generated within UT	d	4.01	2.18	2.18
Energy Requirement @ Generator End	e=c-d	1883.4	1840.92	1840.92
Gross availability				
Long-Term PPAs/UI/Open market/Bilateral purchase	f	1916.31	1912.22	1912.22
External losses (MU)	g	77.52	71.30	71.30
Deficiency	h=e+g-f	44.61	0.00	0.00

Particulars	Formula	Approved in ARR Order	Petitioner's Submission	Now Approved
Net Power Purchase	**i=f-g+h**	**1883.4**	**1840.92**	**1840.92**

3.9. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). The MYT Regulations, 2014 consider the variation of O&M Expenses to be controllable. Regulation 9.2 of the MYT Regulation, 2014 states the following:

"9.2 Some illustrative variations or expected variations in the performance of the applicant, which may be attributed by the Commission to controllable factors include, but are not limited to the following:

(a)Variations in capital expenditure on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;

(b)Variations in Transmission and Distribution Losses (T&D) losses in case of bundled utilities and Distribution losses in case of unbundled utilities which shall be measured as the difference between the units input into the distribution system and the units supplied and billed;

(c)Depreciation and working capital requirements;

(d)Failure to meet the standards specified in the Joint Electricity Regulatory Commission (Standards of Performance) Regulations, 2009 except where exempted;

(e)Variation in operation & maintenance expenses, except those attributable to directions of the Commission;

(f)Variation in Wires Availability and Supply Availability;

(g)Variation on account of inflation;"

Therefore, any variation in O&M Expenses is attributable to the Petitioner and is not passed on in the ARR, other than any cost which is beyond the control of the Petitioner.

3.9.1. Employee Expenses

Petitioner's submission

Employee expenses of Rs 64.01 Cr have been incurred against approved expenses of Rs 64.65 Cr in the APR Order. The employee expenses comprise of Salaries, Dearness allowance, Bonus, Terminal benefits in the form of Pension and Gratuity, Leave encashment and staff welfare expenses.

Commission's analysis

As per the audited accounts submitted by the Petitioner, the employee expenses during the FY 2016-17 are reflected as Rs 64.01 Cr.

However, in accordance with the MYT Regulations, the Commission has considered the same Employee Expenses as approved in the APR Order for FY 2016-17.

Table 16: Employee Expenses approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Total Employee Expenses	64.65	64.01	64.65

The Commission approves Employee Expenses of Rs 64.65 Cr in the True-up of FY 2016-17.

3.9.2. Administrative and General (A&G) Expenses

Petitioner's submission

Actual A&G expenses of Rs 3.58 Cr have been incurred against the approved expenses of Rs 6.09 Cr in the APR Order.

Commission's analysis

A&G expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, etc. As per the audited accounts submitted by the Petitioner the A&G expenses for FY 2016-17 are reflected as Rs 3.58 Cr.

However, as variation in the O&M expenses is controllable, the Commission approves the same A&G expenses as approved in the APR Order.

Table 17: A&G Expenses approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Administration & General Expenses (A&G)	6.09	3.58	6.09

The Commission approves the Administrative & General (A&G) expenses of Rs 6.09 Cr in the True-up of FY 2016-17.

3.9.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

Actual R&M expenses of Rs 9.45 Cr have been incurred against approved expenses of Rs 11.03 Cr in the APR Order. R&M expenses are incurred towards day to day maintenance of the transmission and distribution network of the CED and form an integral part of the company's efforts towards reliable and quality power supply as also in the reduction of losses in the system.

Commission's analysis

Similar to the approach followed while approving the Employee expenses and A&G expenses above, the Commission approves the same R&M Expenses as approved in the APR Order.

Table 18: R&M Expenses approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Repair & Maintenance Expenses (R&M)	11.03	9.45	11.03

The Commission approves the Repair & Maintenance (R&M) expenses of Rs 11.03 Cr in the True-up of FY 2016-17.

3.9.4. Total Operation and Maintenance Expenses (O&M)

The Commission approves total O&M Expenses of Rs 81.77 Cr against the Petitioner's submission of Rs 77.04 Cr.

Table 19: O&M Expenses approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Employee Expenses	64.65	64.01	64.65
2	Administrative & General Expenses (A&G)	6.09	3.58	6.09
3	Repair & Maintenance Expenses	11.03	9.45	11.03
	Total Operation & Maintenance Expenses	**81.77**	**77.04**	**81.77**

3.10. Gross Fixed Assets (GFA) and Capitalisation

Petitioner's submission

The actual capitalisation achieved during the year is Rs 5.61 Cr against approved capitalisation of Rs 48.13 Cr in the APR Order.

Commission's analysis:

The Commission observes that the capitalisation achieved by the Petitioner is much lower, almost one-tenth, than approved by the Commission in the APR Order. Lower capitalisation signifies that not enough efforts have been undertaken in enhancing the reliability and quality of supply to the consumers. Accordingly, the Commission directs the Petitioner to increase its efforts towards undertaking capital expenditure activities necessary for improving the service quality and targeting 24x7 supply to all consumers.

The Commission examined the Fixed Asset Register (FAR) as submitted by the Petitioner and accordingly approves the capitalisation as shown in the table below:

Table 20: Capitalisation approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Capitalisation	48.13	5.61	5.61

The Commission approves a capitalisation of Rs 5.61 Cr in the True-up of the FY 2016-17.

3.11. Capital Structure

Petitioner's Submission

The entire capital deployment at the CED is through equity for the FY 2016-17.

Commission's analysis

In the Technical Validation Session held on 6th March 2018 at the Commission's office, the Petitioner was directed to submit the details of the assets funded through consumer contribution, if any. However, the Petitioner has not submitted any details against the same. In the absence of any information, no assets have been assumed to be funded from consumer contribution in the True-up of the FY 2016-17. The impact of the same shall be accounted for by the Commission in future Tariff Orders once the Petitioner submits such information.

The MYT Regulations 2014, specify that if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as normative loan. Regulation 24 of the MYT Regulations, states the following:

"

(a) *The Distribution Licensee shall provide detailed loan-wise, project-wise and utilization-wise details of all of the pending loans*

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

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

In accordance with the MYT Regulations, 2014 the Commission has determined the Capital Structure for FY 2016-17 as follows:

Table 21: GFA addition approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Gross Fixed Assets	403.86	403.86	403.86
2	Addition During the FY	48.13	5.61	5.61
3	Adjustment/Retirement During the FY	-	-	-
4	Closing Gross Fixed Assets	451.99	409.47	409.47

Table 22: Normative Loan addition (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	31.91	31.91	31.91
2	Add: Normative Loan During the year	33.69	3.93	3.93
3	Less: Normative Repayment equivalent to Depreciation	15.76	11.63	11.63
4	Closing Normative Loan	49.83	24.21	24.21

Table 23: Normative Equity addition (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	121.16	121.16	121.16
2	Additions on account of new capitalisation	14.44	1.68	1.68
3	Closing Equity	135.60	122.84	122.84

3.12. Depreciation

Petitioner's submission

For computation of depreciation, the opening GFA approved by the Commission in the Tariff Order dated 4th May, 2017 has been considered and actual addition during FY 2016-17 as per the annual accounts has been considered. Further, depreciation for the year has been considered as per the Fixed Asset Register. The value of depreciation on account of Assets prior to 2005 shall be accounted for in the True-up for FY 2017-18 and shall be claimed accordingly.

Commission's analysis

Regulation 23 of the MYT Regulations 2014, states the following:

"

(a) *Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year.*

(b) *Depreciation shall not be allowed on assets funded by capital subsidies, consumer contributions or grants.*

(c) *Depreciation shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation. The same shall be as specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014. (The same may vary as notified by CERC from time to time.)*

(d) *The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset.*
Provided that Land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

(e) *Depreciation shall be charged from the first year of operation of the asset.*
Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis.

(f) *A provision of replacement of assets shall be made in the capital investment plan."*

Since a large amount of the Petitioner's assets have already been fully depreciated, the Commission has not been able to apply the applicable CERC rates on the average assets in place. The Commission sought the details of such assets but the same could not be made available by the Petitioner since the Fixed Asset Register (FAR) of the Petitioner is yet to be updated for the assets created before the year 2005. Therefore, the Commission is constrained to approve the depreciation as per the audited accounts for the True-up of FY 2016-17 as shown in the table below:

Particulars	Opening GFA	Addition	Closing GFA	Average GFA	Rate of depreciation	Depreciation
	a	b	c	d=(a+c)/2	e=f/d	f
Plant & Machinery	394.43	5.10	399.54	396.99	2.83%	11.23
Buildings	6.84	0.35	7.19	7.02	5.39%	0.38
Vehicles	0.71	0.16	0.87	0.79	0.00%	-
Furniture & Fixtures	0.20	-	0.20	0.20	1.20%	0.00
Computers & Others	0.98	-	0.98	0.98	2.00%	0.02
Land	0.69	-	0.69	-	-	-
Total	**403.86**	**5.61**	**409.47**	**405.97**	**2.86%**	**11.63**

The same may be considered for revision once the final FAR is submitted by the Petitioner.

The depreciation amount as submitted by the Petitioner and approved by the Commission in the True-up of FY 2016-17 is shown in the table below:

Table 24: Depreciation approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Depreciation	15.76	11.63	11.63

The Commission approves depreciation of Rs 11.63 Cr in the True-up of FY 2016-17

3.13. Interest on Loan

Petitioner's submission

The Petitioner has submitted the Interest on Loan on normative basis. The opening balance of loans for FY 2016-17 is considered the same as approved by the Commission in the APR Order. The normative loan addition in FY 2016-17 has been computed as 70% of the capitalisation for the FY 2016-17.

The repayment of loans has been considered equal to the depreciation during the FY 2016-17.

Further the rate of interest has been considered as the State Bank of India Prime Lending Rate (SBI PLR) of 14.05% (rate as on 1st April 2016).

Commission's analysis:

Regulation 24 of the MYT Regulations provides:

"

(a) *The Distribution Licensee shall provide detailed loan-wise, project-wise and utilization-wise details of all of the pending loans*

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

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

(c) *Actual loan or normative loan, if any, shall be referred as gross normative loan in this Regulation.*

(d) *The normative loan outstanding as of 1st April of control period shall be computed by deducting the cumulative repayment as approved by the Commission (basis as mentioned below) up to 31st March of current period (a year before control period) from the gross normative loan.*

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

(f) *Notwithstanding any moratorium period availed by the Distribution Licensee, the repayment of the loan shall be considered from the first year of the control period as per annual depreciation allowed.*

(g) *The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the control period, in accordance with terms and conditions of relevant loan agreements, or bonds or non-convertible debentures.*

Provided that if no actual loan is outstanding but normative loan is still outstanding, the last available weighted average rate of interest shall be applicable.

Provided further that the interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

Provided also that exception shall be made for the existing loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects.

(h) *The Distribution Licensee shall make every effort to refinance the loan as long as it results in net benefit to the consumers.*

Provided that the cost associated with such refinancing shall be eligible to be passed through in tariffs and the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Distribution Licensee and the consumers.

Provided further that the Distribution Licensee shall submit the calculation of such benefit to the Commission for its approval. •

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

Hence, the rate of interest to be considered while determining the ARR shall be the weighted average interest rate of the actual loan portfolio. However, the Petitioner in the Technical Validation Session (TVS) has submitted that the complete capitalisation during the year has been funded by the Petitioner's equity and no loan has been taken against any of the capitalised assets.

As per the MYT Regulations 2014, if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as normative loan. Further, the Commission has considered the actual capitalisation of assets as approved in the foregoing paragraphs. The Commission for the purpose of funding of the capitalisation has considered the normative debt equity ratio of 70:30. Repayment has been considered equivalent to depreciation allowed during the year

The Commission for the purpose of calculation of Interest on Loan has considered the interest rate equivalent to SBI PLR @ 14.05%, as on 1st April 2016. Further, in accordance with the MYT Regulations, 2014, the interest has been calculated on the average normative loan during the year with the opening loan considered equivalent to the opening loan approved in the APR of the FY 2016-17. The addition in loan has been considered as explained above and the repayment is considered the same as depreciation during the year.

The following table provides the Interest on Loan approved by the Commission.

Table 25: Interest on Loan approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	31.91	31.91	31.91
2	Add: Normative Loan During the year	33.69	3.93	3.93
3	Less: Normative Repayment= Depreciation	15.76	11.63	11.63
4	Closing Normative Loan	49.83	24.21	24.21
5	Average Normative Loan	40.87	28.06	28.06
6	Rate of Interest (%)	14.05%	14.05%	14.05%
	Interest on Loan	**5.74**	**3.94**	**3.94**

The Commission approves the Interest of Loan of Rs 3.94 Cr in the True-up of the FY 2016-17.

3.14. Return on Equity (RoE)

Petitioner's submission

The RoE is calculated in accordance with the MYT Regulations 2014, and is computed on 30% of the capital base. The equity addition has been considered to the tune of 30% of assets capitalized during the year. Accordingly, the CED has computed the Return on Equity at 16% on post tax basis.

Commission's analysis:

Regulation 27 of the MYT Regulations, 2014 provides:

"

(a) the Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower:

Provided that assets funded by consumer contribution, capital subsidies/grants and corresponding depreciation shall not form part of the capital base. Actual equity infused in the Distribution Licensee as per book value shall be considered as perpetual and shall be used for computation in this Regulation.

(b) The return on the equity invested in working capital shall be allowed from the date of start of commercial operation.

(c) *16% post-tax return on equity shall be considered irrespective of whether the Distribution Licensee has claimed return on equity in the ARR Petition"*

As the complete asset capitalisation during the year has been funded by equity, the Commission, for the purpose of equity addition during the year, has limited it to 30% of the total capitalisation. The RoE has been calculated on the average of the opening and the closing of equity during the year @ 16% post-tax basis with opening equity considered the same as approved in the APR Order. The following table provides the return on equity Trued-up for the FY 2016-17.

Table 26: RoE approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	121.16	121.16	121.16
2	Additions on account of new capitalisation	14.44	1.68	1.68
4	Closing Equity	135.60	122.84	122.84
5	Average Equity	128.38	122.00	122.00
6	Return on Equity (%)	16.00%	16.00%	16.00%
	Return on Equity	**20.54**	**19.52**	**19.52**

The Commission approves a Return on Equity of Rs 19.52 Cr in the True-up of the FY 2016-17.

3.15. Interest on Security Deposits

Petitioner's submission

Payments of Rs 7.21 Cr were released to the consumers towards interest on security deposits during the FY 2016-17 against Rs 10.79 Cr approved by the Commission in the APR Order.

Commission's analysis:

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

"The distribution licensee shall pay interest, at the bank rate notified by the Reserve Bank of India from time to time on such security deposits taken from the consumer. In this regard it shall be the responsibility of the licensee to keep a watch on the bank rate from time to time. The interest amount of previous financial year shall be adjusted in the energy bill issued in May / June of each financial year depending on billing cycle."

The Commission has considered the actual interest on security deposit disbursed to the consumers in their bills, as reflected in the audited accounts of the FY 2016-17 for Truing-up.

The following table provides the interest on security deposit as approved in the APR Order, the Petitioner's submission and the interest now approved by the Commission:

Table 27: Interest on Consumer Security Deposits approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Security Deposit	136.67	136.67	136.67
2	Add: Deposits During the year	5.00	11.60	11.60
3	Less: Deposits refunded	0.00	0.46	0.46
4	Closing Security Deposit	141.67	147.81	147.81
5	Average Security Deposit	139.17	142.24	142.24
	Interest on Security Deposit	**10.79**	**7.21**	**7.21**

The Commission has further noticed that the CAG in its audit report has pointed out that the liability for Advance Consumer Deposit (ACD) is being booked on the basis of assessment instead of actual realization. Hence security deposits are overstated to the extent of ACD assessed but not realized. However, the Commission has considered Interest on consumer deposit as per audited accounts and directs the Petitioner to remove the discrepancy in accounts from the next financial year.

The Commission approves interest on security deposit as Rs 7.21 Cr in the True-up of the FY 2016-17.

3.16. Interest on Working Capital

Petitioner's submission

The interest on working capital has been calculated based on the normative principles outlined in the JERC (Multi Year Distribution Tariff) Regulations, 2014.

The working capital requirement for the Control Period has been computed considering the following parameters:

(a) Receivables of two months of billing

(b) Less power purchase cost of one month

(c) Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit

(d) Inventory for two months based on annual requirement for previous year

The interest on working capital is computed at 9.30% (SBI base rate as on 05th October 2015 as has been shown in the table below:

Table 28: Interest on Working Capital submitted by Petitioner (In Rs Cr)

S. No	Particulars	Petitioner's Submission
1	Receivables of two months of billing	135.81
2	Less: Power Purchase Cost for one month	55.94
3	Inventory Based on Annual Requirement for Previous FY for 2 months	4.08
4	Total Working Capital Requirement	83.95
5	Less: Security Deposit excluding BG/FDR	147.81
6	Net Working Capital	0.00
7	Rate of Interest (%)	9.30%
	Interest on Working Capital	**0.00**

Commission's analysis:

The computation of working capital requirements and the rate of interest to be considered are stipulated in the MYT Regulations, 2014. Regulation 25 of the MYT Regulations states the following:

"Working capital for retail supply activity of the licensee shall consist of:

(i) Receivables of two months of billing

(ii) Less power purchase cost of one month

(iii) Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt

(iv) Inventory for two months based on annual requirement for previous year.

The rate of interest on working capital shall be equal to the base rate for the State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan worked out on the normative figures."

The Commission, for determination of working capital requirements of the Petitioner during the year, has considered the receivables as ARR on pro rata basis for 2 months, the net power purchase cost after adjusting the rebate in power purchase bills, the consumer security deposit and the inventory for two months as per the audited accounts of FY 2016-17.

With regards to the interest rate, the Commission has considered the SBI Base rate as on 1st April 2016, as stipulated in the MYT Regulations 2014.

The Working Capital requirement after deduction of the amount of security deposit is coming to be negative. Hence, the Interest on Working Capital is approved as Nil, as shown in the table below:

Table 29: Interest on Working Capital approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Receivables of two months of billing	124.43	135.81	123.41
2	Less: Power Purchase Cost for one month	53.18	55.94	55.94
3	Inventory Based on Annual Requirement for Previous FY for 2 months	1.86	4.08	4.08
4	Total Working Capital Requirement	73.11	83.95	71.56
5	Less: Security Deposit excluding BG/FDR	141.67	147.81	142.24
6	Net Working Capital	0.00	0.00	0.00
7	Rate of Interest (%)	9.30%	9.30%	9.30%
	Interest on Working Capital	**0.00**	**0.00**	**0.00**

The Commission approves the Interest on Working Capital as Nil in the True-up of the FY 2016-17.

3.17. Income Tax

Petitioner's submission

No submission has been made in this regard.

Commission's analysis:

Regulation 28 of the MYT Regulations, 2014, states the following:

"

(a) *Income Tax, if any, on the Licensed business of the Distribution Licensee shall be treated as expense and shall be recoverable from consumers through tariff. However, tax on any income other than that through its Licensed business shall not be a pass through, and it shall be payable by the Distribution Licensee itself.*

(b) *The income tax actually payable or paid shall be included in the ARR. The actual assessment of income tax should take into account benefits of tax holiday, and the credit for carry forward losses applicable as per the provisions of the Income Tax Act 1961 shall be passed on to the consumers.*

(c) *Tax on income, if any, liable to be paid shall be limited to tax on return on the equity component of capital employed. However any tax liability on incentives due to improved performance shall not be considered."*

As the Regulation above stipulates that the income tax shall be approved as per actuals, the Commission considers the income tax payable for the year as nil.

Table 30: Income Tax approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Income Tax	0.00	0.00	0.00

The Commission approves Income Tax liability as nil for the FY 2016-17.

3.18. Provision for Bad & Doubtful Debts

Petitioner's submission

In view of the outstanding dues of Rs. 19.04 Crores from permanently disconnected consumers, the CED has proposed the provision for bad and doubtful debts on 1% of the receivables for FY 2016-17. Accordingly, the CED has estimated the provision of bad debt as Rs. 8.15 Crores for FY 2016-17.

Commission's analysis:

As per Regulation 29 of the MYT Regulations, 2014:

"Bad and Doubtful Debts shall be limited to 1% of receivables in the True-up, subject to the condition that amount of bad and doubtful debts have actually been written off in the licensee books of accounts."

It is observed that as per the audited accounts, the licensee has not actually written off any bad and doubtful debts for the FY 2016-17.

The Commission therefore has not considered any bad and doubtful debts for the Truing-up of FY 2016-17.

3.19. Non-Tariff Income (NTI)

Petitioner's submission

The actual Non-Tariff Income of Rs 42.65 Cr has been earned in the FY 2016-17. Out of the Rs 42.65 Cr, Rs 11.00 Cr is on account of delayed payment charges. The remaining Rs 31.66 Cr is on account of various other components such as recovery of doubtful dues, miscellaneous receipts etc.

Commission's analysis:

The Commission has authenticated the submission of the Petitioner from the audited accounts and found the same to be correct. The NTI approved in the APR Order, Petitioner's submission and now approved by the Commission is shown in the table below:

Table 31: Non- Tariff Income approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	**Non-tariff income**	**23.02**	**42.66**	**42.66**

The Commission approves Non-Tariff Income of Rs 42.66 Cr in the True-up of the FY 2016-17.

3.20. Incentive/Disincentive towards over/under achievement of norms of distribution losses

Petitioner's submission:

No submission has been made in this regard.

Commission's analysis:

In the APR for FY 2016-17, the Commission had approved the T&D loss level of 13.25% in the APR Order. The Petitioner has achieved T&D loss of 13.65% against the approved loss of 13.25%. The Commission, in accordance with Regulation 10 of the JERC MYT Regulations, 2014 (reproduced below) has determined the disincentive towards the under-achievement of the target of Intra-State distribution loss for the FY 2016-17 as follows:

As per Regulation 10 of the MYT Regulations 2014,
"10.1 The licensee shall pass on to the consumers, the 70% of the gain arising from over achievement of the norms laid down by the Commission in these Regulations or targets set by the Commission from time to time and retaining balance 30% with themselves.
10.2 The approved aggregate gain or loss to the Distribution Licensee on account of uncontrollable factors shall be passed through, as an adjustment in the tariff of the Distribution Licensee, as specified in these Regulations and as may be determined in the Order of the Commission passed under these Regulations"

The dis-incentive has been considered at Rs 3.64/kWh, which is the average Power Purchase cost (APPC) of the Petitioner. The APPC has been derived at State/UT Periphery based on the Power Purchase cost approved in the True-up and the Energy at the State/UT Periphery has been computed after grossing up the retail energy sales (1591.43 MU) with the approved Intra-State T&D Loss (13.65%).

The assessment of disincentive for higher T&D losses is shown in the following table:

Table 32: Disincentive due to under-achievement of Intra-State Distribution Loss (In Rs Cr)

S. No	Particulars	Petitioner's Submission	Trued-up by Commission
1	Retail Sales	1,591.43	1,591.43
2	T&D Loss (%)	13.65%	13.25%*
3	Power Purchase at State/UT Periphery	1,843.10	1,834.50
4	Gain/(Loss) (MU)		(8.60)
5	Average Power Purchase Cost (APPC)		3.64
6	Gain/ (Loss) (Rs Cr)		(3.13)

*As approved in the APR Order of FY 2016-17, used for calculation of gain/(loss)

The Commission determines and approves Rs 3.13 Cr as disincentive for under-achieving the Intra-State Distribution Loss target for the FY 2016-17.

3.21. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the net aggregate revenue requirement of Rs 747.03 Cr are submitted for approval in the True-up of the FY 2016-17.

Commission's analysis

The Commission on the basis of the detailed analysis of the cost parameters of the ARR has considered and approved the revenue requirement in the True-up of the FY 2016-17 as given in the following table:

Table 33: Aggregate Revenue Requirement approved by Commission for the FY 2016-17 (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Power Purchase Cost	638.15	671.26	671.26
2	Less: revenue from sale of surplus power	3.15	9.06	9.06
3	Net Power Purchase Cost	635.00	662.20	662.20
4	Operation & Maintenance Expenses	81.77	77.04	81.77
5	Depreciation	15.76	11.63	11.63
6	Interest and Finance charges	5.74	3.94	3.94
7	Interest on Working Capital	0.00	0.00	0.00
8	Interest on Security Deposit	10.79	7.21	7.21
9	Return on Equity	20.54	19.52	19.52
10	Provision for Bad Debt	0.00	8.15	0.00
11	Income Tax	0.00	0.00	0.00
12	Incentive/ (Disincentive)on achievement of norms	0.00	0.00	(3.13)
13	**Total Revenue Requirement**	**769.60**	**789.69**	**783.14**
14	Less: Non-Tariff Income	23.02	42.66	42.66
15	**Net Revenue Requirement**	**746.59**	**747.03**	**740.48**

The Commission approves net Aggregate Revenue Requirement of Rs 740.48 Cr in the True-up of the FY 2016-17.

3.22. Revenue at existing Retail Tariff

Petitioner's submission

The actual revenue from retail sale for the FY 2016-17 is Rs 814.85 Cr (excluding FPPCA of Rs 121.23 Cr) as against Rs 838.76 Cr approved by the Commission in the APR Order. The detailed reconciled statement of revenue from the sale of power at existing tariff with reference to the final actual figures of income & expenditure as per the audited accounts of the FY 2016-17 has also been submitted.

Commission's analysis

The Commission has analysed the sales and revenue figures for each consumer category and checked the revenue from audited accounts. The consumer category-wise revenue as submitted by the Petitioner and approved by the Commission is shown in the following table:

Table 34: Revenue at existing tariff approved by Commission for the FY 2016-17 (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Domestic	300.64	288.92	288.92
2	Commercial	304.05	302.86	302.86
3	Large Industrial supply	79.15	79.19	79.19
4	Medium Industrial supply	74.28	68.11	68.11
5	Small Industrial Supply	11.18	10.54	10.54
6	Agriculture	0.41	0.41	0.41
7	Public lighting	12.06	12.30	12.30
8	Bulk supply	52.45	47.18	47.18
9	Temp. Supply	4.54	5.35	5.35
10	**Sub-total**	**838.76**	**814.85**	**814.85**
11	FPPCA	87.27	121.23	121.23
12	**Grand total**	**926.03**	**936.08**	**936.08**

The Commission approves the revenue from sale of power as Rs 936.08 Cr (including FPPCA charges) in the True-up of the FY 2016-17.

3.23. Standalone Revenue Gap/ Surplus

Petitioner's submission

Based on the ARR and the revenue from retail tariff, the standalone revenue surplus of Rs 189.05 Cr is arrived at in the True-up of the FY 2016-17

Commission analysis

The Commission based on the approved ARR and retail tariff has arrived at the Revenue Gap/Surplus as follows:

Table 35: Standalone Revenue Gap/ Surplus for the FY 2016-17 (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Net Revenue Requirement	746.59	747.03	740.48
2	Revenue from Retail Sales at Existing Tariff	838.76	814.85	814.85
3	FPPCA	87.27	121.23	121.23
4	**Net Gap/(Surplus)**	**(179.44)**	**(189.05)**	**(195.60)**

The Commission, in the True-up of the FY 2016-17 approves a standalone surplus of Rs 195.60 Cr This standalone surplus has been carried over in the subsequent years and has been dealt with while determining the tariff for the FY 2018-19.

4. Chapter 4: Annual Performance Review for the FY 2017-18

4.1. Background

The Tariff Order for the FY 2017-18 was issued by the Commission on 04th May 2017 approving the Aggregate Revenue Requirement (ARR) and tariff for the FY 2017-18. This Chapter covers the Annual Performance Review (APR) for the FY 2017-18 vis-à-vis the cost parameters approved by the Commission in the Order for the FY 2017-18. The Annual Performance Review for the FY 2017-18 is to be carried out as per the following provisions of Regulation 8 of the JERC for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014:

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

……(3) The revenue gap/surplus, if any, of the ensuing year shall be adjusted as a result of review and truing up exercises.

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

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

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

4.2. Approach for the Review for the FY 2017-18

The review of the Aggregate Revenue Requirement requires assessment of the quantum of energy sales, energy loss as well as the various cost elements like Power Purchase Cost, O&M expenses, interest on long term loans, interest on working capital loans, depreciation etc. The Annual Performance Review for the FY 2017-18 has been done based on actual Power Purchase Quantum and Cost of the first 9 months of the FY 2017-18, actual Energy Sales for the first 6 months, etc. depending on which the estimates for the remaining months of the financial year have been made. The various cost elements constituting the Aggregate Revenue Requirement have been approved based on the actual information submitted by the Petitioner, the MYT Regulations, 2014 and on the basis of the norms approved in the MYT Order dated 28th April 2016.

4.3. Energy Sales

Petitioner's Submission

The sales for the FY 2017-18 have been estimated based on the CAGR of the actual sales approved by the Commission for the FY 2010-11 to FY 2015-16. The CAGR for the past five/three/two/one-year growth has been applied appropriately on the actual sales for the FY 2016-17 to arrive at the estimated sales for the FY 2017-18. A total sales of 1,651.72 MU has been estimated against the 1,715.93 MU as approved by the Commission in the ARR Order for FY 2017-18.

Commission's Analysis

In order to determine the revised estimates for the sales of the FY 2017-18 the Commission had sought the monthly sales details for the FY 2015-16, FY 2016-17 and FY 2017-18 (till December). However, in spite of repeated reminders, the Petitioner has failed to submit these details. So the Commission is constrained to apply suitable assumptions for the same.

For revising the estimates of sales for FY 2017-18, the Commission relied upon the category wise actual sales as submitted by the Petitioner for first six months (H1) of the FY 2017-18. The Commission has estimated the category wise sales for entire FY 2017-18 based on the ratio of category wise full year sales for FY 2016-17 and category wise sales in the first six month (H1) of FY 2016-17 and multiplying the same with actual category wise sales for first six month of FY 2017-18 (H1).

The table below provides the energy sales approved by the Commission in the ARR Order, the Petitioner's submission and now approved by the Commission.

Table 36: Energy Sales (MU) approved by the Commission for the FY 2017-18

S. No.	Category	Approved in ARR Order	Petitioner's Submission		Now Approved
			Apr-Sep (Actual)	Apr-Mar (RE)	
1	Domestic	792.03	408.17	757.18	734.58
2	Commercial	534.67	265.87	514.07	489.41
3	Large Industrial supply	125.40	63.42	130.72	123.21
4	Medium Industrial supply	127.75	61.11	121.31	117.57
5	Small Industrial Supply	20.21	10.70	19.53	20.30
6	Agriculture	1.49	0.93	1.33	1.59
7	Public lighting	22.47	9.08	22.01	20.29
8	Bulk supply	86.30	48.11	80.60	79.89
9	Temp. Supply	5.61	2.49	4.98	4.64
	Gross Total	**1,715.93**	**869.89**	**1,651.72**	**1,591.48**

The Commission approves energy sales of 1,591.48 MU in the APR of the FY 2017-18.

4.4. Inter-State Transmission Loss

Petitioner's submission

The Inter-State Transmission Loss of 4.05%, as approved by the Commission in the ARR Order has been considered.

Commission's analysis

The Commission in its ARR Order dated 04th May 2017 had considered the recent 52-week moving average of regional losses and approved 4.05% as the inter-state transmission loss for the FY 2017-18.

Since the recent 52 weeks moving average of regional losses is 4.21% (13th March 2017 to 13th March 2018), the Commission now considers the figures of regional pool losses of 4.21% as the inter-state loss and approves the same for Review of the ARR of the FY 2017-18 which would be revised based on actuals during the True-up exercise.

The following table provides the Inter-State Transmission Loss submitted and now approved by the Commission.

Table 37: Inter-State Transmission Loss (%)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved
1	Inter-State Transmission Losses	4.05%	4.05%	4.21%

The Commission approves Inter-State Transmission Loss of 4.21% for the APR of the FY 2017-18.

4.5. Intra-State Distribution Loss

Petitioner's submission

While the sales have increased in the last three years, losses have remained stagnant without much improvement as majority of the increase in the sales has happened in the LT category. Various technical and technological improvements proposed under IPDS and other schemes shall be useful in bringing about the desired reduction in loss levels. Since these schemes are currently under implementation, the CED requests the Hon'ble Commission to revise the T&D loss level for the FY 2017-18 to 13.50% based on the actual T&D loss for the FY 2016-17. Besides the energy input to the UT is metered outside its territory and hence CED has to bear the additional losses of the interstate circuit due to not having any interstate point in its boundary. In view of the above, it is submitted that the Hon'ble Commission may kindly consider & revise the loss target to a level which is achievable under the circumstances detailed above.

Commission's analysis

In the ARR Order dated 04th May 2017 the Commission had maintained the loss levels as approved in the MYT Order dated 28th April 2016.

Since the Commission has not restated the T&D loss trajectory based on lower losses in the FY 2014-15 (now attributed to wrong submission of sales in FY 2014-15) in the MYT order itself, the Commission finds no merit in restating the loss trajectory at this stage. Hence, for the FY 2017-18 the Commission retains the loss level of 12.75% as approved in the MYT Order dated 28th April, 2016.

Further, during the Public Hearing several stakeholders have complained about the rampant spread of 'kundi connections' in Chandigarh. The Petitioner has also not submitted the Energy Audit report in spite of repeated directions of the Commission. The Commission notes that contrary to the Petitioner's submission, there is considerable scope for improvement with regard to reduction of T&D losses.

The table below provides the Intra-State Distribution Loss approved in the ARR Order, the Petitioners submission and now approved by the Commission.

Table 38: Intra-State Distribution Loss (%)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved
1	Intra-State Distribution Loss	12.75%	13.50%	12.75%

The Commission approves Intra-State Distribution Loss of 12.75% for the APR of the FY 2017-18.

4.6. Power Purchase Quantum & Cost

Petitioner's submission:

The CED procures power from various sources such as:

- Central Generating Stations (CGS) such as NTPC, NHPC and NPCIL
- Other Generating Stations such as SJVNL, BBMB, THDC and APCPL

- Other Sources such as bilateral agreement, banking arrangement, power exchange, UI etc.

The CED has allocation from Northern as well as Western regions from coal, gas, nuclear and hydro power stations. However, for meeting the supply-demand gap during the peak hours, the CED relies on energy exchange and over-drawl from the grid.

For projecting the energy availability for the FY 2017-18, six months actual power purchase has been considered. For projecting the remaining six months of power purchase for the FY 2017-18, firm and infirm allocation from various generating stations has been considered as per the allocation specified in the notification number NRPC/OPR/103/02/2017/12011-12036 dated 25.10.2017 of the Northern Regional Power Committee.

The revised estimated power purchase cost for FY 2017-18 is presented in the following:

Table 39: Power Purchase quantum (MU) and cost (In Rs Cr) submitted by the Petitioner

Source	Units Purchased	Total Charges
NTPC	416.76	145.02
NHPC	262.61	75.29
NPCIL	140.43	44.03
SJVNL	98.88	20.27
BBMB	649.87	193.00
APCPL	39.18	17.95
THDC	172.40	57.48
Bilateral/Exchange	203.70	74.34
CREST	2.55	2.40
Pvt. Solar	0.52	0.45
PGCIL Charges	-	48.01
NRLDC Charges	-	0.17
Reactive Energy	-	0.10
REC Cost	-	3.35
Short Term Purchase	-	-
Grand Total of Charges	**1986.89**	**681.86**

- The fixed cost for each plant is computed based upon the % allocation of the plant capacity to the CED and corresponding annual fixed charges approved for the generating stations as per their recent Tariff Orders for the control period (FY 2014-19) approved by CERC. For generating plants where Tariff Orders are still pending, fixed charges from the first six months of the FY 2017-18 have been considered.
- The variable charges for the thermal and nuclear power plants have been considered based on the actual variable charges during the first six months of the FY 2017-18.
- In case of BBMB the average rate of power as per the recent invoices has been considered for the purpose of projections.
- The generation units available from thermal and nuclear plants are computed considering the average PLF of the plants in the past three years. For hydel plants, the design energy or actual generation in the past three years has been considered as the basis for projections.
- The deficit in energy is proposed to be met through short term power.
- PGCIL, NRLDC and reactive energy charges are computed based upon the half yearly figures available and have been pro-rated for the balance period.
- The CED has had to return power of 47.50 MU to the JKPDD under the banking arrangement during H2 of the FY 2017-18

Commission's Analysis:

The Commission has estimated the power purchase quantum by considering actuals submitted by the Petitioner till December 2017 and the Regional Energy Account scheduled quantum for January and February 2018.

The actual costs incurred by the Petitioner until December 2017 have been considered for estimating power purchase costs. For the remaining three months of power purchase for the FY 2017-18, firm and infirm allocation from various generating stations has been considered. The source wise methodology followed for the projection of the quantum and the cost of power procurement has been detailed as follows:

4.6.1. Availability of power

- Power purchase quantum in March 2018 for all plants of NTPC, NHPC, SJVNL, BBMB, and THDC has been based on the average of quantum purchased in FY 2014-15, FY 2015-16 and FY 2016-17.
- The power purchase quantum in March 2018 from APCPL has been estimated as the average of 11 months of the FY 2017-18 due to abnormal purchases in the previous years.
- A net return of 0.77 MU of power to the JKPDD under the bilateral agreement has been considered as per the bills submitted by the Petitioner.

Availability from NPCIL plants:

- There is a steady purchase of energy from Narora atomic plant and Rajasthan atomic plant. The energy projected to be scheduled in March 2018 has been estimated based on the 3 years average of quantum of energy scheduled in the FY 2014-15, the FY 2015-16 and the FY 2016-17.

Availability of power from the Open Market

- As discussed in the subsequent section while determining the energy balance, there is a power deficit for the FY 2017-18. The Commission has assumed that the deficit power is procured from the Open Market.

4.6.2. Power Purchase Cost

Variable Charges:

The total variable costs have been arrived at considering the actual variable cost for the first nine months as submitted by the Petitioner and projection of station wise variable charges for the remaining three months considering station wise average per unit variable cost (as per bills of October 2017 to December 2017) and station wise energy considered for January – March 2018.

For procurement of power from the Open Market, the Average Round the Clock (RTC) rate for the calendar year 2017 has been considered.

Fixed Charges:

- Actual Fixed Costs have been considered for the first nine months for all stations
- Fixed costs have been determined based on the Tariff Orders issued by the CERC for the respective Central Generating Stations for the remaining three months
- For Unchahar-IV, Koldam, Sewa-II, Chamera-III, Parbati-III, Nathpa Jhakri, Rampur and Koteshwar since the latest Tariff Order has not been issued, fixed cost as per power purchase bills has been considered.
- Fixed cost has been apportioned as per the CED's share in each station and average of the annual plant availability factor achieved during the last five years. The plant availability factor has been limited to 85% for plants having higher availability.
- For hydro plants the fixed costs for January-March 2018 have been apportioned to the corresponding realization of fixed costs for January to March in FY 2016-17 with respect to the overall fixed cost charges.

Other Charges:

- Actual charges have been considered for the first nine months of the FY 2017-18 and no other charges have been considered for the remaining three months of the FY 2017-18.

4.6.3. Transmission Charges

The Commission has estimated the transmission charges payable to PGCIL based on the total capacity allocation of the transmission network of the Petitioner.

For this purpose, the latest quarterly Point of Connection (PoC) rates approved by the Central Electricity Regulatory Commission (CERC) in accordance with Regulation 17(2) of the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 have been considered.

4.6.4. Total power purchase quantum and cost

The following table provides the quantum of energy availability and the power purchase cost approved by the Commission for the FY 2017-18:

Table 40: Power Purchase Quantum (MU) and cost (Rs Cr) approved by the Commission

Source	Units Purchased (MU)	Fixed Charges (Rs Cr)	Variable Charges (Rs Cr)	Other Charges (Rs Cr)	Rebate (Rs Cr)	Total charges (Rs Cr)	Per Unit Cost (Rs/kWh)
NTPC Stations							
Singrauli	25.31	1.53	3.47	0.15	0.00	5.14	2.03
Rihand-I	82.24	6.70	10.47	0.10	0.00	17.27	2.10
Rihand-II	67.00	5.89	8.64	-0.12	0.00	14.42	2.15
Rihand-III	53.76	7.80	6.94	0.35	0.00	15.09	2.81
Unchahar-I	14.72	1.61	4.12	1.43	0.00	7.16	4.86
Unchahar-II	22.44	2.76	6.06	0.80	0.00	9.61	4.28
Unchahar-III	10.91	1.32	3.04	0.35	0.00	4.71	4.32
Unchahar-IV	4.43	0.55	0.66	0.39	0.00	1.61	3.63
Anta	4.66	5.14	2.51	1.41	0.00	9.05	19.45
Auriya	12.07	5.09	1.61	4.09	0.00	10.78	8.93
Dadri GP	21.14	4.57	7.41	-0.06	0.00	11.92	5.64
Kahalgaon-II	23.16	2.60	5.17	-0.01	0.00	7.76	3.35
Dadri-II	20.57	2.62	3.19	1.36	0.00	7.17	3.48
Koldam- Hydro	27.92	11.49	8.16	-1.78	0.00	17.87	6.40
Subtotal – NTPC	**390.33**	**59.66**	**71.45**	**8.46**	**0.00**	**139.57**	**3.58**
NHPC							
Salal	8.70	0.64	0.51	1.04	0.00	2.20	2.52
Tanakpur	3.91	1.06	0.61	0.06	0.00	1.74	4.45
Chamera-I	92.34	9.20	8.93	1.07	0.00	19.19	2.08
Chamera-II	29.81	3.85	2.96	0.13	0.00	6.94	2.33
Uri	14.97	1.56	1.36	1.04	0.00	3.96	2.65
Dhauliganga	21.17	3.79	3.20	1.06	0.00	8.06	3.81
Dulhasti	36.93	7.21	9.40	2.41	0.00	19.02	5.15
Sewa II	9.94	2.72	2.14	0.20	0.00	5.06	5.09
URI II	17.20	5.13	4.16	1.80	0.00	11.08	6.44
Chamara III	17.99	4.48	3.82	0.21	0.00	8.51	4.73
Parbati-III	12.57	2.71	3.44	0.00	0.00	6.15	4.89
Subtotal- NHPC	**265.55**	**42.33**	**40.55**	**9.03**	**0.00**	**91.91**	**3.46**
NPCIL							
NAPS	73.47	0.00	17.49	1.15	0.00	18.64	2.54
RAPP (Unit 3 & 4)-B	20.07	0.00	5.52	0.22	0.00	5.74	2.86
RAPP (Unit 5 & 6)-C	72.21	0.00	24.67	0.63	0.00	25.29	3.50

Source	Units Purchased (MU)	Fixed Charges (Rs Cr)	Variable Charges (Rs Cr)	Other Charges (Rs Cr)	Rebate (Rs Cr)	Total charges (Rs Cr)	Per Unit Cost (Rs/kWh)
Subtotal- NPCIL	**165.75**	**0.00**	**47.67**	**1.99**	**0.00**	**49.67**	**3.00**
SJVNL							
Nathpa Jhakri	91.20	11.36	11.05	-0.69	0.00	21.72	2.09
Rampur	13.63	2.55	2.20	-0.08	0.00	4.68	3.43
Subtotal- SJVNL	**104.84**	**13.92**	**13.25**	**-0.77**	**0.00**	**26.40**	**2.27**
BBMB							
BBMB 3.5%	561.27	0.00	44.26	8.38	0.00	52.64	0.94
BBMB 1 LU- Dehar	83.08	0.00	16.05	-0.27	0.00	15.78	1.90
BBMB 10 LU- Pong	22.55	0.00	133.85	3.63	0.00	137.47	60.98
Subtotal- BBMB	**666.90**	**0.00**	**194.15**	**11.74**	**0.00**	**205.89**	**3.09**
APCPL							
Jajjar	55.24	9.96	16.72	-0.54	0.00	26.14	4.73
Subtotal- APCPL	**55.24**	**9.96**	**16.72**	**-0.54**	**0.00**	**26.14**	**4.73**
THDC							
Koteshwar	25.89	8.46	6.15	-0.37	0.00	14.24	5.50
Tehri	148.30	44.21	39.28	-12.66	0.00	70.82	4.78
Subtotal- THDC	**174.19**	**52.67**	**45.43**	**-13.04**	**0.00**	**85.06**	**4.88**
Power purchase from Other Sources							
Crest	3.31	0.00	2.75	0.00	0.00	2.75	8.31
Pvt.solar	0.74	0.00	0.66	-0.01	0.00	0.65	8.70
Solar REC	0.00	0.00	0.00	0.00	0.00	0.00	1.50
Non Solar	0.00	0.00	0.00	0.00	0.00	0.00	-
Non- Solar REC	0.00	0.00	3.55	0.00	0.00	3.55	1.50
Bilateral J&K	(0.77)	0.00	0.00	0.00	0.00	0.00	-
UI	24.73	6.86	0.00	0.00	0.00	6.86	-
Power purchase from Indian E. Exchange	107.32	0.00	12.92	0.00	0.00	12.92	-
Sale to Indian E. Exchange	-57.36	-	-	-	-	-	-
Subtotal- Other	**77.97**	**6.86**	**19.88**	**-0.01**	**0.00**	**26.73**	**-**
Gross Power Purchase	**1,900.78**	**185.40**	**449.11**	**16.86**	**0.00**	**651.36**	**3.49**
PGCIL CHARGES	-	46.68	-	-	-	46.68	
Other Transmission Charges	-	4.44	-	-	-	4.44	
Grand Total of Charges – Net	**1,900.78**	**236.52**	**449.11**	**16.86**	**0.00**	**702.48**	**3.77**

The Commission approves the revised quantum of power purchase as 1,900.78 MU at the State/ UT Periphery with total cost of Rs 702.48 Cr in the APR for the FY 2017-18.

4.7. Renewable Purchase Obligations (RPOs)

Petitioner's submission:

The CED is required to procure power from renewable sources for meeting the RPO. The CED has complied with the RPO, both solar & non-solar, till the FY 2016-17. The status of cumulative RPO compliance till the FY 2016-17 is provided in the table below. It can be observed from the table that there is a surplus RPO compliance and the same is proposed to be carried forward to the FY 2017-18.

Table 41: RPO compliance status submitted by Petitioner

FY	JERC Trajectory (in %)			Power Sales (in MU)	RPO (in MU)		Compliance (in MU)			
	Solar	Non-Solar	Total		Solar	Non-Solar	Solar Physical	Solar REC	Non-Solar Physical	Non-Solar REC
2010-11	0.25	0.75	1	1,285.33	3.21	9.64				
2011-12	0.3	1.7	2	1,301.48	3.9	22.13		2.36		10.75
2012-13	0.4	2.6	3	1,376.43	5.51	35.79		2.36		52.7
2013-14	0.4	2.6	3	1,423.04	5.69	37		15.89		42.48
2014-15	0.6	2.7	3.3	1,512.54	9.08	40.84		8.54		36.6
2015-16	0.85	2.7	3.55	1,491.32	12.68	40.27	0.41	9.6		43.8
2016-17	1.65	3.2	4.85	446.26	7.36	14.28	22.99	4.3		24
Total compliance till the FY 2016-17					47.73	199.94	23.4	43.05	-	210.33

Commission's analysis:

As per Clause 1, Sub-clause (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

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

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and approved the revised RPO targets, as per which the Petitioner has to purchase 6.70% of its total consumption through conventional sources (including 2.50% from Solar) from renewable sources for the FY 2017-18.

The effective energy sales used for calculation of the RPO has been arrived at as follows:

Table 42: Effective energy sales (adjusted for hydro) (in MU)

S.No.	Particular	Formula	FY 2017-18
1	Energy Sales within UT	a	1,591.48
2	Hydro Power Purchase FY 2017-18	b	1,239.41
3	Inter-State Loss (%)	c	4.21%
4	Inter-State Loss (MU)	d= c*b	52.18
5	Intra-State Loss (%)	e	12.75%
6	Intra-State Loss (MU)	f=e*(b-d)	151.37
7	Hydro Power Consumed (MU)	g=b-d-f	1,035.86
8	Conventional Power consumed	h= a-g	555.62

The Petitioner has also submitted that it plans to fulfill the RPO target for FY 2017-18 by 31st March 2018. Hence, in accordance with the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010 and the Petitioner's submission, the Commission has determined the following Renewable Purchase Obligation for the Petitioner for the FY 2017-18. The Petitioner has no backlog till FY 2016-17.

Table 43: Summary of Renewable Purchase Obligation (RPO) (MU)

Description	FY 2017-18
Sales within State (MU)	555.62
RPO obligation (in %)	**6.70%**
Solar	2.50%
Non-solar	4.20%
RPO obligation for the year (in MU)	**37.23**
Solar	13.89
Non-solar	23.34
Backlog upto FY 2016-17	**0.00**
Solar	0.00
Non Solar	0.00
Total RPO to be fulfilled for the year	**37.23**
Solar	13.89
Non Solar	23.34
RPO compliance (proposed actual purchase)	**17.48**
- Solar (Crest power+Gross generated)	17.48
Crest power	*3.31*
Pvt. Solar (Gross Generated)	*14.17*
Pvt. Solar (Gross Consumed)	*13.43*
-Non-solar	0.00
RPO compliance (REC certificate purchase)	**23.34**
- Solar	0.00
-Non-solar	23.34

The Commission has assumed the rate of purchase for Solar and Non-Solar REC as Rs 1.50/kWh (IEX Average Clearing Price Rate).

The Commission has computed the cost towards compliance of RPO as shown in the following table. The cost has already been considered in the total power purchase cost approved by the Commission in the previous section:

Table 44: Cost towards compliance of Renewable Purchase Obligation through REC (In Rs Cr)

Description	RPO (MU)	Total Cost (Rs Cr)	Avg. Rate (Rs/kWh)
Solar	-	-	-
Non-solar	23.34	3.55	1.50
Total	**23.34**	**3.55**	**1.50**

The Commission has approved a cost Rs 3.55 Cr towards RPO Compliance in the APR of FY 2017-18.

4.8. Energy Requirement at State/UT Periphery

Petitioner's submission

The energy requirement of the CED is as shown in the following table:

Table 45: Energy Requirement of the System (MU)

Particulars	Petitioners submission
Units Procured	1,986.89
Inter-State Transmission Loss (%)	4.05%
Transmission Loss (MUs)	80.47
Net Energy Available at UT Periphery	1,906.42
Power Available within UT	
Power procured from Gross/NET Metering Mode (MUs)	3.08
Total Energy Available	**1,909.50**
Actual Energy Sales (MUs)	**1,651.72**
T&D Loss (%)	13.50%
T&D Loss (MUs)	257.78
Total Energy required at UT Periphery (MUs)	**1,909.50**

Commission's analysis

Based on the revised estimates of energy sales and power purchase quantum, the Commission approves the following energy balance:

Table 46: Energy Balance approved (MU)

Particulars	Formula	Approved in ARR Order	Petitioner's Submission	Now Approved
Energy requirement for Discom				
Energy sales of Discom	a	1715.93	1651.72	1591.48
Less: Energy Savings	b	0	0.00	0.00
Total Sales within the State/UT	c=a-b	1715.93	1651.72	1591.48
Distribution losses				
%	d	12.75%	13.50%	12.75%
MU	e=f-e	250.75	257.78	232.57
Energy required at State Periphery for Discom sales	f=c/(1-d)	**1966.68**	**1909.50**	**1824.05**
Energy Transactions at Periphery				
Add: Sales in Unscheduled Interchange	g	0.00	0.00	28.86
Less: Purchase under UI (MU)	h	0.00	0.00	53.59
Add: Sales in Power Exchanges	i	0.00	0.00	57.36
Less: Purchase from Open Market	j	0.00	203.70	70.81
Add: Bilateral Transfer to J&K	k	0.00	0.00	0.77

Particulars	Formula	Approved in ARR Order	Petitioner's Submission	Now Approved
Total energy scheduled at State Periphery from Tied-up Sources (MU)	l=f+g-h+i-j-k	**2041.47**	**1783.21**	**1786.63**
Energy Available at state periphery from firm sources	m	1848.94	1780.13	1746.06
Own Generation	n	18.22	3.08	4.05
Deficit/(Surplus)	**o=l-m-n**	**174.31**	**0.00**	**36.51**

The Commission approves the Total Energy Requirement at the State/UT Periphery as 1,824.05 MU in the APR for the FY 2017-18. In the ARR Order for the FY 2017-18, the Commission had estimated a deficit of 174.31 MU. However, now in the APR for the FY 2017-18, the Commission has estimated a deficit of 36.51 MU and has assumed that the deficit power is procured through Open Market.

4.9. Operation & Maintenance Expenses

The Operation & Maintenance Expenses basically comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). The MYT Regulations, 2014 recognise the variation of O&M Expenses to be controllable. Regulation 9.2 of the MYT Regulation, 2014 states the following:

"9.2 Some illustrative variations or expected variations in the performance of the applicant, which may be attributed by the Commission to controllable factors include, but are not limited to the following:

(a)Variations in capital expenditure on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;

(b)Variations in Transmission and Distribution Losses (T&D) losses in case of bundled utilities and Distribution losses in case of unbundled utilities which shall be measured as the difference between the units input into the distribution system and the units supplied and billed;

(c)Depreciation and working capital requirements;

(d)Failure to meet the standards specified in the Joint Electricity Regulatory Commission (Standards of Performance) Regulations, 2009 except where exempted;

(e)Variation in operation & maintenance expenses, except those attributable to directions of the Commission;

(f)Variation in Wires Availability and Supply Availability;

(g)Variation on account of inflation;"

4.9.1. Employee Expenses

Petitioner's submission

Based on the actual employee expenses incurred in the first 6 months of the FY 2017-18, the revised estimate for employee expenses of the FY 2017-18 has been submitted as Rs 69.68 Cr against Rs 66.82 Cr as approved by the Commission in the ARR Order.

Commission's analysis

According to the regulations, the Commission doesn't allow any deviation in the employee expenses approved and considers the same Employee Expenses as approved in the ARR Order for FY 2017-18.

Table 47: Employee Expenses approved by Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	66.82	69.68	66.82

The Commission approves employee expenses of Rs 66.82 Cr in the APR of the FY 2017-18.

4.9.2. Administrative and General (A&G) Expenses

Petitioner's submission

Based on the actual A&G expenses incurred in the first 6 months of the FY 2017-18, the revised estimate for employee expenses of the FY 2017-18 has been submitted as Rs 6.34 Cr, the same as approved by the Commission in the ARR Order.

Commission's analysis

The MYT Regulations, 2014 stipulate the O&M expenses to be controllable. Accordingly, the Commission now approves the same A&G Expenses as approved in the ARR Order for the FY 2017-18 as shown in the following table:

Table 48: A&G Expenses approved by Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Administration & General Expenses (A&G)	6.34	6.34	6.34

The Commission now approves the Administrative & General (A&G) expenses of Rs 6.34 Cr in the APR for the FY 2017-18.

4.9.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

Based on the actual R&M expenses incurred in the first 6 months of the FY 2017-18, the revised estimate for employee expenses of the FY 2017-18 has been submitted as Rs 12.97 Cr, the same as approved by the Commission in the ARR Order.

Commission's analysis

The Commission in a similar approach adopted while approving the employee expenses and A&G expenses above, has considered the same R&M expenses as approved by the Commission in the ARR Order.

The table below provides the R&M expenses, approved by the Commission in the ARR Order, Petitioners submission and R&M expenses now approved by the Commission.

Table 49: R&M Expenses approved by Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Repair & Maintenance Expenses (R&M)	12.97	12.97	12.97

The Commission approves the Repair & Maintenance (R&M) expenses of Rs 12.97 Cr in the APR of the FY 2017-18.

4.9.4. Total Operation and Maintenance Expenses (O&M)

The Commission approves total O&M Expenses of Rs 86.13 Cr against the Petitioner's submission of Rs 88.99 Cr in the APR of the FY 2017-18.

Table 50: O&M Expenses approved by Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	66.82	69.68	66.82
2	Administrative & General Expenses (A&G)	6.34	6.34	6.34
3	Repair & Maintenance Expenses	12.97	12.97	12.97
	Total Operation & Maintenance Expenses	**86.13**	**88.99**	**86.13**

4.10. Gross Fixed Assets (GFA) and Capitalisation

Petitioner's submission

A capitalisation of Rs 38.52 Cr, the same as that approved by the Commission in the ARR Order has been projected by the Petitioner for the FY 2017-18. The Petitioner has also submitted that the actual capitalisation achieved in the first 6 months of FY 2017-18 is Rs 4.35 Cr.

The Commission sought the details of the capitalisation envisaged by the Petitioner along with the latest progress made on the same. The Petitioner consequently made a revised submission in this regard.

Table 51: Revised submission for capitalisation (In Rs Cr)

Sr. No.	Particulars	FY 2017-18 Apr-Sep (As per Petition)	FY 2017-18 Apr-Jan (Revised submission)	FY 2017-18 (RE)
1	Capitalisation	4.35	2.40	38.52

Commission's analysis

The Commission takes a serious note of the inability of the Petitioner to meet the approved capitalisation targets and also of the inconsistency in the submissions made by the Petitioner with regard to actual capitalisation details. The Commission cautions the Petitioner that such an approach on issues which have a substantial bearing on its revenue will be detrimental to its own financial health and will also result in poor quality of supply.

The Commission has relied on the documents submitted by the Petitioner and considered the actual capitalisation of Rs 2.39 Cr till 31st January 2018, and the same has been approved as the revised estimate for the FY 2017-18.

Table 52: Capitalisation approved by the Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Capitalisation	38.52	38.52	2.40

The Commission approves the capitalisation of Rs 2.40 Cr in the APR for the FY 2017-18.

4.11. Capital Structure

Petitioner's Submission

The entire capital deployment shall be through equity for the FY 2017-18.

Commission's analysis

The MYT Regulations, 2014 specify that if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as normative loan. Regulation 24 of the MYT Regulations states the following:

"

(a) *The Distribution Licensee shall provide detailed loan-wise, project-wise and utilization-wise details of all of the pending loans*

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

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

The Commission has accordingly determined the Capital Structure for FY 2017-18 as follows:

Table 53: GFA addition approved by Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved
1	Opening Gross Fixed Assets	451.99	409.47	409.47
2	Addition During the FY	38.52	38.52	2.40
3	Adjustment/Retirement During the FY	-	-	-
4	Closing Gross Fixed Assets	490.51	447.99	411.87

Table 54: Normative Loan addition (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	49.83	24.21	24.21
2	Add: Normative Loan During the year	26.96	26.96	1.68
3	Less: Normative Repayment equivalent to Depreciation	17.36	12.26	11.74
4	Closing Normative Loan	59.44	38.91	14.14

Table 55: Normative Equity addition (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	135.60	122.84	122.84
2	Additions on account of new capitalisation	11.56	11.56	0.72
3	Closing Equity	147.15	134.40	123.56

4.12. Depreciation

Petitioner's submission

For computation of depreciation, the closing GFA of the FY 2016-17 is taken as the opening GFA for the FY 2017-18 and subsequently the proposed capitalisation during the FY 2017-18 is added. Depreciation has been calculated as per the rates prescribed in the MYT Regulations, 2014.

Commission's analysis

Regulation 23 of the MYT Regulations, 2014 stipulates the following:

"

(a) *Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year.*

(b) *Depreciation shall not be allowed on assets funded by capital subsidies, consumer contributions or grants.*

(c) *Depreciation shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation. The same shall be as specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014. (The same may vary as notified by CERC from time to time.)*

(d) *The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset.*
Provided that Land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

(e) *Depreciation shall be charged from the first year of operation of the asset.*
Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis.

(f) *A provision of replacement of assets shall be made in the capital investment plan."*

Since a large amount of Petitioner's assets have already been fully depreciated, the Commission has not been able to apply the applicable CERC rates on the average assets in place. The Commission sought the details of such assets but the same could not be made available by the Petitioner since the Fixed Asset Register (FAR) of the Petitioner is yet to be updated for the assets created before the year 2005. Therefore, the Commission is constrained to use the actual depreciation rate as calculated for the FY 2016-17 for the FY 2017-18 also. The deprecation has been calculated on the average Gross Fixed Assets (GFA) with the opening GFA considered equivalent to the closing GFA of the FY 2016-17 as approved in the True-up. The net addition during the year has been considered equivalent to capitalisation as approved above. The following table provides the calculation of deprecation during the FY 2017-18.

Table 56: Depreciation approved by Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	451.99	409.47	409.47
2	Addition During the FY	38.52	38.52	2.40
3	Adjustment/Retirement During the FY	-	-	0.00
4	Closing Gross Fixed Assets	490.51	447.99	411.87
5	Average Gross Fixed Assets	471.25	428.73	410.67
6	Effective Rate of Depreciation (%)	3.68%	2.78%	2.86%
	Depreciation	**17.36**	**11.93**	**11.74**

The Commission now approves depreciation of Rs 11.74 Cr in the APR for the FY 2017-18.

4.13. Interest on Loan

Petitioner's submission

The Interest on Loan is calculated on normative basis according to the MYT Regulations, 2014. The closing balance of the FY 2016-17 is taken as the opening balance of loans for the FY 2017-18. The normative loan addition in FY 2017-18 has been computed as 70% of the capitalisation proposed during the FY 2017-18.

The repayment of loans has been considered equivalent to the depreciation during the FY 2017-18. Further the rate of interest has been considered as SBI PLR @ 14.05%.

Commission's analysis:

The Petitioner in the Technical Validation Session (TVS) has submitted that the complete capitalisation during the year shall be funded by equity and no loan shall be taken during the year.

As per the MYT Regulations 2014, if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as normative loan. Further, the Commission has considered the actual capitalisation of assets as approved earlier. The Commission for the purpose of funding of the capitalisation has considered the normative debt equity ratio of 70:30. Repayment has been considered equivalent to depreciation allowed during the year.

The Commission, similar to the approach followed in the True-up of the FY 2016-17, has considered the rate of interest as SBI PLR as on 1st April 2017 @ 13.85%.

Further, in accordance with the MYT Regulations, 2014, the Interest on Loan has been calculated on the average loan during the year with the opening loan considered equivalent to the closing loan approved in the True-up of the FY 2016-17. The net addition in overall loan portfolio has been considered on normative basis as explained above and the repayment is considered equivalent to depreciation during the year.

The following table provides the Interest on Loan approved by the Commission:

Table 57: Interest on Loan approved by Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	49.83	24.21	24.21
2	Add: Normative Loan During the year	26.96	26.96	1.68
3	Less: Normative Repayment equivalent to Depreciation	17.36	11.93	11.74
4	Closing Normative Loan	59.44	39.25	14.14
5	Average Normative Loan	54.63	31.73	19.17
6	Rate of Interest (%)	14.00%	14.05%	13.85%
	Interest on Loan	**7.65**	**4.46**	**2.66**

The Commission approves Interest on Loan of Rs 2.66 Cr in the APR of the FY 2017-18.

4.14. Return on Equity (RoE)

Petitioner's submission

The Return on Equity (RoE) is computed in accordance with the MYT Regulations 2014, and is computed on 30% of the capital base. The Petitioner has considered the opening equity equivalent to the closing equity for the FY 2016-17 and has considered added equity to the tune of 30% of assets proposed to be capitalized during the year. Accordingly, the CED has computed the Return on Equity at 16% on post tax basis.

Commission's analysis:

As mentioned above, the complete asset capitalisation during the year has been funded by equity, but the Commission for the purpose of equity addition during the year has limited it to 30% of the total capitalisation as prescribed in the MYT Regulations, 2014. The RoE has been calculated on the average of opening and closing of equity during the year at the rate of 16% (on post-tax basis) with the opening equity considered equivalent to the closing equity of the FY 2016-17 approved in the True-up. The following table provides the return on equity approved in the ARR Order, the Petitioner's submission and the RoE now approved by the Commission.

Table 58: RoE approved by Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	135.60	122.84	122.84
2	Additions on account of new capitalisation	11.56	11.56	0.72
4	Closing Equity	147.15	134.40	123.56
5	Average Equity	141.37	128.62	123.20
6	Return on Equity (%)	16.00%	16.00%	16.00%
	Return on Equity	**22.62**	**20.58**	**19.71**

The Commission approves the Return on Equity of Rs 19.71 Cr in the APR of the FY 2017-18.

4.15. Interest on Security Deposits

Petitioner's submission

A provision of Rs 9.39 Cr has been made towards payment of interest on consumer security deposits during the FY 2017-18.

Commission's analysis:

The Interest on security deposits has been calculated in accordance with the MYT Regulations 2014, based on the average of the opening and closing consumer security deposits during the year. As approved in the ARR Order, the Commission has considered a net addition of Rs 5.00 Cr in the consumer security deposits during the year. The rate of interest has been considered equivalent to the prevailing RBI Bank rate. The table below provides the calculation of interest on consumer security deposits for the year.

Table 59: Interest on Security Deposits approved by Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Security Deposit	141.67	147.81	147.81
2	Net addition during the year	5.00	5.00	5.00
3	Closing Security Deposit	146.67	152.81	152.81
4	Average Security Deposit	144.17	150.31	150.31
5	Rate of Interest (%)	6.75%	6.25%	6.50%
	Interest on Security Deposit	**9.73**	**9.39**	**9.77**

The Commission approves Interest on Security Deposit as Rs 9.77 Cr in the APR of the FY 2017-18.

4.16. Interest on Working Capital

Petitioner's submission

The interest on working capital has been calculated based on the normative principles in the JERC (Multi Year Distribution Tariff) Regulations, 2014.

The working capital requirement for the Control Period has been computed considering the following parameters:

(a) Receivables of two months of billing

(b) Less power purchase cost of one month

(c) Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit

(d) Inventory for two months based on annual requirement for previous year

The Interest on Working Capital is computed at the SBI base rate as on 1st April, 2017 at 9.30%.

Commission's analysis:

For calculating the working capital requirements of the Petitioner during the year the receivables have been considered as the proportionate ARR for 2 months, the proportionate revised power purchase cost of the FY 2017-18 for one month as determined above and the consumer security deposit. The inventory for two months has been considered on the same levels as per the audited accounts of the FY 2016-17

With regards to the interest rate, the SBI Base rate as on 1st April 2017 has been considered, as stipulated in the MYT Regulations 2014.

The actual Working Capital requirement, after deduction of the amount of Consumer Security Deposit, becomes negative. Thus, the Interest on Working Capital has been considered as Nil, as shown in the table below:

Table 60: Interest on Working Capital approved by Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Receivables of two months of billing	124.58	142.07	134.81
2	Less: Power Purchase Cost for one month	52.35	56.82	58.54
3	Inventory Based on Annual Requirement for Previous FY for 2 months	1.86	4.08	4.08
4	Total Working Capital Requirement	74.01	89.33	80.35
5	Less: Security Deposit excluding BG/FDR	146.67	152.81	150.31
6	Net Working Capital	0.00	0.00	0.00
7	Rate of Interest (%)	9.25%	9.30%	9.30%
	Interest on Working Capital	**0.00**	**0.00**	**0.00**

The Commission approves the Interest on Working Capital as Nil in the APR of the FY 2017-18.

4.17. Income Tax

Petitioner's submission

No submissions have been made in this regard.

Commission's analysis:

For the FY 2017-18 no income tax liability is computed and the same shall be Trued-up based on the actual income tax paid by the Petitioner.

Table 61: Income tax approved by Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Income Tax	0.00	0.00	0.00

The Commission approved Nil income tax liability for the FY 2017-18.

4.18. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner has earmarked Rs 8.52 Cr as a provision for bad and doubtful debts for the year.

Commission's analysis

The Commission has not considered any provision for Bad & Doubtful Debts. The same shall be accounted for as per actuals in the True-up of the FY 2017-18.

4.19. Non-Tariff Income

Petitioner's submission

The non-tariff income for the FY 2017-18 has been estimated as Rs 23.64 Cr based on the actual non-tariff income in the first 6 months of FY 2017-18.

Commission's analysis:

For the APR of the FY 2017-18 the Commission has considered the Non-Tariff Income the same as that submitted by the Petitioner. The same shall be Trued-up on actual basis. The NTI approved in the ARR Order,the Petitioner's submission and now approved by the Commission is shown in the table below:

Table 62: Non-Tariff Income approved by Commission (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	NTI	24.17	23.64	23.64

The Commission now approves Non-Tariff Income of Rs 23.64 Cr in the APR for the FY 2017-18.

4.20. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the net aggregate revenue requirement of Rs 802.10 Cr is submitted after adjusting the Non -Tariff Income for the FY 2017-18.

Commission's analysis

On the basis of the detailed analysis of the cost parameters of the ARR, the revenue requirements in the APR of the FY 2017-18 are approved as follows:

Table 63: Aggregate Revenue Requirement approved by the Commission for the FY 2017-18 (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost (inclusive of cost towards RPO and sale of surplus power)	628.19	681.86	702.48
2	Operation & Maintenance Expenses	86.13	88.99	86.13
3	Depreciation	17.36	11.93	11.74
4	Interest and Finance charges	7.65	4.46	2.66
5	Interest on Working Capital	0.00	0.00	0.00
6	Interest on Security Deposit	9.73	9.39	9.77
7	Return on Equity	22.62	20.58	19.71
8	Provision for Bad Debt	0.00	8.52	0.00
9	Income Tax	0.00	0.00	0.00
10	**Total Revenue Requirement**	**771.68**	**825.74**	**832.49**
11	Less: Non-Tariff Income	24.17	23.64	23.64
12	**Net Revenue Requirement**	**747.51**	**802.10**	**808.85**

The Commission approves the net ARR of Rs 808.85 Cr in the APR of the FY 2017-18.

4.21. Revenue at existing Retail Tariff

Petitioner's submission

The revenue from sale of power at existing tariff of Rs 852.41 Cr is calculated on the basis of energy sales in the territory for the FY 2017-18. Besides Rs 109.96 Cr has been billed as FPPCA during the first 6 months of the FY 2017-18 and the same has been considered in the total revenue for the FY 2017-18.

Commission's analysis

The consumer category wise/ sub category wise and slab wise revenue at retail tariff is dependent on the sales of the Petitioner. In order to determine the revised estimates for the sales of the FY 2017-18 the Commission had sought the monthly sales details for the FY 2015-16, FY 2016-17 and FY 2017-18 (till December). However, in spite of repeated reminders, the Petitioner has failed to submit the same. The Commission has thus been constrained to apply suitable assumptions as discussed in Section 4.3 of this Order. As a result, the Commission has determined revised estimate of sales as 1,591.48 MU against 1,651.72 MU submitted by the Petitioner.
The consumer category wise/ sub category wise and slab wise revenue at retail tariff is calculated as per the tariff rates applicable for the FY 2017-18. The revenue from demand charges and the energy charges has been projected for each category/ sub category and slab. The revenue from category/ sub category/ slab wise revenue as computed by the Commission for the FY 2017-18 has been shown in the table below:

Table 64: Revenue at existing tariff computed by Commission (In Rs Cr)

S. No.	Category	Phase	Fixed Charges (Rs Cr)	Energy charges (Rs Cr)	Total (Rs Cr)	ABR (Rs/unit)
1	**DOMESTIC SUPPLY (DS)**		**10.40**	**285.05**	**295.45**	**4.02**
1	0-150 units		2.96	80.55	83.51	2.64
2	151-400 units		4.00	116.36	120.36	4.97
3	401 and above units		3.43	88.15	91.58	5.19
2	**C OMMERCIAL / NON RESIDENTIAL (NRS)**		**48.54**	**251.68**	**300.22**	**6.13**

S. No.	Category	Phase	Fixed Charges (Rs Cr)	Energy charges (Rs Cr)	Total (Rs Cr)	ABR (Rs/unit)
1	0-150 units	Single	1.04	110.12	111.16	5.05
2	151-400 units	Single	0.00	0.00	0.00	
3	401 and above units	Single	0.00	0.00	0.00	
4	0-150 units	Three	0.00	0.00	0.00	
5	151-400 units	Three	3.95	106.89	110.84	5.39
6	401 and above units	Three	43.54	34.68	78.22	12.29
3	**INDUSTRY**		**13.27**	**143.36**	**156.64**	**6.00**
1	Large Industrial Power Supply (LS)	Single	6.34	71.26	77.60	6.15
2	Medium Industrial Power Supply (MS)	Single	6.46	61.80	68.27	5.91
3	Small Industrial Power Supply (SP)	Three	0.47	10.30	10.77	5.54
		Three				
4	**AGRICULTURAL PUMPING SUPPLY(AR)**		**0.00**	**0.46**	**0.46**	**2.90**
1	Agricultural Pumping Supply		0.00	0.46	0.46	2.90
5	**PUBLIC LIGHTING (PL)**		**0.82**	**10.85**	**11.67**	**5.75**
1	Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external Agency		0.82	10.85	11.67	5.75
2	Advertisement / Neon sign Boards- Advertisement boards, bill boards(apart from advertisement boards installed on commercial establishments and charged under commercial tariff)		0.00	0.00	0.00	
6	**BULK SUPPLY (BS)**		**5.11**	**44.34**	**49.45**	**6.19**
1	Bulk Supply		5.11	44.34	49.45	6.19
7	**TEMPORARY SUPPLY**		**0.00**	**3.76**	**3.76**	**8.10**
1	Temporary Supply		0.00	3.76	3.76	8.10
	SUB-TOTAL		**78.14**	**739.51**	**817.65**	**5.14**
8	**FPPCA**				**109.96**	
	GRAND TOTAL				**927.61**	

The Commission, has determined revenue from sale of power at existing tariff as Rs 817.65 Cr and FPPCA charges as Rs 109.96 Cr for a total revenue of Rs 927.61 Cr in the APR of the FY 2017-18.

4.22. Standalone Revenue Gap/Surplus

Petitioner's submission

Based on the ARR and the revenue from retail tariff, the standalone revenue surplus of Rs 160.27 Cr is arrived at in the APR for the FY 2017-18.

Commission analysis

The Standalone Revenue Gap/Surplus is arrived at and approved as follows:

Table 65: Standalone Revenue Gap/ Surplus at existing tariff (In Rs Cr)

S. No	Particulars	Approved in ARR Order	Petitioners submission	Now Approved
1	Annual Revenue Requirement	747.51	802.10	808.85
2	Revenue from sale of power	881.00	852.41	817.65
3	FPPCA	0.00	109.96	109.96
	Revenue Gap/(Surplus)	**(133.49)**	**(160.27)**	**(118.76)**

The standalone surplus at existing retail tariff is Rs 118.76 Cr in the APR of the FY 2017-18. The estimated surplus is carried over to the next year and has been considered while determining the tariff for the FY 2018-19.

5. Chapter 5: Determination of Aggregate Revenue Requirement for the FY 2018-19

5.1. Background

The ARR for the FY 2018-19 was approved in the MYT Order issued for the 1st Control Period (the FY 2016-17 to the FY 2018-19). In this Chapter the Commission determines the revised Aggregate Revenue Requirement (ARR) for the FY 2018-19. The determination of Aggregate Revenue Requirement for the FY 2018-19 is to be carried out as per the following provisions of Regulation 6 of the JERC for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014:

"6.ARR Forecast

6.1 The applicant shall, based on the Business Plan as approved by the Commission by Order, submit the forecast of Aggregate Revenue Requirement and expected revenue from tariff, for the Control Period by a Petition in accordance with the JERC (Terms & Condition for determination of Tariff) Regulations, 2009 by 30th November of the year prior to the commencement of the Control Period and accompanied by such fee payable, as specified in the JERC (Conduct of Business) Regulations, 2009.

6.2 The forecast of Aggregate Revenue Requirement shall be developed using the assumptions relating to the behaviour of individual variables that comprise the Aggregate Revenue Requirement during the Control Period.

6.3 The forecast of expected revenue from tariff and charges shall be developed based on the following:

- *(a) Estimates of quantum of electricity to be supplied to consumers and wheeled on behalf of Distribution System Users for each financial year within the Control Period; and*
- *(b) Prevailing tariff as at the date of making the application."*

5.2. Approach for determination of ARR for the FY 2018-19

This Chapter analyses the individual elements constituting the Aggregate Revenue Requirement for the FY 2018-19, approved in the MYT Order dated 28th April, 2016 and re-computes the same considering the actual information available of various parameters for the FY 2016-17 as per the audited accounts and the provisional information available for the FY 2017-18. The revised ARR and revenue at existing tariff is determined for the FY 2018-19 to arrive at the revised revenue gap/surplus for the year.

5.3. Projection of Number of consumers, Connected Load and Energy Sales

Petitioner's Submission

The energy sales, connected load and number of consumers are projected for the year based on the historical trends observed in the last five years (the FY 2012-13 to the FY 2016-17) and the actual data for the first 6 months of the FY 2017-18 as shown in the following table:

Table 66: Energy sales, number of consumers and connected load submitted by the Petitioner

Category	Energy sales (MU)	Number of consumers	Connected load (kW)
Domestic	794.41	200,201	900,808
Commercial	529.94	24,605	475,641
Large Industrial supply	134.82	99	72,919
Medium Industrial supply	126.77	1416	78,446
Small Industrial Supply	19.53	1275	19,926
Agriculture	1.36	119	780
Public lighting	22.18	1253	7,256
Bulk supply	80.60	929	43,385
Temp. Supply	4.98	437	**2,480**
Total	**1,714.58**	**230,334**	**1,601,640**

Commission's Analysis

In order to determine the sales for the FY 2018-19 the Commission had sought the monthly sales details for the FY 2015-16, FY 2016-17 and FY 2017-18 (till December). However, in spite of repeated reminders, the Petitioner has failed to submit the same. The Commission has thus been constrained to apply suitable assumptions for the same.

The Commission while projecting the number of consumers, connected load and energy sales for each category has observed the historical trends in the past 6 years (the FY 2011-12 to the FY 2016-17) and the actual data provided by the Petitioner for the first 6 months of the FY 2017-18.

The Commission has calculated the Compounded Annual Growth Rate (CAGR) and the Year on Year (Y-o-Y) increase for each category, and using the appropriate growth rate has estimated the category wise consumers, connected load and energy sales. The tables below provide the trends observed in the growth of number of consumers, connected load and energy sales for the Petitioner.

Table 67: Growth in No. of consumers

Category	Y-o-Y growth					CAGR				
	FY13/ FY12	FY14/F Y13	FY15/ FY14	FY16/ FY15	FY17/ FY16	5 year	4 year	3 year	2 year	1 year
Domestic	1.28%	1.08%	5.05%	2.82%	1.62%	2.36%	2.63%	3.15%	2.22%	1.62%
Commercial	-19.91%	5.60%	3.25%	2.34%	3.67%	-1.52%	3.71%	3.08%	3.00%	3.67%
Large Industrial supply	-2.88%	3.96%	2.86%	-4.63%	-3.88%	-0.98%	-0.50%	-1.94%	-4.26%	-3.88%
Medium Industrial supply	3.72%	3.41%	3.73%	4.85%	2.63%	3.66%	3.65%	3.73%	3.73%	2.63%
Small Industrial Supply	-0.46%	0.00%	-0.78%	-0.47%	0.47%	-0.25%	-0.20%	-0.26%	0.00%	0.47%
Agriculture	0.82%	-0.81%	-0.82%	-0.83%	-0.83%	-0.50%	-0.82%	-0.83%	-0.83%	-0.83%
Public lighting	4.13%	4.83%	4.73%	10.38%	10.63%	6.90%	7.61%	8.55%	10.51%	10.63%
Bulk supply	44.54%	5.17%	11.91%	12.67%	9.75%	16.03%	9.83%	11.43%	11.20%	9.75%
Temp. Supply	2.10%	-20.07%	-15.88%	-7.58%	-23.73%	-13.51%	-17.03%	-15.99%	-16.05%	-23.73%
Total	**-1.31%**	**1.48%**	**4.75%**	**2.78%**	**1.83%**	**1.89%**	**2.70%**	**3.11%**	**2.31%**	**1.83%**

Table 68: Growth in Connected Load

Category	Y-o-Y growth					CAGR				
	FY13/ FY12	FY14/ FY13	FY15/ FY14	FY16/ FY15	FY17/ FY16	5 year	4 year	3 year	2 year	1 year
Domestic	11.01%	5.77%	2.78%	2.92%	3.93%	5.24%	3.84%	3.21%	3.43%	3.93%
Commercial	2.48%	10.48%	6.45%	4.40%	6.07%	5.94%	6.83%	5.63%	5.23%	6.07%
Large Industrial supply	-2.65%	8.82%	3.00%	0.20%	-2.59%	1.27%	2.27%	0.18%	-1.20%	-2.59%
Medium Industrial supply	3.83%	3.68%	6.28%	6.46%	1.85%	4.40%	4.55%	4.84%	4.13%	1.85%
Small Industrial Supply	0.55%	1.39%	1.33%	0.50%	1.04%	0.96%	1.06%	0.96%	0.77%	1.04%
Agriculture	4.74%	1.13%	0.98%	2.08%	1.49%	2.08%	1.42%	1.52%	1.78%	1.49%
Public lighting	2.35%	3.73%	2.85%	4.82%	6.68%	4.07%	4.51%	4.77%	5.74%	6.68%
Bulk supply	35.96%	-0.01%	0.40%	1.09%	1.28%	6.92%	0.69%	0.92%	1.19%	1.28%
Temp. Supply	-79.63%	-25.44%	-17.0%	-7.41%	-23.69%	-38.35%	-18.68%	-16.30%	-15.94%	-23.69%
Total	**5.91%**	**6.65%**	**3.78%**	**3.25%**	**3.93%**	4.70%	4.39%	3.65%	3.59%	3.93%

Table 69: Growth in Energy Sales

Category	Y-o-Y growth					CAGR				
	FY13/ FY12	FY14/ FY13	FY15/ FY14	FY16/ FY15	FY17/ FY16	5 year	4 year	3 year	2 year	1 year
Domestic	11.55%	3.70%	7.75%	0.48%	9.60%	6.54%	5.32%	5.87%	4.94%	9.60%
Commercial	-4.75%	12.24%	3.14%	0.68%	7.63%	3.62%	5.83%	3.78%	4.10%	7.63%
Large Industrial supply	6.82%	-9.86%	-5.44%	12.49%	-3.87%	-0.31%	-2.02%	0.75%	3.99%	-3.87%
Medium Industrial supply	0.13%	0.66%	-0.91%	7.11%	4.63%	2.28%	2.82%	3.56%	5.86%	4.63%
Small Industrial Supply	-8.67%	1.24%	0.69%	-7.27%	2.74%	-2.37%	-0.73%	-1.38%	-2.39%	2.74%
Agriculture	10.24%	4.29%	14.38%	-10.78%	-12.8%	0.47%	-1.84%	-3.80%	-11.77%	-12.75%
Public lighting	25.96%	-3.55%	2.22%	3.83%	-2.98%	4.58%	-0.17%	0.98%	0.37%	-2.98%
Bulk supply	16.83%	-0.89%	-3.55%	-7.55%	4.42%	1.52%	-1.99%	-2.35%	-1.75%	4.42%
Temp. Supply	-16.29%	-12.63%	3.78%	-18.19%	-23.6%	-13.86%	-13.24%	-13.45%	-20.9%	-23.62%
Total	**4.88%**	**4.04%**	**3.63%**	**1.34%**	**6.71%**	**4.10%**	**3.91%**	**3.87%**	**3.99%**	**6.71%**

Using the appropriate growth rate from the trends observed above, the number of consumers, connected load and energy sales have been estimated for the FY 2018-19. For all categories, the growth rate is applied over the estimates of FY 2017-18, as determined in the previous Chapter.

The growth rate adopted and the revised number of consumers, connected load and energy for each category is tabulated below:

Table 70: No. of consumers

Category	Growth Rate (CAGR)		Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
Domestic	2 year	2.22%	206,206	200,201	200,030
Commercial	2 year	3.00%	23,968	24,605	24,925
Large Industrial supply	Subjective Rate	0.00%	108	99	99
Medium Industrial supply	3 year	3.73%	1,400	1,416	1,386

Category	Growth Rate (CAGR)		Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
Small Industrial Supply	1 year	0.47%	1,275	1,275	1,287
Agriculture	Subjective Rate	0.00%	121	119	119
Public lighting	4 year	7.61%	1,077	1,253	1,253
Bulk supply	5 year	16.03%	592	929	986
Temp. Supply	Subjective Rate	0.00%	620	437	437
Total			**235,367**	**230,334**	**230,522**

Table 71: Connected Load (kW)

Category	Growth Rate CAGR)		Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
Domestic	4 year	3.84%	966,238	900,808	916,992
Commercial	4 year	6.83%	484,253	475,641	484,709
Large Industrial supply	3 year	0.18%	77,678	72,919	70,294
Medium Industrial supply	1 year	1.85%	77,102	78,446	74,119
Small Industrial Supply	3 year	0.96%	20,050	19,926	19,940
Agriculture	4 year	1.42%	751	780	769
Public lighting	4 year	4.51%	6,447	7,256	7,274
Bulk supply	4 year	0.69%	41,464	43,835	43,041
Temp. Supply	Subjective Rate	0.00%	4,187	2,480	2,480
Total			**1,678,169**	**1,601,640**	**1,619,619**

Table 72: Energy Sales (MU)

Category	Growth Rate (CAGR)		Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
Domestic	2 year	4.94%	881.11	794.41	770.85
Commercial	3 year	3.78%	523.71	529.94	507.90
Large Industrial supply	3 year	0.75%	117.00	134.82	124.13
Medium Industrial supply	2 year	5.86%	21.00	126.77	124.46
Small Industrial Supply	1 year	2.74%	104.92	19.53	20.86
Agriculture	Subjective Rate	0.00%	2.18	1.36	1.59
Public lighting	2 year	0.37%	29.96	22.18	20.36
Bulk supply	Subjective Rate	0.00%	95.57	80.60	79.89
Temp. Supply	Subjective Rate	0.00%	7.00	4.98	4.64
Total			**1,782.45**	**1,714.58**	**1,654.68**

The Commission approves number of consumer as 230,522, connected load as 1,619,619 kW and energy sales of 1,654.68 MU in the ARR of the FY 2018-19.

5.4. Inter-State transmission loss

Petitioner's submission

The Inter-State Transmission Loss of 4.05%, as approved by the Commission in the ARR Order for the FY 2017-18 has been considered for the FY 2018-19.

Commission's analysis

The Commission in the MYT Order dated 28th April 2016 had considered the recent 52-week moving average of regional losses and approved 3.75% as the inter-state transmission loss for the FY 2017-18.

Since the recent 52 weeks moving average of regional losses is 4.21% (13th March 2017 to 13th March 2018), the Commission now considers the figures of regional pool losses of 4.21% as the inter-state loss and approves the same for the ARR of the FY 2018-19 which would be revised based on actuals during the True-up exercise.

The following table provides the Inter-State Transmission Loss submitted and now approved by the Commission.

Table 73: Inter-State transmission loss (%)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved
1	Inter-State Transmission Losses	3.75%	4.05%	4.21%

The Commission approves an Inter-State Transmission Loss of 4.21% in the ARR of the FY 2018-19

5.5. Intra-State Distribution Loss

Petitioner's submission

While the sales have increased in the last three years, losses have remained stagnant without much improvement as majority of the increase in the sales has happened in the LT category. Various technical and technological improvements proposed under IPDS and other schemes shall be useful in bringing about the desired reduction in loss levels. Since these schemes are currently under implementation, the CED requests the Hon'ble Commission to revise the T&D loss level for the FY 2017-18 to 13.40% based on the actual T&D loss for the FY 2016-17 and the projection for the FY 2017-18. Besides the energy input to the UT is metered outside its territory and hence CED has to bear the additional losses of the interstate circuit due to not having any interstate point in its boundary. In view of the above, it is submitted that the Hon'ble Commission may kindly consider & revise the loss target to a level which is achievable under the circumstances detailed above.

Commission's analysis

The Commission has not restated the T&D loss trajectory based on lower losses in the FY 2014-15 (now attributed to wrong submission of sales in FY 2014-15) in the MYT order itself, therefore, the Commission finds no merit in restating the loss trajectory at this stage.

Further, during the Public Hearing several stakeholders have complained about the rampant spread of 'kundi connections' in Chandigarh. The Petitioner has also not submitted the Energy Audit report in spite of repeated directions of the Commission. The Commission notes that contrary to the Petitioner's submission, there is considerable scope for improvement with regard to reduction of T&D losses.

Hence the Commission retains the loss level of 12.25% as approved in MYT Order dated 28th April, 2016 for the FY 2018-19.

The table below provides the Intra-State Distribution Loss approved in the MYT Order, the Petitioners submission and the loss now approved by the Commission.

Table 74: Intra-State Distribution Loss (%)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved
1	Intra-State Distribution Loss	12.25%	13.40%	12.25%

The Commission approves the Intra-State Distribution Loss of 12.25% in the ARR of FY 2018-19.

5.6. *Power Purchase Quantum & Cost*

Petitioners Submission

For projecting the energy availability for the FY 2018-19 the firm and infirm allocation from various generating stations is considered. Detailed methodology for projecting the power availability to the Petitioner from various sources is summarized below.

Power Purchase Quantum:

The Petitioner has firm and infirm allocated share in Central Sector Generating Stations (CSGS) of NTPC, Nuclear Power Corporation of India Ltd (NPCIL), NHPC, BBMB, SJVNL, APCPL etc.

The power availability for the FY 2018-19 has been estimated based on the revised allocation issued by the Northern Regional Power Committee against the Ministry of Power letter No. NRPC/OPR/103/02/2017/12011-12036 dated 25.10.2017. The energy allocation from various generating stations has been summarized below:

Table 75: Energy Allocation as submitted by the Petitioner (MW)

Name of Plant	Plant Capacity (MW)	Avg. CED Allocation (%)	CED Allocation (MW)
NTPC Stations			
Singrauli	2000	0.20	4.00
Rihand-I	1000	1.00	10.00
Rihand-II	1000	0.80	8.00
Rihand-III	1000	0.55	5.50
Unchahar-I	420	0.48	2.02
Unchahar-II	420	0.71	2.98
Unchahar-III	210	0.48	1.01
Unchahar-IV	500	0.87	4.36
Anta	419	1.19	4.99
Auriya	663	0.75	4.97
Dadri GPP	830	0.61	5.06
Kahalgaon-II	1500	0.20	3.00
Dadri-II	980	0.22	2.16
Koldam- Hydro	800	0.79	6.32

Name of Plant	Plant Capacity (MW)	Avg. CED Allocation (%)	CED Allocation (MW)
NHPC			
Salal	690	0.27	1.86
Tanakpur	94	1.28	1.20
Chamera-I	300	3.90	21.06
Chamera-II	231	0.67	2.01
Uri	480	0.60	2.98
Dhauliganga	280	0.72	2.02
Dulhasti	390	0.47	1.83
Sewa II	120	0.83	1.00
URI II	240	0.63	1.51
Chamara III	231	0.6	1.39
Parbati-III	520		
NPCIL			
NAPS	440	1.14	5.02
RAPP (Unit 3 & 4)-B	66	3.18	2.10
RAPP (Unit 5 & 6)-C	440	0.68	2.99
SJVNL			
Nathpa Jhakri	1500	0.43	6.45
Rampur	137	0.79	1.08
BBMB			
BBMB 3.5%	1325	3.5	46.38
BBMB 1 LU- Dehar	990	3.5	34.65
BBMB 10 LU- Pong	360	3.5	12.60
APCPL			
Jajjar	1500	0.43	6.45
THDC			
Koteshwar	400	0.36	1.44
Tehri	1000	0.60	6.00

The availability of power from various sources have been considered as per the following methodology:

NTPC: The net energy generated from the generating stations of NTPC has been estimated by considering average PLF of past three years and normative auxiliary consumption as per CERC Tariff Regulations. Based upon the generated energy from each plant and its corresponding entitlement to the UT of Chandigarh, the unit availability has been calculated.

NHPC: The energy generated from the generating stations of NHPC has been estimated by considering design energy of the corresponding stations. Based upon the energy generated by each plant and its corresponding entitlement to the UT of Chandigarh, the unit availability has been calculated.

NPCIL: The energy generated from the generating stations of NPCIL has been estimated by considering the average PLF of the past three years. Based upon the generated energy from each plant and its corresponding entitlement to the UT of Chandigarh, the unit availability has been calculated.

SJVNL: The estimation of energy generated from the Naptha Jhakri generating station has been done based upon the average generation of past three years while for the Rampur hydro station it is estimated by considering design energy of the power plant. Based upon the generated energy from each plant, the unit availability to the UT of Chandigarh has been calculated.

BBMB: The UT of Chandigarh has been allocated fix quota of 1LU and 10 LU per day from the BBMB plant. In addition to that 3.50% of the plant capacity has been allocated to the UT of Chandigarh. The availability of power from BBMB has been considered based on the average generation of the past three years.

THDC: The unit generation from the Koteshawar and Tehri plants has been estimated based upon the average generation of the past three years while the energy available to the UT of Chandigarh for the Control Period has been calculated based upon the entitlement.

In view of the projected deficit in power availability, the CED has planned to procure 40 MW of additional power from Rampur Hydro power plant in Himachal Pradesh. Energy from the same has been considered for the purpose of meeting the power requirement.

Based on the above assumptions and methodology, the power availability to CED from various generating stations during FY 2018-19 is as summarised below:

Table 76: Station wise power purchase submitted by Petitioner

Name of Plant	Projected Availability (MU)
NTPC Stations	
Singrauli	34.73
Rihand-I	62.04
Rihand-II	69.85
Rihand-III	55.15
Unchahar-I	17.55
Unchahar-II	27.20
Unchahar-III	13.05
Unchahar-IV	32.09
Anta	15.03
Auriya	6.49
Dadri GPP	29.17
Kahalgaon-II	21.66
Dadri-II	16.56
Koldam- Hydro	32.23
NHPC	
Salal	10.65
Tanakpur	4.33
Chamera-I	102.00
Chamera-II	25.41
Uri	20.66

Name of Plant	Projected Availability (MU)
Dhauliganga	15.91
Dulhasti	31.44
Sewa II	8.64
URI II	19.01
Chamara III	13.96
Parbati-III	10.60
NPCIL	
NAPS	66.76
RAPP (Unit 3 & 4)-B	24.04
RAPP (Unit 5 & 6)-C	49.63
SJVNL	
Nathpa Jhakri	88.49
Rampur	10.39
BBMB	
BBMB 3.5%	126.25
BBMB 1 LU- Dehar	518.57
BBMB 10 LU- Pong	5.05
APCPL	
Jajjar	39.18
THDC	
Koteshwar	10.45
Tehri	161.95
Total	**1,796.16**

Power Purchase Cost:

It is submitted that CERC has issued new Tariff Orders for the period of FY 2014-19 for a number of generating stations based on which the fixed and energy charges from these stations have undergone a change. Therefore, it is important to consider the revised Tariff Orders of these generating stations for projection of power purchase cost.

Also, the actual power purchase cost from other generating sources is available for FY 2016-17 and six months for FY 2017-18. The assumptions considered for projection of power purchase cost from various generating stations are detailed below:

- The Fixed Cost for each plant is computed based upon the % allocation of the plant capacity to CED and the corresponding annual fixed charges approved for the generating stations as per their recent Tariff Orders for the control period (FY 2014-19) approved by CERC. For generating plants where Tariff Orders are still pending, fixed charges from FY 2013-14 have been considered along with escalation of 5% annual escalation.
- The Energy Charges for thermal plants are computed by escalating the variable charges for FY 2017-18 by 5% and multiplying them with the number of available units for the year.

- In case of hydro plants the variable charge has been computed based on the revised annual charges and design energy of the plant
- Energy Charges for BBMB have been considered as per the last twelve month rate for 1 LU and 10 LU apart from the annual fixed charges and operation and maintenance charges towards the allocation of 3.50%.
- PGCIL Charges, NRLDC Charges, Reactive Energy charges are computed at an escalation of 5% y-o-y over actuals billed per unit for FY 2017-18 in view of the recent Tariff Orders issued by the CERC.
- Shortfall in power after accounting for energy availability from all stations and towards RPO obligation has been considered to be met from short term sources. The rate of short term power has been considered at Rs. 3.00 per unit.

The projected power purchase cost is as illustrated in the table below:

Table 77: Power Purchase quantum (MU) and Cost (In Rs Cr) submitted by Petitioner

Source	Units Purchased (MU)	Total Charges (Rs Cr)	Per Unit Cost (Rs/kWh)
NTPC Stations			
Singrauli	34.73	8.09	2.33
Rihand-I	62.04	18.60	3.00
Rihand-II	69.85	17.52	2.51
Rihand-III	55.15	18.64	3.38
Unchahar-I	17.55	7.26	4.14
Unchahar-II	27.20	11.03	4.05
Unchahar-III	13.05	6.14	4.71
Unchahar-IV	32.09	13.30	4.14
Anta	15.03	8.27	5.50
Auriya	6.49	5.24	8.07
Dadri GP	29.17	9.74	5.88
Kahalgaon-II	21.66	7.46	3.44
Dadri-II	16.56	9.74	5.88
Koldam- Hydro	32.23	15.97	4.95
NHPC			
Salal	10.65	2.34	2.20
Tanakpur	4.33	1.97	4.54
Chamera-I	102.00	19.71	1.93
Chamera-II	25.41	4.88	1.92
Uri	20.66	5.72	2.77
Dhauliganga	15.91	6.02	3.78
Dulhasti	31.44	14.69	4.67
Sewa II	8.64	4.19	4.85
URI II	19.01	9.73	5.12
Chamara III	13.96	6.04	4.33
Parbati-III	10.60	3.76	3.55
NPCIL			
NAPS	66.76	19.50	2.92
RAPP (Unit 3 & 4)-B	24.04	7.63	3.18
RAPP (Unit 5 & 6)-C	49.63	12.10	3.85
SJVNL			
Nathpa Jhakri	88.49	18.64	2.11
Rampur	10.39	2.64	2.54
BBMB	649.87	202.65	3.12
BBMB 1 LU- Dehar	-	-	-
BBMB 10 LU- Pong	-	-	-

Source	Units Purchased (MU)	Total Charges (Rs Cr)	Per Unit Cost (Rs/kWh)
APCPL			
Jajjar	39.18	18.85	4.81
THDC			
Koteshwar	10.45	2.46	2.36
Tehri	161.95	57.89	3.57
Power purchase from Other Sources			
Crest	2.55	2.40	9.41
Power Procurement (Gross/ Net Metering)	0.52	0.45	8.65
Bilateral/Exchange/ UI	264.10	79.23	
Cost of REC Certificates		1.87	
Grand Total of Charges – Net	**2,063.33**	**671.29**	

Transmission Charges

The transmission charges payable to PGCIL are projected based on the total capacity allocation in the transmission network.

An escalation of 5% over the estimated transmission charges for the FY 2017-18 has been considered for projecting the PGCIL transmission charges for the FY 2018-19.

Table 78: Transmission charges submitted by Petitioner (In Rs Cr)

Particulars	FY 2018-19
PGCIL CHARGES	50.41
NRLDC Charges	0.18
Reactive Energy Charges	0.11
Open Access Charges	-
Total	**50.70**

Commission's Analysis

The Commission has projected the power purchase quantum and cost for the FY 2018-19 based on the monthly actual data for 9 months for the FY 2017-18, the FY 2016-17, the FY 2015-16 and the FY 2014-15, as submitted by the Petitioner. For projecting availability of power, firm allocation from various generating stations has been considered. The source wise methodology followed for projection of quantum and cost of power procurement has been detailed as follows:

5.6.1. Availability of power

Availability of power from NTPC:

- The power purchase quantum for 13 out of 14 NTPC plants has been estimated based on the 3 years average of the quantum of energy scheduled in the FY 2014-15, the FY 2015-16 and the FY 2016-17.

- The availability of power from the new station Unchhar-IV thermal plant which began operations in April 2017 has been projected assuming normative PLF of 85% and other relevant parameters as prescribed in the CERC Tariff Regulations, 2014.

Availability of power from NHPC:

- The power purchase quantum for all NHPC plants has been estimated based on the 3 years average of the quantum of energy scheduled in the FY 2014-15, the FY 2015-16 and the FY 2016-17.

Availability from NPCIL plants:

- From Narora power station & RAPP-C, the power availability has been assumed to be the same as in the FY 2017-18 as there were unsteady power purchases in the previous years.
- The CED has a steady purchase of energy from RAPP-B atomic plant, the energy projected to be scheduled in the FY 2018-19 has been estimated based on the 3 years average of quantum of energy scheduled in the FY 2014-15, the FY 2015-16 and the FY 2016-17.

Availability from SJVNL Plant, THDC & BBMB:

- For Nathpa Jahkri & Rampur plant, the availability has been taken as the average of the FY 2016-17 and the FY 2015-16, because of abnormally low power availability in the FY 2014-15.
- The power availability from Koteshwar has been taken as the purchased values of the FY 2017-18 due to constant increase in uptake since previous years
- The project power purchase quantum from Tehri has been estimated as the average of purchases in the FY 2016-17, the FY 2015-16 & the 2014-15
- The power availability from 3 plants in BBMB has been considered as the FY 2017-18 values due to changing trends of power generation from the three plants ie. Pong, Dehar and Bhakra. However the overall power availability from BBMB has remained in line with the availability of previous years.

Availability of power from Open Market

- The energy deficit for the FY 2018-19, as discussed in the section of energy balance has been assumed to be procured from the Open Market.
- No power has been projected under UI for the FY 2018-19.

5.6.2. Power Purchase Cost

Variable Charges:

- The per unit variable costs have been computed by taking the average of the actuals per unit variable cost as per bills of October 2017 to December 2017 for all the stations.
- For procurement of power from the Open Market, the Average Round the Clock (RTC) rate for the northern region during the calendar year 2017 has been considered.
- No cost has been projected towards UI Overdrawl/ Underdrawl.

Fixed Charges:

- The fixed costs have been determined based on the Tariff Orders issued by the CERC for the respective Central Generating Stations,

- For Unchahar-IV, Koldam, Sewa-II, Chamera-III, Parbati-III, Nathpa Jhakri, Rampur and Koteshwar since the latest Tariff Order has not been issued, fixed cost as per power purchase bills has been considered.

- The Fixed cost has been apportioned on the basis of the CED's share in each station and the average annual plant availability factor achieved during the last five years by the plant.

- Due to high volatility of CED's share in each station on a monthly basis, the cumulative weighted average share of each month for the FY 2017-18, the FY 2016-17, the FY 2015-16 and the FY 2014-15 has been computed.

- The cumulative weighted share averages have been considered depending on the duration used for projecting the quantum from each station.

Other Charges:

No other charges have been considered for the FY 2018-19.

5.6.3. Transmission Charges

The Commission has projected the transmission charges payable to PGCIL based on the total capacity allocation of the Petitioner of the transmission network. The Commission has taken into account the additional capacity share in the new stations while estimating the Inter-State Transmission Charges for the FY 2018-19.

The transmission charges are determined based on the latest quarterly Point of Connection (PoC) rates approved by the Central Electricity Regulatory Commission (CERC) in accordance with Regulation 17(2) of the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010

5.6.4. Total power purchase quantum and cost

The energy availability and the power purchase cost approved by the Commission have been shown in the table below:

Table 79: Power Purchase Quantum (MU) and cost (Rs Cr) approved by the Commission

Source	Units Purchased (MU)	Fixed Charges (Rs Cr)	Variable Charges (Rs Cr)	Other Charges (Rs Cr)	Total charges (Rs Cr)	Per Unit Cost (Rs/kWh)
NTPC Stations						
Singrauli	36.51	2.06	4.79	0.00	6.85	1.88
Rihand-I	76.00	7.19	9.91	0.00	17.10	2.25
Rihand-II	75.23	5.16	9.82	0.00	14.98	1.99
Rihand-III	58.08	8.34	7.66	0.00	16.00	2.75
Unchahar-I	20.80	1.59	5.54	0.00	7.13	3.43
Unchahar-II	22.44	2.21	5.98	0.00	8.19	3.65
Unchahar-III	14.52	1.34	3.87	0.00	5.21	3.59
Unchahar-IV	1.72	0.61	0.42	0.00	1.03	6.02
Anta	23.49	3.91	16.46	0.00	20.36	8.67
Auriya	14.13	3.60	7.82	0.00	11.42	8.08
Dadri GP	26.96	3.12	8.58	0.00	11.70	4.34
Kahalgaon-II	26.20	2.30	5.84	0.00	8.13	3.10
Dadri-II	19.67	2.32	5.44	0.00	7.76	3.94
Koldam- Hydro	29.81	8.63	6.60	0.00	15.23	5.11
Subtotal – NTPC	**445.57**	**52.38**	**98.72**	**0.00**	**151.10**	**3.39**
NHPC						
Salal	9.04	0.69	0.57	0.00	1.26	1.39
Tanakpur	3.86	1.66	0.62	0.00	2.28	5.91

Source	Units Purchased (MU)	Fixed Charges (Rs Cr)	Variable Charges (Rs Cr)	Other Charges (Rs Cr)	Total charges (Rs Cr)	Per Unit Cost (Rs/kWh)
Chamera-I	93.80	12.88	8.84	0.00	21.72	2.32
Chamera-II	19.97	3.64	2.06	0.00	5.70	2.85
Uri	18.44	2.29	2.24	0.00	4.53	2.46
Dhauliganga	11.88	3.16	1.84	0.00	5.01	4.22
Dulhasti	23.52	0.10	4.24	0.00	4.33	1.84
Sewa II	7.42	1.79	1.64	0.00	3.43	4.62
URI II	12.63	4.48	3.10	0.00	7.59	6.00
Chamara III	11.50	3.09	2.49	0.00	5.58	4.85
Parbati-III	7.49	2.06	2.08	0.00	4.14	5.53
Subtotal- NHPC	**219.57**	**35.85**	**29.72**	**0.00**	**65.57**	**2.99**
NPCIL						
NAPS	73.47	0.00	17.71	0.00	17.71	2.41
RAPP (Unit 3 & 4)-B	20.72	0.00	5.77	0.00	5.77	2.78
RAPP (Unit 5 & 6)-C	72.21	0.00	24.91	0.00	24.91	3.45
Subtotal- NPCIL	**166.40**	**0.00**	**48.40**	**0.00**	**48.40**	**2.91**
SJVNL						
Nathpa Jhakri	67.94	8.02	8.38	0.00	16.40	2.41
Rampur	7.53	1.34	1.25	0.00	2.58	3.43
Subtotal- SJVNL	**75.48**	**9.36**	**9.63**	**0.00**	**18.98**	**2.51**
BBMB						
BBMB 3.5%	561.27	0.00	180.03	0.00	180.03	3.21
BBMB 1 LU- Dehar	83.08	0.00	26.65	0.00	26.65	3.21
BBMB 10 LU- Pong	22.55	0.00	7.23	0.00	7.23	3.21
Subtotal- BBMB	**666.90**	**0.00**	**213.92**	**0.00**	**213.92**	**3.21**
APCPL						
Jajjar	54.24	5.60	16.94	0.00	22.54	4.15
Subtotal- APCPL	**54.24**	**5.60**	**16.94**	**0.00**	**22.54**	**4.15**
THDC						
Koteshwar	25.89	7.07	5.82	0.00	12.89	4.98
Tehri	87.49	38.61	21.82	0.00	60.43	6.91
Subtotal- THDC	**113.38**	**45.68**	**27.64**	**0.00**	**73.32**	**6.47**
Subtotal	**1,741.54**	**148.86**	**444.96**	**0.00**	**593.82**	**3.41**
Power purchase from Other Sources						
Crest	3.31	0.00	2.48	0.00	2.48	7.51
Pvt.solar	0.74	0.00	0.66	0.00	0.66	8.93
Solar REC	0.00	1.30	0.00	0.00	1.30	1.50
Non Solar	0.00	0.00	0.00	0.00	0.00	-
Non- Solar REC	0.00	5.88	0.00	0.00	5.88	1.50
Bilateral J&K	0.00	0.00	0.00	0.00	0.00	-
UI	0.00	0.00	0.00	0.00	0.00	-
Power purchase from Indian E. Exchange	213.40	0.00	65.73	0.00	65.73	3.08
Sale to Indian E. Exchange	0.00	0.00	0.00	0.00	0.00	-
Subtotal- Other	**217.45**	**7.18**	**68.87**	**0.00**	**76.05**	**-**

Source	Units Purchased (MU)	Fixed Charges (Rs Cr)	Variable Charges (Rs Cr)	Other Charges (Rs Cr)	Total charges (Rs Cr)	Per Unit Cost (Rs/kWh)
Gross Power Purchase	**1,958.99**	**156.04**	**513.83**	**0.00**	**669.87**	**3.84**
PGCIL CHARGES	-	62.71	-	-	62.71	-
Other Transmission Charges	-	4.44	-	-	4.44	-
Grand Total of Charges – Net	**1,958.99**	**223.19**	**513.83**	**0.00**	**737.02**	**3.76**

The Commission approves the quantum of power purchase as 1,958.99 MU at the State/ UT Periphery with a total cost of Rs 737.02 Cr for the FY 2018-19.

5.7. Renewable Purchase Obligations (RPOs)

Petitioner's submission:

The CED has already met the RPO requirement for the FY 2017-18 and has surplus RPO credits to the extent of 25.86 MU for solar and 14.44 MU for Non-Solar. The CED intends to meet the RPO as per the directions of the Hon'ble Commission in the FY 2018-19. It has planned to meet the Solar RPO from the purchase of solar power within the UT of Chandigarh (through rooftop solar).

Commission's analysis:

As per Clause 1, Sub-clause (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

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

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and approved the revised RPO targets, as per which the Petitioner has to purchase 9.00% of its total consumption (including 3.60% from Solar) from renewable sources for the FY 2018-19.

The Commission has considered the per unit rate of Rs 1.50/kWh (IEX Average Clearing Price Rate) to fulfill the Solar RPO and the same rate for fulfilling the Non Solar RPO. The total cost towards RPO compliance has been considered in the total power purchase cost approved earlier.

The effective energy sales used for calculation of the RPO has been arrived at as follows:

Table 80: Effective energy sales (adjusted for hydro) (in MU)

S.No.	Particular	Formula	FY 2017-18
1	Energy Sales within UT	a	1,654.68
2	Hydro Power Purchase FY 2018-19	b	1,105.14
3	Inter-State Loss (%)	c	4.21%
4	Inter-State Loss (MU)	d= c*b	46.53
5	Intra-State Loss (%)	e	12.25%
6	Intra-State Loss (MU)	f=e*(b-d)	129.68
7	Hydro Power Consumed (MU)	g=b-d-f	928.93
8	Conventional Power consumed	h= a-g	725.74

In accordance with the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010, the Commission has determined the following Renewable Purchase Obligation for the Petitioner for the FY 2018-19:

Table 81: Summary of Renewable Purchase Obligation (RPO) (MU)

Description	FY 2018-19
Sales within State (MU) (except hydro)	**725.74**
RPO obligation (in %)	**9.00%**
Solar	3.60%
Non-solar	5.40%
RPO obligation for the year (in MU)	**65.32**
Solar	26.13
Non-solar	39.19
RPO compliance (proposed actual purchase)	**17.48**
- Solar (Crest power+Gross generated)	17.48
Crest power	*3.31*
Pvt. Solar (Gross Generated)	*14.17*
Pvt. Solar (Gross Consumed)	*13.43*
-Non-solar	0.00
RPO compliance (REC certificate purchase)	**47.84**
- Solar	8.65
-Non-solar	39.19

The Commission has computed the cost towards compliance of RPO as shown in the table below. The cost has already been considered in the total power purchase cost approved by the Commission in the previous section:

Table 82: Cost towards compliance of Renewable Purchase Obligation through REC (In Rs Cr)

Description	RPO (MU)	Total Cost (Rs Cr)	Avg. Rate (Rs/kWh)
Solar	8.65	1.30	1.50
Non-solar	39.19	5.88	1.50
Total	**47.84**	**7.18**	**1.50**

5.8. Energy Balance

Petitioner's submission

The Petitioner has submitted the energy balance as shown in the following page:

Table 83: Energy Balance submitted by Petitioner (MU)

Particulars	Petitioners submission
Units Procured	2,060.26
Inter-State Transmission Loss (%)	4.05%
Transmission Loss (MUs)	83.44
Net Energy Available at UT Periphery	**1,976.82**
Power Available within UT	
Power procured from Gross/NET Metering Mode (MUs)	3.07
Total Energy Available	**1,979.89**

Particulars	Petitioners submission
Actual Energy Sales (MUs)	**1,714.58**
T&D Loss (%)	13.40%
T&D Loss (MUs)	265.30
Total Energy required at UT Periphery (MUs)	**1,979.89**

Commission's analysis

Based on the revised estimates of energy sales and the Power purchase quantum, the Commission approves the following energy balance:

Table 84: Energy Balance approved by Commission (MU)

Particulars	Formula	Approved in MYT Order	Petitioner's Submission	Now Approved
Energy requirement for Discom				
Energy sales of Discom	a	1,782.45	1,714.58	1654.68
Open Access Sales	b	0.00	0.00	0.00
Less: Energy Savings	c	0.00	0.00	0.00
Total Sales within the State/UT	d=a+b-c	1,782.45	1,714.58	1654.68
Distribution losses				
%	e	12.25%	13.40%	12.25%
MU	f=g-d	248.83	265.30	230.99
Energy required at State Periphery for Discom sales	g=d/(1-e)	**2,031.28**	**1,979.89**	**1885.67**
Energy Transactions at Periphery				
Add: Sales in Unscheduled Interchange	h	-	-	0.00
Less: Purchase under UI (MU)	i	-	-	0.00
Add: Sales in Power Exchanges	j	-	-	0.00
Less: Purchase from Open Market	k	-	-	0.00
Less: Open Access Purchase (MU)	l	-	264.10	0.00
Add: Bilateral Transfer J&K		-	-	0.00
Total energy scheduled at State Periphery from Tied-up Sources (MU)	m=g+h-i+j-k-l	**2,110.42**	**1,715.79**	**1885.67**
Energy Available at state periphery from firm sources	n	1,765.99	1,712.72	1668.22
Own Generation	o	30.84	3.07	4.05
Deficit/(Surplus)	**u=m-n-o**	**313.59**	**0.00**	**213.40**

The Commission approves an energy deficit of 213.40 MU in the FY 2018-19. The additional cost of procurement has been considered in the total power purchase cost approved for the FY 2018-19. Further, the Commission advises the Petitioner not to rely on UI for meeting its power deficit and instead to procure power through long term PPAs and the open market.

5.9. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). The MYT Regulations, 2014 consider the variation in O&M Expenses to be controllable. Regulation 9.2 of the MYT Regulation, 2014 states the following:

"9.2 Some illustrative variations or expected variations in the performance of the applicant, which may be attributed by the Commission to controllable factors include, but are not limited to the following:

(a)Variations in capital expenditure on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;

(b)Variations in Transmission and Distribution Losses (T&D) losses in case of bundled utilities and Distribution losses in case of unbundled utilities which shall be measured as the difference between the units input into the distribution system and the units supplied and billed;

(c)Depreciation and working capital requirements;

(d)Failure to meet the standards specified in the Joint Electricity Regulatory Commission (Standards of Performance) Regulations, 2009 except where exempted;

(e)Variation in operation & maintenance expenses, except those attributable to directions of the Commission;

(f)Variation in Wires Availability and Supply Availability;

(g)Variation on account of inflation;"

5.9.1. Employee Expenses

Petitioner's submission

The employee expenses have been considered as that approved by the Commission in the MYT Order.

Commission's analysis

In accordance with the MYT Regulations, 2014, the Commission approves the same Employee Expenses as approved in the MYT Order.

The following table provides the employee expenses approved in the MYT Order, the Petitioner's submission and the employee expenses now approved by the Commission.

Table 85: Employee Expenses approved by Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	74.38	74.38	74.38

The Commission approves Employee Expenses of Rs 74.38 Cr in the ARR of the FY 2018-19.

5.9.2. Administrative and General (A&G) Expenses

Petitioner's submission

The A&G expenses have been considered as that approved by the Commission in the MYT Order.

Commission's analysis

In accordance with the MYT Regulations the Commission now approves the same A&G Expenses as approved in the MYT Order for the FY 2018-19 as shown in the following table:

Table 86: A&G Expenses approved by Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Administration & General Expenses (A&G)	7.10	7.10	7.10

The Commission approves the Administrative & General (A&G) expenses of Rs 7.10 Cr in the ARR of the FY 2018-19.

5.9.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The R&M expenses for the FY 2018-19 have been estimated based on the approved 'K' Factor escalated at the weighted average of WPI & CPI, which is applied on the GFA. The proposed R&M expenses for the FY 2018-19 have accordingly being revised as per the approach followed by the Commission in the MYT Order.

Commission's analysis

The Commission in a similar approach adopted while approving the Employee expenses and A&G Expenses above, has considered the same R&M expenses as approved by the Commission in the MYT Order

The following table provides the R&M expenses, approved by the Commission in the MYT Order, the Petitioner's submission and the R&M expenses now approved by the Commission.

Table 87: R&M Expenses approved by Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Repair & Maintenance Expenses (R&M)	10.51	12.23	10.51

The Commission approves the Repair & Maintenance (R&M) expenses of Rs 10.51 Cr in the ARR for the FY 2018-19.

5.9.4. Total Operation and Maintenance Expenses (O&M)

The Commission approves total Operation & Maintenance Expenses of Rs 91.99 Cr against Rs 93.71 Cr as submitted by the Petitioner.

Table 88: O&M Expenses approved by Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	74.38	74.38	74.38
2	Administrative & General Expenses (A&G)	7.10	7.10	7.10
3	Repair & Maintenance Expenses	10.51	12.23	10.51
	Total Operation & Maintenance Expenses	**91.99**	**93.71**	**91.99**

5.10. Gross Fixed Assets (GFA) and Capitalisation

Petitioner's submission

A capitalisation of Rs 94.80 Cr, same as that approved by the Commission in the MYT Order has been projected by the Petitioner for the FY 2018-19.

Commission's analysis:

The Commission notes the performance of the Petitioner with regard to achieving the approved capitalisation as follows:

Table 89: Capitalisation achieved by Petitioner over the years (In Rs Cr)

S. No	Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18 (till Jan)	FY 2018-19 (Proposed)
1	Approved	7.64	9.96	48.13	38.52	94.80
2	Actual/Proposed	16.59	12.29	5.61	2.40	94.80

Considering the actual capitalisation achieved by the Petitioner over the years, the Commission finds the Petitioner's proposal of a capitalisation of Rs 94.80 Cr for the FY 2018-19 to be unrealistic.

The Commission has thus considered the average of the actual capitalisation achieved by the Petitioner during FY 2014-15 to FY 2016-17 and approved the same as the capitalisation for the FY 2018-19.

Table 90: Capitalisation approved by the Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Capitalisation	94.80	94.80	11.50

The Commission approves the capitalisation of Rs 11.50 Cr in the ARR of the FY 2018-19.

5.11. Capital Structure

Petitioner's Submission

A capitalisation of Rs 94.80 Cr shall be undertaken in FY 2018-19. Further, the entire capital deployment at the CED shall be through equity.

Commission's analysis

As discussed while determining the capital structure in Chapter 4, since the Petitioner has failed to provide the details of the assets created from consumer contributions, no asset has been assumed to be funded through consumer contribution. Further, since the Petitioner submitted that the entire capitalisation is funded through equity, equity higher than 30% of capitalisation has been considered as normative loan. In accordance with the MYT Regulations, 2014, the Commission has determined the Capital Structure for the FY 2018-19 as follows:

Table 91: GFA addition approved by the Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	326.91	447.99	411.87
2	Addition During the FY	94.80	94.80	11.50
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	421.71	542.79	423.37

Table 92: Normative Loan addition (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	71.12	39.25	14.14
2	Add: Normative Loan During the year	66.36	66.36	8.05
3	Less: Normative Repayment equivalent to Depreciation	20.21	13.96	11.94

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
4	Closing Normative Loan	117.27	91.65	10.25

Table 93: Normative Equity addition (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	98.07	134.40	123.56
2	Additions on account of new capitalisation	28.44	28.44	3.45
3	Closing Equity	126.51	162.84	127.01

5.12. Depreciation

Petitioner's submission

For computation of depreciation, the closing GFA of the FY 2017-18 is taken as the opening GFA for the FY 2018-19 and subsequently the proposed capitalisation during the FY 2018-19 is added. Depreciation has been calculated as per the rates prescribed in the MYT Regulations, 2014.

Commission's analysis

Regulation 23 of the MYT Regulations, 2014 stipulates the following:

"

(a) *Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year.*

(b) *Depreciation shall not be allowed on assets funded by capital subsidies, consumer contributions or grants.*

(c) *Depreciation shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation. The same shall be as specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014. (The same may vary as notified by CERC from time to time.)*

(d) *The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset.*
Provided that Land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

(e) *Depreciation shall be charged from the first year of operation of the asset.*
Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis.

(f) *A provision of replacement of assets shall be made in the capital investment plan."*

Since a large amount of the Petitioner's assets have already been fully depreciated, the Commission has not been able to apply the applicable CERC rates on the average assets in place. The Commission sought the details of such assets but the same could not be made available by the Petitioner since the Fixed Asset Register (FAR) of the Petitioner is yet to be updated for the assets created before the year 2005. Therefore, the Commission is constrained to use the actual depreciation rate as calculated for the FY 2016-17 for the FY 2018-19 also. The deprecation has been calculated on the average Gross Fixed Assets (GFA) with the opening GFA considered equivalent to the closing GFA of the FY 2017-18 as approved in Chapter 4. The net addition during the year has been considered equivalent to the capitalisation as approved above. The following table provides the calculation of deprecation during the FY 2018-19.

Table 94: Depreciation approved by Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	326.91	447.99	411.87
2	Addition During the FY	94.80	94.80	11.50
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	421.71	542.79	423.37
5	Average Gross Fixed Assets	374.31	495.39	417.62
6	Effective Rate of Depreciation (%)	5.40%	2.82%	2.86%
	Depreciation	**20.21**	**13.96**	**11.94**

The Commission approves a depreciation of Rs 11.94 Cr in the ARR of the FY 2018-19.

5.13. Interest on Loan

Petitioner's submission

The Interest on Loan is determined on normative basis according to the MYT Regulations, 2014. The opening balance of loans for the FY 2018-19 is considered the same as the closing balance of the FY 2017-18. The normative loan addition in the FY 2018-19 has been computed as 70% of the capitalisation proposed during the FY 2017-18.

The repayment of loans has been considered equal to the depreciation during the FY 2018-19. Further the rate of interest has been considered as SBI PLR @ 14.05%.

Commission's analysis:

The Interest on Loan is determined in accordance with the MYT Regulations. The Commission has considered the actual capitalisation of assets as approved in the foregoing paragraphs. Repayment has been considered equivalent to depreciation allowed during the year.

Similar to the approach followed in previous years the rate of interest has been considered as the prevailing SBI Prime Lending Rate (PLR) of 13.40% as on 1st January 2018. Further, in accordance with the MYT Regulations, 2014, the Interest on Loan has been calculated on the average loan during the year with the opening loan considered equivalent to the closing loan approved in the APR for the FY 2017-18.

The table below provides the Interest on Loan approved by the Commission

Table 95: Interest on loan approved by Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	71.12	39.25	14.14
2	Add: Normative Loan During the year	66.36	66.36	8.05
3	Less: Normative Repayment equal to Depreciation	20.21	13.96	11.94
4	Closing Normative Loan	117.27	91.65	10.25
5	Average Normative Loan	94.20	65.45	12.19
6	Rate of Interest (%)	14.05%	14.05%	13.40%
	Interest on Loan	**13.23**	**9.20**	**1.63**

The Commission approves Interest on Loan as Rs 1.63 Cr in the ARR of the FY 2018-19.

5.14. Return on Equity (RoE)

Petitioner's submission

The Return on Equity (RoE) is computed in accordance with the MYT Regulations 2014, wherein RoE is computed on 30% of the capital base. The opening equity equivalent to the closing equity for the FY 2017-18 is considered and equity is added to the tune of 30% of assets capitalized during the year. Accordingly, the CED has computed the Return on Equity at 16% on post tax basis.

Commission's analysis:

The RoE has been calculated on normative basis on the average of the opening and closing equity during the year at the rate of 16% (on post-tax basis) with the opening equity considered equivalent to the closing equity of the FY 2017-18. As the complete asset capitalisation during the year has been funded by equity, the Commission for the purpose of equity addition during the year has limited it to 30% of the total capitalisation as prescribed in the MYT Regulations, 2014. The following table provides the return on equity approved for the year.

Table 96: RoE approved by Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	98.07	134.40	123.56
2	Additions on account of new capitalisation	28.44	28.44	3.45
4	Closing Equity	126.51	162.84	127.01
5	Average Equity	112.29	148.62	125.29
6	Return on Equity (%)	16.00%	16.00%	16.00%
	Return on Equity	**17.97**	**23.78**	**20.05**

The Commission approves Return on Equity of Rs 20.05 Cr in the ARR of the FY 2018-19.

5.15. Interest on Security Deposits

Petitioner's submission

A provision of Rs 9.71 Cr has been made towards payment of interest on consumer security deposits during the FY 2018-19.

Commission's analysis:

The Interest on security deposits has been calculated in accordance with the MYT Regulations 2014, based on the average of the opening and closing consumer security deposits during the year. As approved in the MYT Order, the Commission has considered a net addition of Rs 5 Cr in the consumer security deposits during the year. The rate of interest has been considered equivalent to the RBI Bank rate as on 1st April 2017 in accordance with the MYT Regulations 2014. The table below provides the calculation of interest on consumer security deposits for the year.

Table 97: Interest on Security Deposits approved by Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Security Deposit	148.84	152.81	152.81
2	Net addition during the year	5.00	5.00	5.00
3	Closing Security Deposit	153.84	157.81	157.81
4	Average Security Deposit	151.34	155.31	155.31

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
5	Rate of Interest (%)	7.75%	6.25%	6.25%
6	**Interest on Security Deposit**	**11.73**	**9.71**	**9.71**

The Commission approves Interest on Security Deposit as Rs 9.71 Cr in the ARR for the FY 2018-19.

5.16. Interest on Working Capital

Petitioner's submission

The interest on working capital has been calculated based on the normative principles outlined in the JERC (Multi Year Distribution Tariff) Regulations, 2014.

The working capital requirement for the Control Period has been computed considering the following parameters:

(a) Receivables of two months of billing

(b) Less power purchase cost of one month

(c) Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit

(d) Inventory for two months based on annual requirement for the previous year

The Interest on Working Capital is computed at the SBI base rate as on 1st April, 2017 at 9.30%.

Commission's analysis:

For calculating the working capital requirements during the year, the receivables are considered as the proportionate ARR for 2 months, the proportionate revised power purchase cost of the FY 2018-19 for one month as determined above and the consumer security deposit. The inventory for two months has been considered the same as in the FY 2017-18.

With regards to the interest rate, the prevailing SBI Base rate has been considered, in accordance with the MYT Regulations.

The actual Working Capital requirement, after deduction of the amount of Consumer Security Deposit, becomes negative. Thus, the Interest on Working Capital has been considered as Nil, as shown in the table below:

Table 98: Interest on Working Capital approved by Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Receivables of two months of billing	153.48	147.38	140.91
2	Less: Power Purchase Cost for one month	66.06	60.17	61.43
3	Inventory Based on Annual Requirement for Previous FY for 2 months	0.34	4.08	4.08
4	Total Working Capital Requirement	87.76	91.29	83.56
5	Less: Security Deposit excluding BG/FDR	153.84	157.81	155.31

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
6	Net Working Capital	0.00	0.00	0.00
7	Rate of Interest (%)	9.30%	9.30%	8.65%
	Interest on Working Capital	**0.00**	**0.00**	**0.00**

The Commission approves the Interest on Working Capital as Nil in the ARR of the FY 2018-19.

5.17. Income Tax

Petitioner's submission

No submission has been made in this regard.

Commission's analysis:

For the FY 2018-19 no income tax liability is computed and the same shall be Trued-up based on the actual income tax paid by the Petitioner.

Table 99: Income Tax approved by Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	**Income Tax**	**0.00**	**0.00**	**0.00**

5.18. Provision for Bad & Doubtful Debts

Petitioner's submission

The Petitioner has earmarked Rs 8.84 Cr as a provision for bad and doubtful debts for the year.

Commission's analysis

The Commission also has not considered any Provision for Bad & Doubtful Debts. The same shall be accounted for as per actuals in the True-up of the FY 2018-19.

5.19. Non-Tariff Income

Petitioner's submission

The non-tariff income for the FY 2018-19 has been estimated as Rs 26.99 Cr, same as that approved by the Commission in the MYT Order.

Commission's analysis:

For the ARR of the FY 2018-19 the Commission has considered Non-Tariff Income at the same amount as approved in the MYT Order. The same shall be Trued-up on actual basis. The NTI approved in the MYT Order, Petitioner's submission and now approved by the Commission is shown in the table below:

Table 100: Non -tariff Income approved by Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	**NTI**	**26.99**	**26.99**	**26.99**

The Commission approves Non-Tariff Income of Rs 26.99 Cr in the ARR of the FY 2018-19

5.20. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the Petitioner submitted the net aggregate revenue requirement of Rs 854.19 Cr after adjusting the non-tariff income for the FY 2018-19.

Commission's analysis

On the basis of the detailed analysis of the cost parameters of the ARR the revenue requirement for the FY 2018-19 is approved as provided in the following table:

Table 101: Aggregate Revenue Requirement approved by Commission for FY 2018-19 (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved
1	Net Power Purchase Cost (inclusive of cost towards RPO and sale of surplus power)	792.73	721.99	737.02
2	Operation & Maintenance Expenses	91.99	93.71	91.99
3	Depreciation	20.21	13.96	11.94
4	Interest and Finance charges	13.23	9.20	1.63
5	Interest on Working Capital	0.00	0.00	0.00
6	Interest on Security Deposit	11.73	9.71	9.71
7	Return on Equity	17.97	23.78	20.05
8	Provision for Bad Debt	0.00	8.84	0.00
9	Income Tax	0.00	0.00	0.00
10	**Total Revenue Requirement**	**947.86**	**881.18**	**872.34**
11	Less: Non-Tariff Income	26.99	26.99	26.99
12	**Net Revenue Requirement**	**920.87**	**854.19**	**845.35**

The Commission approves net ARR of Rs 845.35 Cr for the FY 2018-19.

5.21. Revenue at existing Retail Tariff

Petitioner's submission

The revenue from sale of power at existing tariff of Rs 884.25 Cr is based on the projected energy sales, connected load and number of consumers.

Commission's analysis

The consumer category wise/ sub category wise and slab wise revenue at retail tariff is dependent on the sales of the Petitioner. In order to determine the revised estimates for the sales of the FY 2018-19 the Commission had sought the monthly sales details for the FY 2015-16, FY 2016-17 and FY 2017-18 (till December). However, in spite of repeated reminders, the Petitioner has failed to submit the same. The Commission has thus been constrained to apply suitable assumptions for the same as discussed in section 5.3 of this Order. As a result, the Commission has determined revised estimate of sales as 1,654.68 MU against 1,714.58 MU submitted by the Petitioner.

The category wise/ sub category wise and slab wise revenue at retail tariff is determined as per the applicable tariff rates. The revenue from demand charges and the energy charges has been projected for each category/ sub category and slab. The category/ sub category/ slab wise revenue as computed by the Commission for the FY 2018-19 has been shown in the table below:

Table 102: Revenue at existing tariff computed by Commission (In Rs Cr)

S. No.	Category	Phase	Fixed Charges (Rs Cr)	Energy charges (Rs Cr)	Total (Rs Cr)	ABR (Rs/unit)
1	**DOMESTIC SUPPLY (DS)**		**10.80**	**299.13**	**309.93**	**4.02**
1	0-150 units		3.08	84.52	87.60	2.64
2	151-400 units		4.16	122.10	126.26	4.96
3	401 and above units		3.57	92.50	96.07	5.19
2	**COMMERCIAL / NON RESIDENTIAL (NRS)**		**51.85**	**261.19**	**313.04**	**6.16**
1	0-150 units	Single	1.11	114.28	115.39	5.05
2	151-400 units	Single	0.00	0.00	0.00	
3	401 and above units	Single	0.00	0.00	0.00	
4	0-150 units	Three	0.00	0.00	0.00	
5	151-400 units	Three	4.22	110.92	115.14	5.40
6	401 and above units	Three	46.52	35.99	82.50	12.49
3	**INDUSTRY**		**13.41**	**147.96**	**161.37**	**5.99**
1	Large Industrial Power Supply (LS)		6.40	73.55	79.95	6.14
2	Medium Industrial Power Supply (MS)		6.53	63.78	70.31	5.90
3	Small Industrial Power Supply (SP)		0.48	10.63	11.11	5.54
4	**AGRICULTURAL PUMPING SUPPLY(AR)**		**0.00**	**0.46**	**0.46**	**2.90**
1	Agricultural Pumping Supply		0.00	0.46	0.46	2.90
5	**PUBLIC LIGHTING (PL)**		**0.85**	**10.89**	**11.75**	**5.77**
1	Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external Agency		0.85	10.89	11.75	5.77
2	Advertisement / Neon sign Boards- Advertisement boards, bill boards(apart from advertisement boards installed on commercial establishments and charged under commercial tariff)		0.00	0.00	0.00	
6	**BULK SUPPLY (BS)**		**5.15**	**44.34**	**49.48**	**6.19**
1	Bulk Supply		5.15	44.34	49.48	6.19

S. No.	Category	Phase	Fixed Charges (Rs Cr)	Energy charges (Rs Cr)	Total (Rs Cr)	ABR (Rs/unit)
7	**TEMPORARY SUPPLY**		**0.00**	**3.76**	**3.76**	**8.10**
1	Temporary Supply		0.00	3.76	3.76	8.10
	Sub-total		**82.06**	**767.73**	**849.79**	**5.14**
8	**FPPCA**				**0.00**	
	GRAND TOTAL				**849.79**	

The Commission has determined revenue from sale of power at existing tariff as Rs 849.79 Cr in the FY 2018-19.

5.22. Standalone Revenue Gap/ Surplus

Petitioner's submission

Based on the ARR and the revenue from retail tariff, the standalone revenue surplus of Rs 30.07 Cr is arrived at for the FY 2018-19.

Commission's analysis

The Commission based on the approved ARR and existing retail tariff has derived the following Revenue Gap/Surplus:

Table 103: Standalone Revenue Gap/ Surplus at existing tariff (In Rs Cr)

S. No	Particulars	Petitioners submission	Now Approved
1	Annual Revenue Requirement	854.19	845.35
2	Revenue from sale of power	884.25	849.79
3	FPPCA	0.00	0.00
	Revenue Gap/(Surplus)	**(30.07)**	**(4.44)**

The standalone surplus at existing retail tariff is Rs 4.44 Cr for the FY 2018-19. The estimated surplus is considered while determining the retail tariff for the FY 2018-19, as discussed in the subsequent Chapter.

6. Chapter 6: Tariff Principles and Design

6.1. Overall Approach

The Commission while designing retail tariffs for the FY 2018-19 has kept in view the principles of determination of tariff set out in the Electricity Act, 2003 (EA, 2003), Tariff Policy, 2016 and the MYT Regulations, 2014.

The Commission, with this Tariff Order, has tried to meet the objectives of the EA 2003, as set out in its Preamble, including the protection of the interest of consumers, the supply of electricity to all areas and the rationalisation of tariffs. The EA, 2003 also directs to maintain a healthy balance between the interests of the Utilities and the reasonableness of the cost of power being supplied to consumers. The Commission has also taken into consideration the CED's submissions as well as the public responses in these proceedings.

The provision of supply of electricity to all the people is an essential driver for development, and also influences social and economic change.

6.2. Applicable Regulations

Regulation 36 of MYT Regulations, 2014 states the following:

"a. The Commission shall gradually move towards reduction of cross subsidy in accordance with Electricity Act, Tariff Policy and such other guidelines of the government as applicable.

b. The Distribution Licensee shall compute the consumer category-wise cost of supply as per the methodology elaborated below.

c. Allocation of Cost: The Cost to serve shall be allocated to the consumer categories in the following manner:

Step 1: Functional Demarcation of Cost – Total cost shall be divided on the basis of functions performed such as power purchase, distribution etc.

Step 2: Classification of Cost –Each of the functionalized costs shall be further classified, based on its intrinsic nature into Demand related cost, Energy related cost and Customer related cost. Demand related costs shall generally be of fixed nature, related to capacity creation and shall include interest on capital borrowing, depreciation etc. Energy cost shall be related to quantum of electricity consumption of consumer, such as fuel cost, interest on working capital, etc. Consumer related cost shall include operating expenses associated with meter reading, billing and accounting.

Step 3: Allocation of Cost

(i) Allocation of Demand Costs: Demand costs of all three functions shall be allocated among consumer categories on the basis of average coincident peak demand of the tariff categories (average of past 12 months). To facilitate determination of average coincident peak demand for the various tariff categories, load research shall be made an integral part of the operations of the DISCOMs and systematic load research exercises shall be initiated.

(ii) Allocation of Energy Costs: Energy related costs of Distribution functions shall be allocated to consumer categories on the basis of ratio of electricity consumption of each consumer category to the total electricity consumption under the purview of the Distribution Licensee. Energy related costs of Power purchase shall be allocated to various tariff categories on the basis of block approach on merit order dispatch and incremental principle, where each tariff category shall be allocated the incremental (energy related) power purchase cost on the basis of their respective share in the incremental power purchase. For the purpose of operationalizing the block approach and incremental principle, the Commission shall identify and notify a suitable year as the "base year".

(iii) Allocation of Customer Costs: Customer related costs shall be allocated to consumer categories on the basis of the ratio of number of consumers in each category to total number of consumers under the purview of the Distribution Licensee.

d. Summation of allocated Demand cost, Energy cost and Customer cost across functions shall be total Cost to serve for respective consumer categories. Cost to serve reduced by revenue from a consumer category shall give total subsidy for that category. Total subsidy for a consumer category reduced by Government subsidy, if any, shall be cross-subsidy for that consumer category.

e. The consumers below poverty line who consume power below a specified level, say 30 units per month, shall receive a special support through cross subsidy.

f. Cross-subsidy surcharge and additional surcharge in Open Access

(i) The amount received or to be received by the licensee on account of cross-subsidy surcharge and additional surcharge, as approved by the Commission from time to time in accordance with the Regulations specified by the Commission, shall be shown separately against the consumer category that is permitted open access as per the phasing plan.

(ii) Cross-subsidy surcharge and additional surcharge shall be shown as revenue from the tariff from the consumer categories who have been permitted open access and such amount shall be utilized to meet the cross-subsidy requirements of subsidized categories and fixed costs of the Distribution Licensee arising out of his obligation to supply. Provided that the licensee shall provide such details in its annual filings.

g. Tariff Design

(i) The Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.

(ii) After the costs have been allocated based on the method specified in clauses I and (d) above, tariffs for different consumer categories shall be designed with due regard to factors provided under section 62(3) of the Act.

(iii) The time of day tariff would be structured across three time slabs to denote normal, peak and off-peak periods. The time-periods would vary according to different seasons of the year i.e. summer, winter and the monsoon season. The peak tariff would be 10%-20% higher than the normal tariff and the off-peak tariff would be priced 5%-10% lower than the normal tariff.

(iv) Time of Day tariff may be introduced in a phased manner, wherein in phase 1 it would be for HT Consumers, in phase 2 – for LT consumers consuming more than 25 KW and in phase 3 for LT consumers consuming more than 10 KW."

6.3. Cumulative Revenue Gap/ Surplus

Petitioner's Submission

The Petitioner has proposed a cumulative revenue gap of Rs 190.28 Cr till the FY 2018-19. Besides the gap of Rs 275.85 Cr approved by the Commission in the True-up of the FY 2015-16, the Petitioner has also proposed the recovery of Rs 208.17 Cr, the gap recognized by the Commission for the period of the FY 2010-11 to the FY 2013-14.

Table 104: Revenue Gap/ Surplus submitted by Petitioner (In Rs Cr)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening gap/(surplus)	275.85	333.73	220.34
Add: Approved revenue gap/(surplus) for the FY 2010-11 to FY 2013-14	208.17	0.00	0.00
Add: Gap/(surplus) during the year	(189.05)	(160.27)	(30.07)
Add: Amortization of Regulatory asset	0.00	0.00	0.00
Closing	294.97	173.45	190.28
Interest rate	14.05%	14.05%	14.05%

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Carrying cost	38.76	46.89	-
Closing gap/(surplus)	**333.73**	**220.34**	**190.28**

Commission's analysis

In the MYT order dated 28th April 2016, the Commission had ordered that

"The Commission is also of the view that historically, in the absence of the audited accounts, the Commission had approved expenses and income as sought by the Petitioner. However, there has been repeated non-compliance by the Petitioner i.e. on account of delay in finalization of the audited accounts based on commercial principles and the preparation of Fixed Asset Register which prevented the Commission from ascertaining the actual expenses and revenue. This has eventually resulted in substantial disallowances over a period of time and non-recovery of the actual costs in a time bound manner.

Further, 8.1.7 of Tariff Policy 2016 provides that

Quote
"...... it is desirable that the requisite tariff changes come into effect from the date of the commencement of the each financial year and any gap on account of delay in filing should be on account of licensee."
Unquote

The Commission is of the view that had the Petitioner filed the True-up Petitions for FY 2011-12, FY 2012-13 and FY 2013-14 in the stipulated time frame, the requisite tariff changes on account of additional gaps in these years would have come into effect from the date of commencement of the respective financial years. As there was substantial delay in filing of the True-ups by the Petitioner, the Commission is of the view that resultant gap should be on account of licensee only.
The Commission is strictly of the view that while inefficiencies of the Petitioner should not be passed on to the consumers, at the same time the utility should not be devoid of its due amount. ***The Commission orders that the Petitioner, being a Government Department, should approach the Government to provide budgetary support to meet this approved revenue gap of Rs 208.17 Crores.***
Accordingly, the Commission is not carrying forward this gap of Rs 208.17 Crores in future years*."*

The Commission observes that the Petitioner has approached the Government for budgetary support as per the directions of the Commission. Following the request of the Petitioner, the Finance Secretary cum Secretary (Engineering), being the competent authority of the Chandigarh Administration, has conveyed the inability of the government to provide this budgetary support and has requested the JERC that the order regarding disallowance of revenue gap of 208.17 Cr. may be reconsidered to ensure financial viability of the Petitioner.

In light of these facts the Commission has decided to consider the revenue gap of 208.17 Cr disallowed in the earlier Orders. However, the Commission notes that due to reasons attributable to the Petitioner, there was a delay in preparation and submission of audited accounts and Fixed Asset Register (still under process), and therefore it would not be prudent to burden the consumers with the carrying cost on this amount. The Commission has thus not considered any carrying cost on the gap of Rs 208.17 Cr. The Commission has only allowed the carrying cost (at 8%) on the revenue gap of Rs 275.85 Cr till 31st March 2016, approved by the Commission in the APR Order.

Taking into account the previous gap, the Commission determines the consolidated revenue gap/ surplus at the end of FY 2018-19 as shown below:

Table 105: Standalone Revenue Gap/ Surplus determined by Commission (In Rs Cr)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Net Revenue Requirement	740.48	808.85	845.35

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Revenue from Retail Sales at Existing Tariff	814.85	817.65	849.79
FPPCA	121.23	109.96	0.00
Total revenue	936.08	927.61	849.79
Standalone Gap /(Surplus) for the year	**(195.60)**	**(118.76)**	**(4.44)**

Table 106: Consolidated Revenue Gap/ Surplus determined by Commission (In Rs Cr)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening Gap /(Surplus)	275.85	94.49	(21.45)
Addition Gap /(Surplus) during the year	(195.60)	(118.76)	(4.44)
Closing Gap /(Surplus)	80.25	(24.26)	(25.89)
Average Gap /(Surplus)	178.05	35.12	(23.67)
Rate of Interest	8.00%	8.00%	8.00%
Carrying/Holding cost	14.24	2.81	(1.89)
Final Closing Gap /(Surplus)	**94.49**	**(21.45)**	**(27.79)**
Cumulative Gap/(Surplus) for the FY 2010-11 to FY 2013-14			**208.17**
Final Closing Gap/ (Surplus)			**180.38**

The Commission determines a consolidated revenue gap of Rs 180.38 Cr till the FY 2018-19 at existing tariff.

6.4. Treatment of the cumulative Gap/ Surplus and Tariff Design

The Commission has estimated that the Petitioner will have consolidated revenue gap of Rs 180.38 Cr at the end of the FY 2018-19 at the existing tariff. However, it is pertinent to note that the revenue estimated by the Commission at the existing tariff is covering the standalone expenditure of the Petitioner for the FY 2018-19, indicating the adequacy of the existing tariffs. However, in order to make the tariff structure more cost reflective the Commission has tried to rationalize the tariffs across consumer categories as discussed in the following sections.

Since the cumulative revenue gap is substantial, recovering this entirely from increase in consumer tariffs may lead to a tariff shock and at the same time may warrant reduction in tariff in next year. Hence, the Commission proposes to recover this gap by imposing Regulatory Surcharge for each consumer category.

6.4.1. Tariff Proposal

Petitioner's Submission

1. The Petitioner has requested the creation of new consumer categories as follows:
    a. Domestic misuse consumer category for domestic consumers/temporary domestic consumers conducting commercial activities on their premises
    b. Temporary domestic and Temporary NRS Consumer for residents of JJ Clusters/ Slum Dwellers/ Unauthorized Colonies and Structure/ Resident outside Lal Dora
    c. Tariff for Electric Vehicle Charging Stations/ Charging infrastructure/ Battery Swap. Proposal that the activity of usage of power for Charging Infrastructure/ Battery swap be recognized as an NRS activity
2. The Petitioner has requested for certain modifications in respect of 'Applicability' of tariff categories such as Domestic, Commercial and Industrial (Medium and Small)
3. Modifications regarding the clauses on contracted demand, advance payment rebate, LT surcharge, etc. have been proposed under the 'General terms for HT and LT supply'
4. The Petitioner has also requested for the modification in the 'Schedule of Charges' for certain services

Also, since the computed revenue at existing tariff for the FY 2018-19 is inadequate to meet the projected annual revenue requirement & Gap, accordingly the CED has proposed a revision in retail tariff for various categories for FY 2018-19. The category wise existing and proposed tariff submitted by the Petitioner is as follows:

Table 107: Retail tariff proposed by the Petitioner (In Rs Cr)

S. No.	Category	Existing		Proposed	
		Fixed Cost (Rs/kW/month)	Variable Cost (Rs/kWh)	Fixed Cost (Rs/kW/month)	Variable Cost (Rs/kWh)
1	**DOMESTIC SUPPLY (DS)**				
1	0-150 units	10.00	2.55	12.00	2.75
2	151-400 units	10.00	4.80	12.00	5.80
3	401 and above units	10.00	5.00	12.00	6.00
2	**COMMERCIAL / NON RESIDENTIAL (NRS)**				
1	0-150 units	20.00	5.00	24.00	6.20
2	151-400 units	100.00	5.20	122.00	6.45
3	401 and above units	100.00	5.45	122.00	6.75
3	**INDUSTRY**				
1	Large Industrial Power Supply (LS)	100.00	5.65	122.00	7.00
2	Medium Industrial Power Supply (MS)	100.00	5.35	122.00	6.45
3	Small Industrial Power Supply (SP)	20.00	5.30	24.00	6.40
4	**AGRICULTURAL PUMPING SUPPLY(AR)**				
1	Agricultural Pumping Supply		2.90		2.90
5	**PUBLIC LIGHTING (PL)**				
1	Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external Agency	100.00	5.35	122.00	6.40
2	Advertisement / Neon sign Boards- Advertisement boards, bill boards(apart from advertisement boards installed on commercial establishments and charged under commercial tariff)	100.00	7.10		
6	**BULK SUPPLY (BS)**				
1	Bulk Supply	100.00	5.55	122.00	6.60

S. No.	Category	Existing		Proposed	
		Fixed Cost (Rs/kW/month)	Variable Cost (Rs/kWh)	Fixed Cost (Rs/kW/month)	Variable Cost (Rs/kWh)
7	**TEMPORARY SUPPLY**				
1	Temporary Supply		8.10		9.50

Commission's analysis

As discussed above, the Commission has determined the retail tariff for the FY 2018-19 in accordance with the principles stated in the Electricity Act, 2003 Tariff Policy, 2016, and the MYT Regulations, 2014.

Tariff design in general is guided by the following principles:

1. Cost reflective: The tariffs determined should efficiently reflect the cost of supply for each consumer category.

2. Progressive tariffs: Ensuring progressivity among tariffs by having telescopic tariff slabs which encourages efficient consumption and at the same time promotes intra-category cross-subsidy by way of charging higher tariff for higher consumption to subsidise the lower consumption consumers

3. Revenue neutrality: There should be no impact on the utility's yearly revenue due to rationalization of tariffs i.e. the overall status quo should be maintained.

4. Affordability: Assessing affordability of electricity for Domestic & Commercial consumers for defining slab ranges and setting tariffs

5. Revenue stability: Utilities should ensure adequate fixed cost recovery from fixed/demand charges

6. Avoiding tariff shocks: Tariff shocks should be prevented and consumers should be kept informed about the future trends in tariffs

7. Demand management and grid stability: Demand management and grid stability should be ensured with demand-based tariffs

8. Simplified tariff structure: Tariff structure should be simplified to make it easily administrable by the utility and easy to understand for the consumer.

9. Smart tariff design: Tariff rate design should take into consideration trends in electric power such as small scale renewable generation by consumers, energy efficiency, electric vehicle charging, etc.

The Petitioner has proposed certain changes in the Tariff Schedule most of which were also proposed by the Petitioner in its previous petition which have been discussed in detail in the subsequent paras:

1. Creation of new consumer categories

a. Domestic Misuse Consumer Category

The Commission has noted the Petitioner's submission with regard to commercial or other non-domestic activities, like opening of grocery shop, welding shop, scooter repairing shop, etc. being carried out by domestic category consumers and the subsequent submission of the Petitioner to create a separate category for such consumers.

The Commission is of the view that there are adequate provisions in the Electricity Act and the JERC Supply code, which should be implemented by the Petitioner in order to address such cases and prevent misuse. The Commission has thus not accepted this proposal of the Petitioner

b. Temporary Domestic & Temporary NRS Consumer Category

The Petitioner has conveyed its difficulty with regard to releasing electricity connections to JJ Clusters/ Slum Dwellers/ Unauthorized Colonies and Structure/ Resident outside Lal Dora. In the MYT Order dated 28th April 2016, the Commission had quoted the Judgment of Hon'ble High court and mentioned that:

"The Commission is of the view that since these sites are not of permanent/ regularized nature, the High Court had given the verdict wherein the rights to permanent installations of meters were not given.

At the same time, the proposal of the Petitioner is not in line with the provisions of Electricity Act, 2003. The Commission is of the view that supply is to be given through regular connections only. Keeping in view of the High Court Judgment, these connections should be released with a proviso that installation of meters is an interim arrangement for and can in no way be construed as right to permanent installation of meters.

In case of any operational difficulties, the Petitioner can also opt for other options as per Electricity Act, 2003 and amendments thereon. However, there shall be no change in category of consumers, conditions of supply or applicable tariff."

The Petitioner has conveyed that in the absence of adequate documents available with the prospective consumers, the Petitioner is not able to provide permanent electricity connections to such consumers as per the Supply Code.

The Commission is of the view that the issue being faced by the Petitioner pertains to the Electricity Supply Code and should not be addressed in the Tariff proceedings. The Petitioner is therefore advised to submit a separate petition to the Commission to address this issue with regard to the Supply Code.

c. Tariff for Electric Vehicle Charging Stations/ Charging infrastructure/ Battery Swap

The Commission has noted the submission of the Petitioner. The Commission believes that the demand for charging infrastructure for electric vehicles will increase in the near future due to increased commercialization. However, the Commission would require the Petitioner to submit data on the number of consumers, connected load and the anticipated demand to enable the Commission to determine the tariff accurately as it will impact the Petitioner's revenue. The Petitioner in this regard is directed to submit a proposal for creation of any such category backed with the requisite data along with the next tariff petition.

2. Request for modification of Applicability, General terms for HT and LT supply and Schedule of other charges

The Commission considered all the proposals of the Petitioner and has accordingly addressed the specific submissions in the sections 8.2, 8.3 and 8.4 of this Tariff Order.

Keeping in view the above principles, the Commission has determined and restructured the Retail Tariff applicable for FY 2018-19 as per the following:

1. An increase of Rs 0.20/kWh has been made for the Domestic consumer category slabs of 0-150 kWh and 401-above kWh. This has been done to ensure a more rational distribution of tariff across the slabs of the Domestic consumer category and also to make the individual slabs more cost reflective.

2. Along similar lines, a small increase in the Commercial consumer category slabs of 151-400 kWh and 410-above kWh has been made.

3. Relatively higher tariff increase has been done for cross-subsidized categories such as Domestic than cross-subsidizing categories such as Commercial, Industrial category, in order to ensure that tariffs progressively reflect the cost of supply.

4. In order to promote the crucial Industrial consumer category, especially small industries, the Commission has decided to decrease the energy charges being paid by these consumers while making the fixed charges being made more cost reflective. This has resulted in decrease in tariff by 7% for small industries. An overall decrease of 0.37% has been approved for the Industrial consumer category.

5. The Commission has similarly decided to decrease the energy charges being paid by the Bulk Supply consumer category while making the fixed charges more cost reflective. A total decrease of 0.09% has been imposed on the Bulk Supply consumer category.

6.4.2. Tariff Adjustment and Schedule:

The existing retail tariff and tariff now approved by the Commission for each consumer category has been shown in the table below:

Table 108: Existing and approved tariff

S. No.	Category	Existing		Proposed	
		Fixed Cost (Rs/kW/month)	Variable Cost (Rs/kWh)	Fixed Cost (Rs/kW/month)	Variable Cost (Rs/kWh)
1	**DOMESTIC SUPPLY (DS)**				
1	0-150 units	10.00	2.55	10.00	2.75
2	151-400 units		4.80	10.00	4.80
3	401 and above units		5.00	10.00	5.20
2	**COMMERCIAL / NON RESIDENTIAL (NRS)**				
1	0-150 units (single phase)	20.00	5.00	20.00	5.00
2	151-400 units (single phase)		5.20		5.30
3	401 and above units (single phase)		5.45		5.60
4	0-150 units (three phase)	100.00	5.00	100.00	5.00
5	151-400 units (three phase)		5.20		5.30
6	401 and above units (three phase)		5.45		5.60
3	**INDUSTRY**				
1	Large Industrial Power Supply (LS)	100.00	5.65	200.00	5.00

S. No.	Category	Existing		Proposed	
		Fixed Cost (Rs/kW/month)	Variable Cost (Rs/kWh)	Fixed Cost (Rs/kW/month)	Variable Cost (Rs/kWh)
2	Medium Industrial Power Supply (MS)	100.00	5.35	200.00	4.70
3	Small Industrial Power Supply (SP)	20.00	5.30	30.00	4.80
4	**AGRICULTURAL PUMPING SUPPLY(AR)**				
1	Agricultural Pumping Supply		2.90		2.90
5	**PUBLIC LIGHTING (PL)**				
1	Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external Agency	100.00	5.35	100.00	5.35
2	Advertisement / Neon sign Boards- Advertisement boards, bill boards(apart from advertisement boards installed on commercial establishments and charged under commercial tariff)	100.00	7.10	100.00	7.10
6	**BULK SUPPLY (BS)**				
1	Bulk Supply	100.00	5.55	200.00	4.90
7	**TEMPORARY SUPPLY**				
1	Temporary Supply		8.10		8.10

6.4.3. Revenue from Approved Retail Tariff for FY 2018-19

Based on the retail tariff approved above, the Revenue from approved tariff is shown in the table below:

Table 109: Revenue from approved retail tariff determined by Commission (In Rs Cr)

S. No.	Category	Fixed Charges (Rs Cr)	Energy charges (Rs Cr)	Total (Rs Cr)	ABR (Rs/unit)	K Factor
1	**DOMESTIC SUPPLY (DS)**	**10.80**	**309.46**	**320.26**	**4.15**	**0.80**
1	0-150 units	3.08	91.15	94.23	2.84	0.55
2	151-400 units	4.16	122.10	126.26	4.96	0.95
3	401 and above units	3.57	96.20	99.77	5.39	1.03

S. No.	Category	Fixed Charges (Rs Cr)	Energy charges (Rs Cr)	Total (Rs Cr)	ABR (Rs/unit)	K Factor
2	**COMMERCIAL / NON RESIDENTIAL (NRS)**	**51.85**	**264.31**	**316.16**	**6.22**	**1.19**
1	0-150 units (single phase)	1.11	114.28	115.39	5.05	0.97
2	151-400 units (single phase)	0.00	0.00	0.00		0.00
3	401 and above units (single phase)	0.00	0.00	0.00		0.00
4	0-150 units (three phase)	0.00	0.00	0.00		0.00
5	151-400 units (three phase)	4.22	113.06	117.28	5.50	1.05
6	401 and above units (three phase)	46.52	36.98	83.49	12.64	2.43
3	**INDUSTRY**	**30.02**	**130.75**	**160.77**	**5.97**	**1.14**
1	Large Industrial Power Supply (LS)	14.51	65.09	79.59	6.11	1.17
2	Medium Industrial Power Supply (MS)	14.80	56.03	70.83	5.94	1.14
3	Small Industrial Power Supply (SP)	0.72	9.63	10.34	5.16	0.99
4	**AGRICULTURAL PUMPING SUPPLY(AR)**	**0.00**	**0.46**	**0.46**	**2.90**	**0.56**
1	Agricultural Pumping Supply	0.00	0.46	0.46	2.90	0.56
						0.00
5	**PUBLIC LIGHTING (PL)**	**0.85**	**10.89**	**11.75**	**5.77**	**1.11**
1	Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external Agency	0.85	10.89	11.75	5.77	1.11
2	Advertisement / Neon sign Boards- Advertisement boards, bill boards(apart from advertisement boards installed on commercial establishments and charged under commercial tariff)	0.00	0.00	0.00		0.00
						0.00
6	**BULK SUPPLY (BS)**	**10.29**	**39.14**	**49.44**	**6.19**	**1.19**
1	Bulk Supply	10.29	39.14	49.44	6.19	1.19
						0.00
7	**TEMPORARY SUPPLY**	**0.00**	**3.76**	**3.76**	**8.10**	**1.55**
1	Temporary Supply	0.00	3.76	3.76	8.10	1.55
	SUB-TOTAL	**103.82**	**758.77**	**862.60**	**5.21**	
	GRAND TOTAL			**862.60**		

The Commission approves revenue from approved Retail Tariff of Rs 862.60 Cr for the FY 2018-19 against a Net Revenue Requirement of Rs 845.35 Cr

The average increase in the retail tariff now approved by the Commission vis-à-vis the prevailing tariff is 1.51%. The table below provides the category wise Average Cost of Supply (ACoS), Existing Average Billing Rate (ABR), Approved ABR and the existing and approved recovery vis-à-vis the (ACoS).

Table 110: Tariff increase approved by Commission

Category	ACoS (Rs/kwh)	ABR at Existing Tariff (Rs/kwh)	ABR at Approved Tariff (Rs/kwh)	Increase (%)
Domestic	5.11	4.02	4.15	3.33%
Commercial	5.11	6.16	6.22	1.00%
Large Industrial supply	5.11	6.14	6.11	-0.44%
Medium Industrial supply	5.11	5.90	5.94	0.74%
Small Industrial Supply	5.11	5.54	5.16	-6.88%
Agriculture	5.11	2.90	2.90	0.00%
Public lighting	5.11	5.77	5.77	0.00%
Bulk supply	5.11	6.19	6.19	-0.09%
Temp. Supply	5.11	8.10	8.10	0.00%
Total	**5.11**	**5.14**		**1.51%**

6.4.4. Regulatory Surcharge

As is evident from the above, with an average tariff increase of 1.51%, the revenue from Approved Retail Tariff recovers the standalone Net Revenue Requirement of the FY 2018-19. The Commission has tried to limit the tariff increase in each category in order to safeguard the interests of consumers by avoiding abnormal increase in tariffs. However, the cumulative revenue gap till the end of the FY 2018-19 resulting from the True-up of the years the FY 2010-11 to the FY 2013-14 is yet to be recovered. The table below provides the cumulative revenue gap till the FY 2018-19.

Table 111: Revenue Gap/ Surplus without Regulatory Surcharge (In Rs Cr)

Particulars		FY 2016-17	FY 2017-18	FY 2018-19
Opening Gap/(Surplus)	A	**275.85**	**94.49**	**(21.45)**
Gap/(Surplus) for the year				
Net Revenue Requirement	B	740.48	808.85	845.35
Revenue from Retail Sales at Existing Tariff (including FPPCA)	C	936.08	927.61	849.79
Revenue from Retail Sales at Proposed Tariff (including FPPCA)	D	936.08	927.61	862.60
Addition Gap/(Surplus) (without regulatory surcharge)	E=B-D	**(195.60)**	**(118.76)**	**(17.25)**
Closing Gap/(Surplus)	F=A+E	**80.25**	**(24.26)**	**(38.70)**
Average Gap/(Surplus)	G=(A+F)/2	178.05	35.12	(30.08)
Rate of Interest	H	8.00%	8.00%	8.00%
Carrying cost	I=G*H	14.24	2.81	(2.41)
Closing Gap/ (Surplus)	J=F+I	**94.49**	**(21.45)**	**(41.11)**

Particulars		FY 2016-17	FY 2017-18	FY 2018-19
Cumulative Gap/(Surplus) for the FY 2010-11 to FY 2013-14	K			**208.17**
Final Closing Gap/ (Surplus)	L=J+K			**167.06**

It can be observed from the table above that the increase in tariff is not enough to recover the cumulative revenue gap. Therefore, the Commission in order to recover the revenue gap, has decided to impose a Regulatory Surcharge of 5.00%. The Surcharge shall be applicable on all consumer categories. The revenue from the Regulatory Surcharge, and the resultant gap after factoring in the additional revenue from Regulatory Surcharge has been discussed subsequently.

Applicability and Conditions of the Regulatory Surcharge

- This Regulatory Surcharge shall be applicable to all consumer categories served by the Petitioner.
- The Surcharge shall also be applicable to consumers opting for open access.
- The Regulatory Surcharge shall be levied in the monthly/ bimonthly bill as a percentage of the total Energy and Demand charges payable by the consumer
- The Surcharge shall be applicable for all the bills raised on or after 1st April 2018 and shall continue till further Orders of the Commission.

6.4.5. *Revised Revenue Gap/ Surplus*

On considering the additional revenue from tariff increase and the Regulatory Surcharge, the resultant Revenue Gap/Surplus has been shown in the table below:

Table 112: Revised Revenue Gap/ Surplus with Regulatory Surcharge approved by Commission (In Rs Cr)

Particulars		FY 2016-17	FY 2017-18	FY 2018-19
Opening Gap/(Surplus)	A	**275.85**	**(94.49)**	**(21.45)**
Gap/(Surplus) for the year				
Net Revenue Requirement	B	740.48	808.85	845.35
Revenue from Retail Sales at Existing Tariff (including FPPCA)	C	936.08	927.61	849.79
Revenue from Retail Sales at Proposed Tariff (including FPPCA)	D	936.08	927.61	862.60
Impact of regulatory surcharge at 5%	E	0.00	0.00	43.13
Total Revenue at Proposed Tariff	F=D+E	936.08	927.61	905.73
Addition Gap/(Surplus) (with regulatory surcharge)	G=B-F	**(195.60)**	**(118.76)**	**(60.38)**
Closing Gap/(Surplus)	H=A+G	**80.25**	**(24.26)**	**(81.83)**
Average Gap/(Surplus)	I=(A+H)/2	178.05	35.12	(51.64)
Rate of Interest	J	8.00%	8.00%	8.00%
Carrying cost	K=I*J	14.24	2.81	(4.13)
Closing Gap/ (Surplus)	L=H+K	**(94.49)**	**(21.45)**	**(85.96)**
Cumulative Gap/(Surplus) for the FY 2010-11 to FY 2013-14	M			**208.17**

Particulars		FY 2016-17	FY 2017-18	FY 2018-19
Final Closing Gap/ (Surplus)	N=L+M			**122.21**

The Commission approves a cumulative revenue gap of Rs 122.21 Cr till FY 2018-19.

7. Chapter 7. Open Access Charges for the FY 2018-19

7.1. Determination of Wheeling Charges

7.1.1. Allocation Matrix - Allocation of ARR into Wheeling and Retail Supply of Electricity

Petitioner's submission:

The Petitioner has not submitted details of allocation between wheeling and retail business for the FY 2018-19 as the same has not been segregated by the Petitioner so far.

Commission's analysis:

It is seen from the Petitioner's submission that the Transmission and Distribution business has not been segregated and the CED continues to function as an integrated utility. The Commission has a firm view that there has to be a proper bifurcation of all the expenses pertaining to the Petitioner between the functions of the wheeling business (wire business) and the retail supply business.

The Commission for the purpose of bifurcation of wheeling and retail ARR, is guided by the Staff Paper on "Operationalisation of Open Access in the State of Goa and UT's". The allocation between wheeling and retail supply business for the FY 2018-19 as per the ARR approved in this Order is provided in the following table:

Table 113: Allocation matrix approved by Commission

Sr. No.	Particulars	Allocation (%)		FY 2018-19		
		Wheeling	Supply	Wheeling	Supply	Total
1	Cost of power purchase for full year	*0%*	*100%*	0.00	737.02	737.02
3	Employee costs	*70%*	*30%*	52.07	22.31	74.38
4	Administration and General Expenses	*50%*	*50%*	3.55	3.55	7.10
5	Repair and Maintenance Expenses	*90%*	*10%*	9.46	1.05	10.51
6	Depreciation	*90%*	*10%*	10.75	1.19	11.94
7	Interest and Finance charges	*90%*	*10%*	1.47	0.16	1.63
8	Interest on Working Capital	*22%*	*78%*	0.00	0.00	0.00
9	Interest on consumer security deposit	*22%*	*78%*	2.14	7.57	9.71
10	Return on NFA /Equity	*90%*	*10%*	18.04	2.00	20.05
11	Provision of Bad & Doubtful Debt	*0%*	*100%*	0.00	0.00	0.00
12	**Total Revenue Requirement**			**97.47**	**774.87**	**872.34**
13	Less: Non-Tariff Income	*0%*	*100%*	0.00	26.99	26.99
14	**Net Revenue Requirement**			**97.47**	**747.88**	**845.35**

To determine the wheeling charges, the wheeling costs are allocated on the basis of voltage levels. The wheeling charges are levied for distribution network utilized by the Open Access consumers and primarily comprises of O&M Expenses and other costs as provided in the table above.

The methodology adopted for allocating the derived wheeling costs at respective voltage levels has been elaborated as follows:

- O&M Expenses consisting of Employee, A&G and R&M expenses are allocated to each voltage level on the basis of number of consumers.
- All expenses other than the O&M expenses are allocated to each voltage level on the basis of voltage wise asset allocation. The Petitioner in this regard was directed to submit the voltage wise asset allocation but has failed to submit the desired information and in the absence of such information, the Commission has assumed the voltage wise asset allocation shown in the table below.
- The resultant cost at HT/EHT voltage level is divided among LT and HT/EHT voltage levels on the basis of input energy at respective voltage levels as the HT/EHT network is used by consumers at all voltage levels. The cost at LT voltage level is allocated completely to LT voltage level

The energy input has been determined assuming the loss level of HT/EHT voltage as 3.95%, same as that approved in the Tariff Order of the FY 2017-18. The Petitioner in this regard has failed to submit the voltage wise losses. The resultant losses have been loaded to the LT voltage level in order to maintain the overall Intra-State T&D loss at 12.25% as approved in the ARR of the FY 2018-19 above.

In case the Petitioner submits the voltage wise asset allocation in due course, the Commission shall review the same based on the actual information provided. The voltage wise asset allocation assumed and the number of consumers in each category has been shown as follows:

Table 114: Parameters assumed for voltage wise allocation of wheeling charges

Category	Consumers	Sales (MU)	Asset Allocation (%)	Voltage wise Losses (%)	Energy Input (MU)
LT	229,037	1,406.09	60.00%	15.70%	1,626.86
HT & EHT	1,485	248.59	40.00%	3.95%	258.82
Total	**230,522**	**1,654.68**	**100%**	**12.25%**	**1,885.67**

Accordingly, the Commission approves the Wheeling Charges as follows:

Table 115: Wheeling Charges approved by Commission

Category	O&M	Others	Total	Wheeling Charges (Rs/kWh)
LT	64.66	19.44	84.09	0.68
HT & EHT	0.42	12.96	13.38	0.07
	65.08	**32.40**	**97.47**	

The Commission approves wheeling charge of Rs 0.68/ kWh at LT voltage level, and Rs 0.07/kWh at HT/EHT voltage level

7.2. Determination of Additional Surcharge

Petitioner's submission:

No submission has been made by the Petitioner in this regard.

Commission's analysis:

The Commission has notified the Joint Electricity Regulatory Commission for the State of Goa And Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017. Regulation 4.5 (1) of the said Regulations states the following:

"An Open Access Consumer, receiving supply of electricity from a person other than the Distribution Licensee of his area of supply, shall pay to the Distribution Licensee an additional surcharge in addition to wheeling charges and cross-subsidy surcharge, to meet the fixed cost of such Distribution Licensee arising out of his obligation to supply as provided under sub-section (4) of Section 42 of the Act:

Provided that such additional surcharge shall not be levied in case Open Access is provided to a person who has established a captive generation plant for carrying the electricity to the destination of his own use."

Regulation 4.5 (2) of the said Regulations stipulates:

This additional surcharge shall become applicable only if the obligation of the Licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear fixed costs by the Licensee consequent to such a contract. However, the fixed costs related to network assets would be recovered through wheeling charges.

Further, Regulation 5.2 (1) (b) states the following:

The quantum of drawal of electricity by a partial Open Access Consumer from the Distribution Licensee during any Time Block of a Day should not exceed the "Admissible Drawl of Electricity by the Open Access Consumer" which is the difference of Contract Demand and maximum quantum of Open Access for which approval has been granted by the Nodal Agency.

[Illustration: If an Open Access Consumer with a Contract Demand of 10 MW has been given an approval for a maximum Open Access quantum of 6MW for a period of 3 Months, the Admissible Drawl of Electricity from the Distribution Licensee during any Time Block shall be 4 MW for any Day during a period of 3 Months.]"

Therefore, in accordance with the above Regulations, the Commission has determined the Additional Surcharge as per the following:

Table 116: Additional Surcharge approved by Commission

Particulars	FY 2018-19
Total Power Purchase cost approved	**737.02**
Fixed Cost component in Power Purchase Cost (excluding Transmission Charges)	156.04
Energy Sales (MU)	1,654.68
Additional Surcharge (Rs/kWh)	**0.94**

Earlier, a consumer availing Open Access was required to pay fixed charges on contracted load even when the load was drawn partially from the Distribution Licensee. In addition, the consumer was also required to pay wheeling charges, additional surcharge and the cross-subsidy surcharge. As per the Open Access Regulations, 2017, a consumer now is only required to pay fixed charges on Admissible Drawl rather than on total contracted load.

The Commission approves an Additional Surcharge of Rs 0.94/kwh for the FY 2018-19.

The Commission directs the Petitioner to submit quarterly details of power stranded on account of consumers opting for open access along with the Additional Surcharge recovered from these consumers. The Commission will analyse the information and change the applicable Additional Surcharge, if required.

7.3. Cross-Subsidy Surcharge

Petitioner's submission:

The Petitioner has not submitted any computation of Cross subsidy surcharge.

Commission's analysis:

The Commission has used the cumulative losses at each voltage level as determined above to calculate the energy input at each voltage level.

Table 117: Energy Input at each voltage level (MU)

Category	Energy Sales (MU)	Cumulative Losses (%)	Energy Input (MU)
LT	1,406.09	15.70%	1,626.86
HT & EHT	248.59	3.95%	258.82
Total	**1,654.68**	**12.25%**	**1,885.67**

Now the overall ARR approved for FY 2018-19 is divided into variable and fixed ARR with variable ARR comprising of variable power purchase cost and fixed ARR comprising of all the other costs.

The fixed component comprising of fixed cost of power purchase, O&M etc. is further allocated to each voltage category as per the following principles:

- The fixed cost of power purchase is assigned to each voltage level on the basis of energy input at respective voltage levels.
- The O&M expenses are allocated to each voltage level on the basis of the number of consumers. The resultant cost allocated to HT/EHT level is then further allocated to LT level on the basis of input energy, as the HT/EHT network is utilized by both HT/EHT and LT network consumers.
- The remaining fixed costs are allocated on the basis of voltage wise asset allocation assumed earlier and further allocated to respective voltage levels on the basis of input energy.

Table 118: Parameters used for allocation of fixed costs

Category	Energy Input (MU)	Voltage wise Asset Allocation (%)	Number of Consumers
LT	1,626.86	60.00%	229,037
HT & EHT	258.82	40.00%	1,485
Total	**1,885.67**	**100%**	**230,522**

The Variable component of the Power purchase cost is allocated on the basis of energy input.

The Voltage wise cost of supply (VCoS) is then determined on the basis of energy sales of respective categories.

Accordingly, the VCoS is determined as shown in the table below:

Table 119: Voltage Wise Cost of Supply (VCoS)

Category	Allocated Fixed Cost (Rs. Cr.)	Allocated Variable Cost (Rs. Cr.)	Total Cost (Rs. Cr.)	Energy Sales (MU)	VCoS (Rs./kwh)
LT	299.90	443.31	743.21	1,406.09	5.29
HT & EHT	31.61	70.53	102.14	248.59	4.11
Total	**331.52**	**513.83**	**845.35**	**1,654.68**	

The VCoS as determined above is used to determine the Cross-Subsidy Surcharge

Table 120: Cross-Subsidy Surcharge

Category	VCoS (Rs/kWh)	ABR (Rs./kWh)	Cross- Subsidy (Rs./kWh)
LT	5.29	5.06	-0.22
HT & EHT	4.11	6.05	1.94

The Cross-Subsidy Surcharge is coming out to be negative for LT voltage level and Rs. 1.94/kWh for HT/EHT voltage level.

Therefore, the Commission approves nil Cross-Subsidy Surcharge at LT Voltage level and Rs. 1.94/kWh at HT/EHT Voltage level, in FY 2018-19.

8. Chapter 8: Tariff Schedule

8.1. Tariff Schedule

Table 121: Tariff Schedule

S. No	Consumer Category	Consumption Range	Fixed Charge Rs. per kW/Month	Energy Charge Rs./kWh
1	**DOMESTIC SUPPLY (DS)**			
	Domestic Supply (DS)	0-150 kWh	Rs. 10/kW/Month	2.75
		151-400 kWh		4.80
		Above 400 kWh		5.20
2	**C OMMERCIAL / NON RESIDENTIAL (NRS)**			
	COMMERCIAL /NON RESIDENTIAL SUPPLY (NRS)	0-150 kWh	Rs. 20/kW/Month for Single Phase Rs. 100/kW/Month for Three Phase	5.00
		151-400 kWh		5.30
		Above 400 kWh		5.60
3	**Industry**			
a	**LARGE INDUSTRIAL POWER SUPPLY (LS)**			
	Large Power Supply	All Units	200	5.00
b	**MEDIUM INDUSTRIAL POWER SUPPLY (MS)**			
	Medium Power Supply	All Units	200	4.70
c	**SMALL INDUSTRIAL POWER SUPPLY (SP)**			
	Small Scale Industry	All Units	30	4.80
4	**AGRICULTURAL PUMPING SUPPLY(AR)**			
	Agricultural Pumping Supply	All Units		2.90
5	**PUBLIC LIGHTING (PL)**			
	Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external Agency	All Units	100	5.35
	Advertisement / Neon sign Boards- Advertisement boards, bill boards(apart from advertisement boards installed on commercial establishments and charged under commercial tariff)	All Units	100	7.10
6	**BULK SUPPLY (BS)**			
	Bulk Supply	**All Units**	200	4.90
7	**TEMPORARY SUPPLY**			
	Temporary Supply	**All Units**		8.10

8.2. Applicability

Table 122: Applicability of Tariff Schedule

Applicability	Character of service
DOMESTIC SUPPLY (DS)	
This schedule shall apply for light, fan, domestic pumping sets and household appliances in the following premises: a) Single private houses/flats. b) Government recognized education institutions, viz schools, colleges, universities, ITI hostels, canteens, and residential quarters attached to the educational institutions. c) Supply to hostels and /or residential quarter attached with the private educational institutions where separately metered. d) Paying Guest (PG) authorized by the Chandigarh Administration e) Administrative Training Institutes/Correctional Institutes/Training Centres exclusively run/managed by the UT/State/Central Government to undertake research, consultancy/Training and allied activities to improve management efficiency f) Government and public sports institutions/Gymnasium halls etc. banks and PCOs exclusively for the use of educational institutions. g) Religious Institutions viz. Temples, Gurudwaras, Mosques, Churches, provided that the Sub Divisional officer concerned authenticates the genuineness of the place being exclusively used for worship by the general public. h) Housing colonies and multi storied flats/buildings as defined in the Electricity Supply Code Regulations notified by the JERC. i) Dispensaries / Hospitals / Public Libraries / Schools / Colleges / Working Women's Hostels / run by the Chandigarh Administration. j) Recognized Centers/ societies for the welfare of blind, deaf and dumb, spastic children, physically handicapped persons, mentally retarded persons, as approved by the Chandigarh Administration. k) Orphanages/ Cheshire Homes/ Old age homes/ charitable homes and Gaushalas. l) Charitable Organizations viz. Schools, Hospitals, Dispensaries, Education and Research Institutes and Hostels attached to such Institutions registered with the Income Tax authorities under Section 80G, or 80 GGA, or 35 AC. The individual organization shall apply in writing to the Electricity Department along with a certificate from the IT Department or getting considered for the tariff in the Domestic Category m) Shelter Homes (including Night Shelters) approved by Chandigarh Administration. n) Crematoriums (including electric) and Burial Grounds. The Halls or Gardens/ Lawns or any portion of the premises listed in Para (i) above let out for consideration or used for Commercial activities at any time shall be charged at Commercial Rate of Electricity Tariff. **NOTES:**	AC, 50 cycles, Single phase 230 volts or three phase 400 volts or 11 Kilo volts. For loads up to 5 KW supply shall be connected on single phase 230 volts and above 5 KW up to 100 KW supply shall be given on three phase 400 volts. For loads above 100 KW, supply shall be connected on 11 KV and a separate transformer of adequate capacity shall be installed at consumers cost as per Electricity Supply Code Regulations notified by JERC. In case of consumers where the metering is being done on the low voltage side of the transformer instead of the high voltage side, the consumption should be computed by adding 3% extra on account of transformation/ losses. This arrangement shall be continued for a maximum of one year within which metering shall be shifted to HT(11KV) side of the transformers

<table>
<tr><th>Applicability</th><th>Character of service</th></tr>
<tr><td>
i. Where a portion of the dwelling is used for mixed load purposes the connection shall be billed for the purpose for which the tariff is higher.
ii. Hostels shall be considered as one unit and billed under domestic supply tariff without compounding.
iii. Private education institutions not recognized by the Chandigarh Administration shall be billed under Non Domestic Tariff.
iv. STD/PCOs, shops attached to Religious Institutions will be billed under Non- Domestic Tariff.
v. A room or a part of a residential house utilized by a teacher for imparting tuition work, self-occupied handicapped persons operating from their residences, cooking classes taken by house ladies, beauty parlour run by house ladies, ladies doing tailoring work etc. shall be covered under domestic tariff.
vi. For cottage & commercial activities operating in residences such as repair of shoes by cobbler, dhobi, ironing of clothes, stitching/ knitting, paan-shop and bakery products etc. small shops, tea shops etc. with total load (maximum demand) of 5 kW domestic tariff shall be applicable subject to installation of MDI Meters. In cases where total load is more than 5 kW, separate metering shall be done for commercial and domestic use and consumption shall be charged according to the tariff applicable.
vii. Professionals such as Doctors, Engineers, Lawyers, CAs, Journalists and consultants practicing from their residence irrespective of location provided that such use shall not exceed 25% of the area of the premises or 50 Sq. meter whichever is less, subject to the installation of MDI Meter, shall be covered under domestic tariff.
viii. The load of common amenities for consumers of housing societies may include pumps for pumping water supply, lifts and lighting of common area. The consumption of energy for common services shall be separately metered with meters installed and sealed by the licensee and shall be billed at Domestic Tariff. The user shall inform the details of every non-domestic activity within the residential complex, such as commercial complex, industrial activity, and recreation club, along with the connected load, and shall seek a separate connection for the same under the commercial category.
</td><td></td></tr>
<tr><td colspan="2">COMMERCIAL / NON RESIDENTIAL SUPPLY (NRS)</td></tr>
<tr><td>
This schedule shall apply to all consumers, using electrical energy for light, fans appliances like pumping sets, central air conditioning plant, lift ,welding set, small lathe, electric drill, heater, battery charger, embroidery machine, printing press, ice candy, dry cleaning machines, power press, small motors in non-residential premises such as defined below:
a) Hostels (other than those recognized/aided institutions of Chandigarh Administration)
b) Pvt Schools/colleges, coaching institutes, research institutes, (Other than those run by the Chandigarh Administration),
c) Coaching institutes and research institutes (Other than those recognized by the Chandigarh Administration)
</td><td>
AC, 50 cycles, single phase at 230 Volts or 3 Phase at 400 Volts or 11 Kilo volts
For loads up to 5 KW, supply shall be connected on single phase 230 volts and above 5 KW up to 100 KW, supply shall be given on 3 phase 400 volts. For loads above 100 KW, supply shall be given on 11 KV in case of multi consumer complex including commercial complex and in other cases for load above 100 KW the supply
</td></tr>
</table>

<table>
<tr><th>Applicability</th><th>Character of service</th></tr>
<tr><td>d) Auditoriums, Hospitals, clinics, dispensaries, nursing homes / diagnostic centers other than those run by the Chandigarh Administration.
e) Railways (other than traction)
f) Hotels, restaurants, guest houses, boarding / lodging houses, marriage houses
g) Cinemas
h) Banks
i) Petrol pumps.
j) Government / Public Sector offices and undertakings
k) Public halls, auditoriums, exhibitions, theatres, circus, cinemas etc.
l) All other establishments, i.e., shops, chemists, tailors, washing, dyeing etc. which do not come under the Factories Act.
m) Cattle farms, fisheries, piggeries, poultry farms, floriculture, horticulture, plant nursery Farm houses being used for commercial activity.
n) Ice-cream parlors, bars, coffee houses etc.
o) Any other category of commercial consumers not specified/covered in any other category in this Schedule.
NRS supply shall also be applicable to multi consumer complexes including commercial complexes as defined in the Electricity Supply Code Regulations notified by the JERC. No separate circuit/connection for power load including pumping set/central air conditioning plant, lifts etc. is permitted.</td><td>shall be on 11 KV. In case of consumers where metering is done on the low voltage side of the transformer instead of the high voltage side, the consumption should be computed by adding 3% extra on account of transformation losses.</td></tr>
<tr><td colspan="2">LARGE INDUSTRIAL POWER SUPPLY (LS)</td></tr>
<tr><td>The schedule shall apply for consumers having industrial connected load above 100kW.Their contract demand shall not be less than 100 kVA.
No consumers shall increase their connected load without prior approval of the Electricity department. The consumer availing supply at high tension shall indicate rated capacity of all the step down transformers installed in his premises and shall not increase the capacity of such step down transformers without prior approval of the department.
NOTE
i. The above tariff covers supply at 11 kV. Surcharge at 20% on the tariff shall be leviable for all the existing consumers which are being given supply at 400 volts. A consumer getting supply at 33 kV and above will get a rebate of 3%.
ii. Surcharge @ 17.5% on the tariff shall be leviable for all the arc furnace consumers which are being given supply at 11 kV. This surcharge at 17.5% shall also be leviable on other industrial consumers having contract demand exceeding 5000 kVA and running at 11kV.
iii. In case of steel rolling mills having supply at 400 volts, an additional surcharge of 5% shall be leviable.
iv. In case of HT consumers (11kV and above) where maximum demand and energy consumption is recorded on the lower voltage side of the consumer transformer instead of the high voltage side, maximum demand and energy consumption for billing purpose should be computed by adding 3% extra on units on account of transformation/cables losses. However this agreement shall in no case continue for more than three months and the meter shall be installed on the HT side of the transformer within the said period including such existing connection.</td><td>AC, 50 Cycles, 3 phase 11 kV supply for loads above 100 kW
Supply can be given at 33/66/220kV depending on quantum/type of load and contract demand and availability of bus voltage and transformer winding capacity at the feeding substation wherever possible at the discretion of supplier.
For arc furnace loads and other loads of equally violent fluctuating nature, voltage of supply will be 33kV and above depending upon availability of bus voltage and transformer winding capacity at the feeding substation wherever possible, at the discretion of supplier.

Contract demand is the load kW, kVA or HP, as the case may be agreed to be supplied by the licenses and contracted by the consumer and specified in the agreement. If</td></tr>
</table>

Applicability	Character of service
v. For new connections, all metering will be on HT side only.	the consumer in a month exceeds the contract demand, such excess shall be charged at an additional rate of Rs 250/kVA.
MEDIUM INDUSTRIAL POWER SUPPLY (MS)	
This tariff schedule shall apply to all industrial power supply consumers having connected load ranging from 21 kW to 100 kW	AC, 50 cycles, 3 phase, 400 volts, or at 11 kV for load above 100 KW
SMALL INDUSTRIAL POWER SUPPLY (SP)	
This schedule shall apply to small power industries with connected load not exceeding 20 KW (26BHP) in urban and rural areas	AC, 50 cycles, single phase 230 volts, or 3 phase, 400 volts.
AGRICULTURAL PUMPING SUPPLY (AP)	
This schedule shall apply to all consumers for use of electrical energy for irrigation pumping load upto 20 kW (26 BHP). Supply for loads above 26 BHP/20 KW shall be charged in accordance with the relevant industrial tariff (Govt. Tubewells meant for water supply are covered under the relevant Industrial Tariff) **NOTE** • Pumping sets shall be ISI marked. The responsibility for ensuring installation of ISI marked pumping sets as well as shunt capacitors shall be that of the Junior Engineer concerned, who shall verify the same at the time of verification of test reports before the release of the connection. • Supply for agriculture/Irrigation pump sets, at one point, may also be given to a registered co-operative society or to a group of farmers recognized by the competent authority. • An agriculture consumer, if he so desires, may shift the location within his premises of his connection, with the approval of the competent authority, after payment of applicable charges.	AC, 50 Cycles, three phase, 400 volts, Single Phase at 230 volts.
PUBLIC LIGHTING (PL)	
This tariff schedule shall apply for use of Public Lighting system including signaling system, road and park lighting managed by municipal corporation, panchayats, institutions(at the discretion of the supplier)etc. The tariff schedule shall also apply for use of electricity by street lights managed/outsourced to an external agency and advertisement boards, sign boards, bill boards, signages etc., (apart from the advertisement boards installed on commercial establishments & charged under commercial tariff).	AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts.
BULK SUPPLY (BS)	
This tariff schedule shall apply to general or mixed loads exceeding 10 kW to MES, Defense establishments, Railways, Central PWD, Institutions, Hospitals, Departmental Colonies and other similar establishments where further distribution is to be done by the consumer. Above schedule shall not be applicable, if 50 % or more of the total sanctioned load is motive/ manufacturing load	AC, 50 cycles, three phase, 400 volts or 11 kV or higher voltage at the option of the department. Loads exceeding 100 kW shall be released on HT only.
TEMPORARY SUPPLY	
Available to any person requiring power supply for a purpose temporary in nature for period upto three months, which may be extended up to a maximum period of two years after completion of formalities	AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts

8.3. General Conditions of HT and LT Supply

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

1) The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.

2) Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.

3) If energy supplied for a specific purpose under a particular tariff is used for a different purpose, not contemplated in the contract for supply and / or for which higher tariff is applicable, it will be deemed as unauthorized use of electricity and shall be dealt with for assessment under the provisions of section 126 of the Electricity Act, 2003 & Supply Code Regulation notified by JERC.

4) Fixed charges, as applicable, will be charged on pro-rata basis from the date of release of connection. Fixed charges, as applicable, will be double as and when bi monthly billing is carried out, Similarly slabs of energy consumption will also be considered accordingly in case of bi-monthly billing.

5) If connected load of a domestic category is found to be at variance from the sanctioned/contracted load as a result of replacement of appliances such as lamps, fans, fuses, switches, low voltage domestic appliances, fittings, it shall not fall under Section 126 and Section 135 of the EA 2003.

6) Fixed charges, wherever applicable, will be charged on pro-rata basis from the date of release of connection. Fixed charges, wherever applicable, will be double as and when bi- monthly billing is carried out, Similarly slabs of energy consumption will also be considered accordingly in case of bi-monthly billing.

7) The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 85% of the contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal rate. The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulation. If such over-drawl is more than 20% of the contract demand then the connection shall be disconnected immediately.

   Explanation: Assuming the contract demand as 100 KVA, maximum demand at 120 KVA and total energy consumption as 12000 kWh, then the consumption corresponding to the contract demand will be 10000 kWh (12000*100/120) and consumption corresponding to the excess demand will be 2000 kWh. This excess demand of 20 KVA and excess consumption of 2000 kWh will be billed at twice the respective normal rate. Such connections drawing more than 120 kVA, shall be disconnected immediately.

8) **Power Factor Charges for HT and EHT**

   (a) Power factor means, the average monthly power factor and shall be the ratio expressed as percentage of total kWh to total kVAh supplied during the month. The ratio shall be rounded up to two figures.

   (b) The consumer shall maintain the monthly average power factor of the supply not less than 90% (lagging). If the monthly average power factor of (a) consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 1% in power factor upto 70%(lagging).

   (c) In case the monthly average power factor of the consumer is more than 95% (95% lagging), a power factor incentive @ 1% on demand and energy charges shall be given for each increase of 1% in power factor above 95% (lagging)

   (d) If the average power factor falls below 70% (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.

9) **Additional charges for exceeding contracted load/contracted maximum demand,**

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

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

10) **Maximum Demand**

The maximum demand of supply of electricity during a month shall be twice the largest number of Kilo-Volt Ampere hours (KVAH) delivered at the point of supply to the consumers during any consecutive 30 minutes in the month. However for the consumers having contracted demand above 4000 KVA the maximum demand shall be four times the largest number of Kilo-Volt Ampere hours (KVAH) delivered at the point of supply to the consumers during any consecutive 15 minutes in the month.

11) Delayed payment surcharge shall be applicable to all categories of consumers. Delayed payment surcharge of 2% per month or part thereof shall be levied on all arrears of bills. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amounts less than 50 paisa shall be ignored and amounts of 50 paisa or more shall be rounded off to the next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only upto the month of permanent disconnection.

12) The Department shall have the right to disconnect the supply after giving 15 days' notice as per the provision of the Act and the Supply Code Regulation, if the consumer fails to pay the energy bill presented to him by the due date.

13) **Advance Payment Rebate**: If full advance payment of the current bill is made before the issue date of previous cycle bill, rebate @1% shall be given on the amount consisting of SOP plus fixed charges plus FPPCA. However if the advance payment is not adequate as per current bill amount consisting of SOP plus Fixed Charges plus FPPCA or payment made after the issue date of previous cycle bill , such cases shall be treated for prompt payment rebate. Sample calculation for the same has been in Annexure 4 of this Order.

14) **Prompt Payment Rebate:** If payment is made at least 7-days in advance of the due date of payment of the current bill a rebate for prompt payment @ 0.25 % of the bill amount (SOP +Fixed Charges +FPPCA) amount shall be given. Those consumers having arrears shall not be entitled for such rebate. Sample calculation for the same has been in 2Annexure 4 of this Order.

15) The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with the FPPCA formula separately notified by the Commission under the Regulation. Such charges shall be recovered / refunded in accordance with the terms and conditions specified in the FPPCA formula.

16) The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order.

17) **Surcharge for Low Power Factor/Non Installation of Required rated LT Shunt Capacitors**

(a) Consumers using LT installation with welding transformers and induction meters of three HP and above and other low power factor consuming appliances shall arrange to install low tension shunt capacitors of the required rating and shall maintain these capacitors in good working condition. No service connection shall be released without the installation of shunt capacitor(s) of required rating. In case the shunt capacitor(s) are found to be missing or inoperative or damaged, 15 days' notice shall be issued to the consumer by the licensee for rectification of the defect. In case the defective capacitor(s) are not replaced/rectified within 15 days of the notice, a surcharge of 20% on the billed variable energy charges shall be levied till the defective capacitor(S) are replaced/rectified to the satisfaction of the licensee.

(b) Consumers with L.T connections where the meter provided by the licensee has the power factor recording feature, shall install shunt capacitors of adequate rating to ensure power factor of 90% or above failing which low power factor surcharge at the rates noted below will be levied.

Sl.	Power Factor range	Surcharge
1.	90% and above	NIL
2.	Below 90% and upto 85%	1% of billed energy charges of that month for every 1% fall in power factor from90%
3.	Below 85% and upto 80%	1.5 % of billed energy charges of that month for energy 1% fall in P.F from 85%
4.	Below 80% and upto 75%	2% of billed energy charges of the month for energy 1% fall in P.F from 80%
5.	Below 75%	3% of billed energy charges of that month for energy 1% fall in P.F from 75%

Should the power factor drop below 70% the licensee may disconnect supply after due notice of 15 days to any installation without prejudice to the right of the licensee to levy demand/fixed charges as applicable during the disconnection period.

18) **Plant & Apparatus**

The following features shall be installed:

(a) LT installation with welding transformers will be required to have suitable shunt capacitor(s) installed so as to ensure power factor of not less than 90%.

(b) Every LT consumer, including irrigation pump set consumer, whose connected load includes induction motors of 3 HP and above and other low power factor consuming appliances shall arrange to install Low tension Shunt capacitors of appropriate capacity at his cost across the terminals of his motor(s) so as to ensure power factor of not less than 90%.

(c) A linked switch with fuse(s) or a circuit breaker for consumers having aggregate installed transformer/apparatus capacity up to 1000 KVA if supplied at voltage of 11 KV and 2500 kVA if supplied at voltage of 33 kV.

(d) A circuit breaker along with linked switch for consumer having an aggregate installed transformer apparatus capacity above 1000 kVA if supplied at 11 kV and above 2500 kVA if supplied at 33 kV.

(e) In either case, suitable automatic circuit breakers shall be installed on the low tension side of each transformer or on each LT feeder emanating from the transformer.

(f) Extra High Tension consumer shall install a circuit breaker on the HV side of the transformer.

19) **Unauthorized use of Electricity**

A) Cases to be treated as Unauthorized Use of Electricity

1) The following acts on the part of consumer are to be considered as unauthorized use of electricity for the purpose of assessment under the provisions of Section 126 of the Act;

I. Use of electricity by any artificial means; or

II. Unauthorized use of electricity by means without the permission of the concerned person or authority or licensee; or

III. Use of Electricity in the premises where supply is disconnected by the licensee.

IV. Disconnection of neutral wire

V. Tampering with meter or equipment associated with metering provided by the licensee and not reported to the licensee

B) Cases not to be treated as Unauthorized Use of Electricity

i. If the connected load of a domestic category is found to be at variance with the sanctioned/contracted load as a result of increase of load or due to replacement of lamps, fans, fuses, switches, low voltage domestic appliances, fittings, etc it shall neither fall under unauthorized use of electricity (Section 126 of EA 2003) nor under theft of electricity (Section 135 of EA 2003).

ii. Supply to activities incidental to main activity, for example supply to chemist shop in nursing homes and hospitals; tea shop, canteen, employees' cooperative store, dispensaries, puncture shop in petrol pumps etc. provided that the connected load for such activities remains within 5% of the sanctioned load or 5 kW, whichever is less.

iii. In case of domestic/non-domestic connection(s), extension of supply from connection to other portion of the building/plot including for servant quarters, own parking garages or for social requirements relating to personally religious functions, sports etc. in residential areas so long as the supply is not extended to any portion for which connection has been disconnected due to non-payment of dues and there is no change in the category of use.

iv. Professionals such as Doctors , Engineers, lawyers, CAs, Journalists and Consultants practicing from their residence irrespective of location provided that such use shall not exceed 25% of the area of the premises or 50 sq meters, whichever is less subject to installation of MDI meters.

v. For cottage and commercial activities operating in residences such as repair of shoes by cobbler, dhobi, ironing of clothes, stitching/knitting, paan-shop, bakery products etc. shops, tea shops etc. with total load (maximum demand) of 5 kW domestic tariff shall be applicable subject to installation of MDI meters.

vi. In industrial or commercial premises where the supply is used by one or more persons where partition in business takes place or division in the family occurs or where user of the connection changes due to succession.

20) Taxes and duties

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

21) Time of Day (TOD) tariff

i. Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.

ii. The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer, as TOD metering is not yet implemented.

Period of use	Hrs.	Demand Charges	Energy Charges
Normal period	6:00 a.m. to 6:00 p.m	Normal Rate	Normal rate of energy charges
Evening peak load period	6:00 p.m to 10.00 p.m	Normal Rate	120% of Normal rate of energy charges
Off-peak load period	10:00 p.m to 6:00 a.m	Normal Rate	90% of Normal rate of energy charges

iii. Applicability and Terms and Conditions of TOD tariff:

a) TOD tariff shall be **optional** unless otherwise specifically stated to the contrary in the tariff order.

b) The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from other sources through wheeling of power.

c) The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff.

d) In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.

8.4. Schedule of Other Charges

Sr. No.	Description	Approved
A	**Application processing charges for new connection/ enhancement of load/ reduction of load/**	
i	Domestic supply	Rs 25/-
ii	Non-Domestic Supply	Rs 100/-
iii	Small Power, Medium Supply and street lighting supply.	Rs 250/-
iv	Large Supply and bulk supply	Rs 500/-
v	Agriculture Power supply	Rs 25/-
vi	Temporary metered supply	Two times the normal rates of category of permanent supply
B	**Charges for Re-fixing/ Changing of meter/Meter Board in the same premise on consumer request when no additional material is required. (When the cause leading to subsequent change/replacement of meter is either manufacturing defect or Department's fault then, it shall be free of cost and further, if shifting of meter is done in the interest of department work then it is free of cost.)**	
i	Single Phase Meter	250/- per meter
ii	Three Phase Meter without CT	500/- per meter
iii	Three Phase Meter (with CTs & PTs)	1000/- per meter
iv	Trivector and special type meters	1200/- per meter
v	HT/ EHV metering equipment	3000/- per meter
C	**Meter Inspection & Testing Charges**	
	(In case correctness/accuracy of a meter belonging to the Licensee is challenged by the consumer)	
i	Single phase	150/- per meter
ii	3-phase whole current i.e. without C.T	500/- per meter
iii	L.T. meter with CTs	1500/- per meter
iv	H.T. & E.H.F metering equipment.	3000/- per meter
	NOTE: If the challenged meter is found to be incorrect / defective, the credit of these charges will be given to the consumer, otherwise these will be forfeited.	
D	**Re-sealing charges (irrespective of the number of seals involved against each item below and where seals found to have been broken by the consumer):**	
i	Meter cupboard	50/-
ii	Where cut-out is independently sealed	50/-

Sr. No.	Description	Approved
iii	Meter cover or Meter Terminal cover (Single phase)	150/-
iv	Meter cover or Meter Terminal cover (3- phase)	375/-
v	Maximum Demand Indicator or C.T.s Chamber	900/-
vi	Potential fuses	900/-
	Note: If M&T and ME seals are found to be broken/tampered cost of meter shall be recoverable and the case shall be treated as theft case.	
E	**Reconnection Charges**	
A	Reconnecting/connecting the premises of any consumer who was previously disconnected on account of breach of his agreement with the department or of any other provisions of the Act as may be relevant.	
i	Domestic supply	Rs 250/-
ii	Non-Domestic Supply	Rs 500/-
iii	Small Power, Medium Supply and street lighting supply	Rs 500/-
iv	Large Supply and bulk supply	Rs 1000/-
v	Agriculture Power supply	Rs 250/-
vi	Temporary metered supply	Rs 1500/-
F	**Testing/ Inspection of Consumer's installation**	
A	Initial Test/ Inspection	Free of Cost.
B	For subsequent test of a new installation or an extension to an existing installation if the installation is found to be defective or the wiring contractor or his representative fails to be present	
i	Single Phase	Rs 150/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
ii	Three Phase	Rs 200/- (Payable in advance for each subsequent visit for the purpose of testing the installation)
iii	Medium Supply/Bulk Supply loads upto 100 kW	Rs 500/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
iv	Large Supply/Bulk Supply (loads above 100 kW)	Rs 1000/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
G	**Meter Reading Cards/ Passbook (New/ Replacement)**	
i	Provision of meter reading cards including PVC jacket	Rs 5/- per card
ii	Replacement of meter card found to be missing on consumer's premises	
iii	Domestic & NRS	Rs 5/- per card
iv	SP and AP	Rs 10/- per card
v	MS	Rs 25/- per card

Sr. No.	Description	Approved
vi	LS	Rs 45/- per card
vii	Replacement of Passbook in case it is lost by AP Consumer	Rs 60/- each
viii	Replacement of identification card missing on the premises of AP Consumer	Rs 25/- each
ix	Temporary	Rs 60/- per card
H	**Meter Rentals** (In case where consumer opts that department to supply departmental meter)	
i	Single Phase meter	Rs 20/- per month
ii	Three Phase LT meter	Rs 50/- per month
iii	Three Phase LT meter with CT	Rs 70/- per month
iv	11 kV Metering System	Rs 500/- per month
v	33 kV Metering System	Rs 1000/- per month
vi	66 kV Metering System	Rs 2000/- per month
I	**Replacement of broken glass**	
a	Replacement of broken glass of meter cupboard (when the cause of the breakage is considered to be an act or fault of the consumer).	Rs 60/- each
b	Replacement of meter glass where the same has been tampered with or broken by the consumer	
i	Single phase meter	Rs 250
ii	Three phase meter	Rs 450
J	**Amount of Security deposit for new/ extension of load**	**As per the procedure prescribed in clause 6.10 of the JERC Electricity Supply Code Regulation 2010.**
K	**Charges recoverable from the consumer when the meter is found damaged / burnt owing to negligence or default on the part of consumer**	
i	Single Phase Meter	Rs 700/- each
ii	Three Phase Meter	Rs 1550/- each
iii	LT CT operated Solid State Meter. (Without CTs)	Rs.3000/- each
iv	LT CTs	
	a) Upto 50/5A	Rs.1,580/- each
	b) Above 50/5 A	Rs. 600/- each
	c) Solid State HT TPT metering equipment (without CT/PT unit)	Rs.20,000/- each
	d) H.T.C.T./P.T. Unit	Rs.40,470/-
P	**Special Meter reading charges in case of change in occupancy/ vacation of premises**	
i	Domestic	Rs. 50/-
ii	Other Consumer-Single phase meter	Rs 250/-
iii	Other Consumer-Three phase meter	Rs 450/-
Q	**Supply of duplicate copies of electricity bills**	
i	Domestic consumers	Rs 5/-
ii	Non-Domestic consumers	Rs 10/-

Sr. No.	Description	Approved
iii	Temporary consumers	Rs 10/-
iv	L.T. Industrial (upto 20 kW) & AP consumer	Rs 10/-
v	L.T. Industrial (above 20 kW) & Street lighting consumer	Rs 15/-
vi	H.T. Industrial & bulk supply consumer	Rs 20/-
R	**Review of electricity bills (If the accuracy of licensee's bill is challenged by the consumer and a review of the bills is demanded)**	
i	Single Phase Supply	Rs 10/-
ii	Three Phase Supply	
	load upto 20 kW	Rs 250/-
	load above 20 kW upto 60 kW	Rs 450/-
	load above 60 kW upto 100 kW	Rs 750/-
iii	Large Supply (above 100 kW)	Rs 1000/-
	NOTE: If the challenged bill is found to be incorrect, the credit of the fee will be given to the consumer, otherwise these will be forfeited.	
S	**Testing and calibration including sealing of energy meter owned /supplied by the consumer**	
i	Single Phase	Rs 100/-
ii	Polyphase whole current meter	Rs 500/-
iii	Polyphase meters with CTs	Rs 1200/-
iv	HT and EHT metering equipment	Rs 3500/-
T	**Checking of the capacitors at the request of the consumer**	
i	Consumer receiving supply at 230/440 V	Rs 250/- per visit
ii	Consumer receiving supply at Above 400 V and up to 11 KV	Rs 500/- per visit
U	**Rates for Security Deposit for new/extension in load only.**	
	Domestic Supply	200/-
	Non-residential supply	500/-
	Large Industrial Supply	1500/-
	Medium Industrial Supply	500/-
	Small Industrial Supply	300/-
	Bulk Supply	800/-
	Public lighting supply	750/-
	Agriculture power supply	120/-
	Others-Temporary supply	2000/-
V	**Demand notice extension fee (for each period of three months)**	
	i) DS and NRS	Rs 50
	ii) AP	Rs 500
	iii) SP	Rs 200
	iv) MS/LS/BS	Rs 2500
	Note: Demand notice shall be valid for three months initially with an extended/grace period of further three months. After the	

Sr. No.	Description	Approved
	expiry of grace/extended period of three months, the application shall be deemed as cancelled. Revival fee(one time only) for cancelled application shall be twice the demand notice extension fee as prescribed above and will be done by load sanctioning authority for another three months only	

8.5. Schedule for service connection charges and service rentals

Service connection charges are provided in the schedule of general and service connection charges and are to be recovered from all prospective consumers and existing consumers seeking extension in load. Schedule of service connection charges as applicable is given under:

A. Service connection charges for domestic supply

Sr. No	Particulars	Category	Rs
1	Single Phase Fixed Per kW Charges		
a	Up to 1 kW	Domestic	250/-
		Non Residential Supply	250/-
b	Above 1 kW and up to 3 kW	Domestic	300/-
		Non Residential Supply	300/-
c	Above 3 kW and 5 kW	Domestic	500/-
		Non Residential Supply	750/-
2	Three Phase Fixed Per kW Charges		
a	Above 5 kW	Domestic	750/-
		Non Residential Supply	1000/-

Variable Charges

No variable charges are leviable upto 75 meters of service line length from the point of interconnection. Beyond 75 meters for all loads variable charges @ Rs 125 per meter length of service line shall br recoverable for loads in excess of 5 kW.

a) Domestic and Non Residential consumers falling under the following categories have the option, either to pay in lump sum the service connection charge as mentioned in the preceding clause or to pay monthly service rentals at 1.6 paisa per rupee of the estimated cost of the service line beyond the cost of 30.48 meters.
   i) Members of Schedule Castes.
   ii) Religious and Charitable institutions run by recognized/ registered associations or societies registered with Register of Societies

b) All such prospective and existing consumers who will pay or have paid service connection charges in full, shall be exempted from the payment of monthly service rentals.

c) The service rentals to the consumers existing prior to 01st November 2002, if applicable already shall continue.

B. Service connection charges for industrial and bulk Supply (For new Connections):

Sr.	Load	Service Connection
1	Up to 100 kW	Rs 750/kW

Service connection charges under Para i) shall be applicable for loads upto 100 KW where the length of new and augmented or both line(s) to be provided is up to 100 meters which will include 11kV line (whether overhead or cable LT line and service cable. Where this limit exceeds 100 meters, the applicant shall be required to pay the actual cost of @ Rs 125 per meter of 11 kV line, LT line and service cable in excess of 100 meters as additional service connection charges (nonrefundable).However, no component of the distribution substation transformer to be created would be charged wherever applicable.

Extension of Load

a) **Where the consumer is either paying service rentals or had paid the service connection charges on kW basis for the original load.**

i) Extension in load bringing to be charged at Rs 750/- per the total load up to 100 kW for extension part only. However charges for service line in excess of 100 meters shall be charged @ Rs 125 per meter for length of service line (new or augmented or both) feeding such consumer. Rentals on original load, if applicable, already shall continue.

b) **Where the consumers had paid the service connection charge in full**.

i) No charges for extension shall be recoverable where the cost of service/common part of service line had been paid by the applicant at the time of release of the original connection provided. No augmentation of service/common portion of service lines had been carried out ever since the release of connection and also the additional load can be released from the existing line without augmentation and the cost deposited by the consumer at the time of release of original connection is not less than 'per kW charges' payable on the basis of total connected load (including extension in load). For calculating per kW charges, the rate as applicable at the time of release of original connection shall apply for the existing load and prevailing rates for the extension in load. Difference, if any, between the actual cost paid and the recoverable amount 'per KW charges' shall be payable by such consumers at the time of extension in load. This shall also apply to the cases fed through an independent feeder laid at the cost of the consumer. The cost of line/bay (33/66/132/220kV) paid by the consumer or at the time of clubbing/conversion paid by the consumer at the time of clubbing of supply to higher voltage shall be appropriated towards service connection charges at the time of subsequent release of extension in load, if applicable. However, for calculating total 'per kW charges' service connection charges already recovered from the consumer in respect of clubbing cases, applicable rates to different connections as existing immediately prior to clubbing are to be taken into account.

Cases involving augmentation of service/Common portion of service line or if the augmentation had taken place subsequent to release of connection shall be default with as per provisions of sub Para (a)

c) While accessing the connected load for working out service connection charges, both general and industrial loads of an individual consumer at one location shall be taken into account.

d) The "per kW", service charges for extension in load shall be as contained in Para ii above and those shall be in addition to the service rentals on the original load, if applicable thereon.

e) An increase in the connected load even without increase in the contract demand shall call for payment of service connection charges on "per kW" basis as applicable to the category in which total connected load after extension falls and shall be recoverable for extension of the electrical part only. Consumers seeking extension in contract demand within the sanctioned connected load shall not be required to pay service connection charges on KW basis.

f) Consumers seeking contract demand higher than 60% of the connected load, shall be charged one time charge termed 'Contract Demand Charges' as follows :

S. No	Particulars	Rs/kVA
1	For Contract Demand above 60% and up to 80% of connected load	200/-

2	For Contract Demand above 80% and up to 100% of connected load	300/-
3	Large Supply Consumers getting at 33 kV and above are exempted from the payment of one time contract demand charges for purpose of increasing contract demand	

g) In case of LT connections, Service rentals to the consumer existing prior to 1-11- 2002, if applicable already shall continue.

C. Recovery of service connection charges for extension of load by consumers who had paid the full cost of the line

Industrial and Bulk supply consumers availing connection for load exceeding 1 MW have to pay the entire cost of service line laid for them. By virtue of paying the entire cost of the line involved in releasing the connection, the consumer is entitled to avail (within five years) extension in load upto 100% of the original line for which the line had been erected provided that line so erected is capable of carrying the load i.e. original load and extended load up to 100% of the original load. If, however, line already erected is unable to take 100% extension of load, extension in load shall be limited to the capacity of the line. In such an event, the consumer is not required to pay service connection charges for the extension in load, provided the cost of the line already provided by him is more than the per kW charges calculated at the applicable rate from time to time on the total load including extension in load applied by the consumer.

a) If the extension in load applied by the consumer is in excess of the capacity of line already erected or more than 100 % of the original load, consumer shall pay the service connection charges as applicable to the new applicants.

b) If during the period of 5 Years from the date of connection some load has already been released from the line, whose entire cost has been paid by the consumer, who seeks extension in load within five years up to the extent of the capacity of the line or 100% of the original load within 5 years up to the extent of the capacity of the line or 100 % of the original load, whichever is lesser, release of additional load shall be regulated as under:

Load released on voltage above 11 kV and loads 1MW and above:

Extension in load to the original consumer shall be allowed (within the contract demand for which the line was originally erected for the said consumer) at the cost of the electricity department, even if augmentation/erection of new lines are required.

Load less than 1MW released on 11 kV

In this case care should to taken for a period of 5 years that a margin of 100 % of the load of the original consumer is available in the capacity of the line. If other consumer(s) want connection(s) to be released by utilizing the available margin, new consumer(s) singly or jointly, as the case may be shall pay towards the cost of augmentation of the line so that sufficient margin in electricity carrying capacity is available to cater to the additional requirement of the original consumer.

a) Provisions of the preceding Para's of this schedule shall not be applicable where as a result of extension in load the supply voltage level of the consumer changes or when the consumer changes the site of the premises.

D. Service connection charges for agriculture power

All prospective tube well consumers covered under general category shall pay Rs 3000 per BHP as service connection charges. The above charges are recoverable where the total length of the service line including new

11 kV line, LT line (new/augmented) and service cable is upto 1 Km (out of which LT line/Service cable route length should not exceed 500 meters from the common pole).Where the total length of the service line is more than 1 km (out of which LT line/Service cable route length should not exceed 500 meters), any applicant under this category shall be required to pay the cost of the new 11 kV line beyond this limit at Rs 125 per meter as additional service connection charges. However, no component of distribution substation/transmission cost would be charged.

9. Chapter 9. Fuel and Power Purchase Adjustment Mechanism

The State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry receive power from the Central Generating Stations, State Generating Stations, Independent Power Producer's (IPP's) through the long-term power purchase agreements and short term purchases – through exchange, bilateral purchases etc. The distribution licensees procure power from various available sources and supply power to the consumers at retail tariffs determined by the Commission. Power purchase cost accounts for more than 80% of the Annual Revenue Requirements (ARR) of the distribution licensees and includes the cost paid for procurement of power, transmission charges, Deviation Settlement Mechanism (DSM) charges, State Load Dispatch Center (SLDC)/ Regional Load Dispatch Center (RLDC) charges and is netted off with revenue earned from the sale of surplus power.

The cost of the long term power being procured by the distribution licensees is fixed by the Central Electricity Regulatory Commission (CERC) for plants supplying power to more than one State/UT (for example NTPC, NHPC etc.) and by the JERC for plants located within its territory/state (for IPP's, licensees own generation and other State generating sources). Charges for the Over-drawl/Under-drawl from the Grid and the Inter State Transmission charges, RLDC charges are fixed by the CERC, while Intra-State Transmission charges and SLDC charges are fixed by the JERC. Short term purchase/ sale of power is done through traders, bilateral contracts, banking and power exchanges at market determined prices.

While determining retail tariff for any year, the Commission first determines the ARR based on the projection of various cost elements including power purchase cost. Power purchase cost of the distribution licensee is derived from the power purchase quantum and per unit power purchase cost. Quantum of power purchase depends upon the energy sales to the retail consumer and distribution losses, out of which energy sales is not under the control of the distribution licensee. There is also variation in actual per unit power purchase cost vis-a-vis projected per unit power purchase cost due to change in fuel cost, change in power purchase mix i.e. thermal /hydel/renewable mix, long term/short term power mix etc. This makes power purchase cost uncontrollable in nature.

The Commission undertakes the truing up exercise for the variation in the cost and revenue once the audited accounts of the distribution licensee are available. For example, True-up of the FY 2016-17 will be undertaken by the Commission once the audited accounts of the FY 2016-17 are available. If the audited accounts for the FY 2016-17 are prepared timely, the impact of True-up of various cost and revenue items is allowed in the tariff of the FY 2018-19, along with the carrying cost for 2 years. As the power purchase cost is the major cost element of the ARR of the distribution licensee, adjustment due to change in power purchase cost at regular intervals is important in order to avoid the burden of carrying cost on the additional power purchase cost incurred during the year.

9.1. Legal Provisions

The relevant provisions of the Electricity Act, Regulations, Policy document and the ATE judgments, which enable the Commission to devise, adopt and implement a power purchase/ fuel price adjustment mechanism are as follows:-

(a) Indian Electricity Act, 2003- Section 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."

(b) Tariff Policy, 2016, clause 5.11 – sub clause (h-4)
"Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Uncontrollable costs would include (but not limited to) fuel costs, costs on account of

inflation, taxes and cess, variations in power purchase unit costs including on account of adverse natural events."

(c) Tariff Policy, 2016, clause 8.2– sub clause 8.2.1-(1)

"8.2 Framework for revenue requirements and costs
Actual level of retail sales should be grossed up by normative level of T&D losses as indicated in MYT trajectory for allowing power purchase cost subject to justifiable power purchase mix variation (for example, more energy may be purchased from thermal generation in the event of poor rainfall) and fuel surcharge adjustment as per regulations of the SERC."

(d) Hon'ble ATE judgement in OP1 of 2011 dated 11 November, 2011

The Hon'ble ATE directed the SERCs to develop a power purchase cost adjustment mechanism within six months of the date of the Order. The relevant excerpt of the Order is shown as follows:
"(vi)Fuel and Power Purchase cost is a major expense of the distribution Company which is uncontrollable. Every State Commission must have in place a mechanism for Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. The Fuel and Power Purchase cost adjustment should preferably be on monthly basis on the lines of the Central Commission's Regulations for the generating companies but in no case exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must within 6 months of the date of this Order must put in place such formula/mechanism."

9.2. Existing formula

The Commission first introduced the provision for adjustment of fuel surcharge in the Joint Electricity Regulatory Commission for the State of Goa and UT's (Terms and conditions for determination of tariff) Regulations, 2009 notified on 08 February 2010. The relevant Clause 7 of the Regulations is provided below:
"7. Fuel Surcharge Formula
(1) The fuel cost revisions for the generating companies/units owned by the licensee that are due to reasons beyond the control of the generating companies / the licensee be in accordance with the fuel surcharge formula as may be decided by the Commission from time to time.
(2) The generating company or the licensee may determine such charge in accordance with the specified formula and recover the same from such categories of consumers or the licensees, as the case may be after following procedure and the terms and conditions attached thereto."

The Commission subsequently notified the Joint Electricity Regulatory Commission for the State of Goa and UT's (Terms and conditions for determination of tariff) (First Amendment) Regulations, 2009 on 27 June, 2012 prescribing the methodology for determination and the recovery mechanism of Fuel & Power Purchase Cost Adjustment (FPPCA) formula. Subsequently on 18 January, 2013, the Commission issued a Corrigendum correcting the calculations of the FPPCA for certain consumer categories.

On 30 June, 2014 the Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Multi Year Distribution Tariff) Regulations, 2014 wherein the Commission proposed to adopt the same methodology as prescribed in the Joint Electricity Regulatory Commission for the State of Goa and UT's (Terms and conditions for determination of tariff) (First Amendment) Regulations, 2009 in the MYT Period. Clause 19 of the Regulations is shown as follows
"*19. Treatment of Incremental Power procurement cost*
The Distribution Licensee shall recover the incremental cost on account of fuel & power purchase adjustment in accordance with FPPCA formula provided in JERC Terms & Condition for determination of Tariff (first amendment) Regulations, 2009."

On 19 October, 2016 JERC notified the Joint Electricity Regulatory Commission for the State of Goa and UT's (Multi Year Distribution Tariff) (Second Amendment) Regulations, 2016 according to which the Fuel and Power Purchase cost adjustment charge shall be levied by distribution licensees on consumer electricity bills on account of the incremental power purchase cost incurred by the licensees and the Transmission charge recovery was also added to the formula. The relevant amendment to the Regulation has been shown as follows:

"**1. *Recovery Periodicity (Cycle)***

The licensee shall compute fuel and power procurement cost variations on quarterly basis and adjustment shall be made in consumers bills starting after a month following the end of the quarter on units billed in the month under consideration. For example, Fuel & Power Purchase Cost Adjustment (FPPCA) for the quarter April-May-June shall be made in the month of July and shall be reflected in the consumer bills raised in the months of August-September and October on the units billed for the respective months. The formula shall be applicable prospectively for the purpose of consideration of Fuel and Power Purchase Cost Adjustment. FPPCA shall be done for all consumer categories except Below Poverty Line (BPL) and Agriculture consumers.

2. *Formula*

The formula for determination of per unit Fuel & Power Purchase Cost Adjustment ("FPPCA") is as under:

Per Unit FPPCA (Paisa/ unit) = Per Unit Actual cost of Power Purchase- Per Unit Approved Cost of Power Purchase in Tariff Order

$$Per\ Unit\ FPPCA\ \left(\frac{Paisa}{Unit}\right) = \left[\frac{Pactual - Sbulk}{[\{(X-c) - Xs\} * b] - Z}\right] * 1000 - Rapproved$$

Where

$$c = \{(X - A) * \frac{Tapproved}{100}$$

$$b = (1 - \frac{Yapproved}{100})$$

Where:

- $Pactual$ *: Actual cost of power purchased during the quarter (excluding purchase from unapproved bilateral and other unapproved sources) includes transmission charges of PGCIL but excludes SLDC charges, RLDC charges and reactive energy charges (Rs Cr).*
- $Sbulk$ *: Actual Revenue recognized from Sale of power to persons other than consumers of the licensee during the quarter (Rs Cr).*
- $Rapproved$ *: Approved per unit cost of power purchase for use in the FPPCA formula as given in the Tariff Order of the Licensee (Paisa per unit).*
- X *: Actual Energy units (kWh) procured during the quarter in consideration excluding unapproved sources (million units).*
- A *: Actual Energy Units (kWh) procured during the quarter in consideration (million units) from power exchanges, power generation within the periphery of the licensee & used by licensee and units overdrawn from the grid.*
- $Tapproved$ *: Approved inter-state transmission losses for the year in consideration as provided in the Tariff Order (%).*
- $Yapproved$ *: Approved T&D losses for the year in consideration as provided in the Tariff Order (%).*
- Xs *: Actual Sale of power to persons other than the utility consumers (million units) during the quarter.*
- Z *: Actual energy units billed for BPL and Agriculture category consumers (million units).*

3. *Other Terms and conditions*

a) For the purpose of Fuel and Power Purchase Cost Adjustment, all the bills admitted and credits, if any, received by the distribution licensee during the period in consideration, irrespective of the period to which they pertain shall be considered. However, the bills or credits of earlier period *received by the distribution licensee earlier than the period under consideration will not be considered for the purpose of FPPCA.*

b) *The variation in fuel and power purchase cost adjustment with respect to the approved per unit power purchase cost, as per the formula specified above shall be recoverable/payable based on units billed for each category of consumers except BPL & Agriculture.*

c) *Per unit rate of FPPCA to be billed to consumers is worked out in Paisa after rounding off to the next lower integer in case of fraction less than 0.5 and to the next higher integer in case of fraction equal to or greater than 0.5.*

d) *The per unit FPPCA so worked out is charged differentially as per the approved retail tariff of the consumers. The determination of differential per unit FPPCA is mentioned below:*

- *Step 1: Determination of Value of K*

$$\frac{Approved\ Retail\ Tariff\ for\ a\ category\ or\ sub\ category}{Weighted\ Average\ Retial\ Tariff\ (WART)}$$

The value of K for different consumer category or sub category for the year in consideration is considered as per the respective Tariff Order.

- *Step 2: Determination of proportionate FPPCA (Paisa/unit) consumer category/sub-category wise*

FPPCA to be billed for the consumers category or sub-category (Paisa/unit) =

$$Average\ FPPCA\ \left(\frac{Paisa}{uni}\right) * K\ for\ that\ consumer\ category\ or\ sub - category$$

4. *Duties of the licensees and Designated officer*

a) *Every distribution licensee shall appoint a designated officer not below the rank of Executive Engineer with Name, Designation, Telephone no. & Fax and Place of Posting, who shall compute, certify and post the PPCA calculations, PPCA chargeable & related data summary on the licensees website and clarify to consumers query, if any.*

b) *The Designated Officer shall send certified copy of FPPCA calculations immediately to Joint Electricity Regulatory Commission."*

9.3. Need to review the existing mechanism

JERC has been amongst the first few Electricity Regulatory Commission's in India to introduce the concept of adjustment of variation in the power purchase cost in the end consumer tariffs through Fuel and Power Purchase Cost Adjustment (FPPCA) mechanism in 2012.

The Indian Power Sector is very dynamic and has changed a lot since 2012. Further, there have been changes in the methodology for determination and recovery of generation and transmission tariff, transmission pricing mechanism, fuel mix with emergence of renewable energy etc. Other State Electricity Regulatory Commissions (SERCs) have also introduced the concept of the FPPCA wherein the Fuel and Power Purchase cost variations are passed through to the consumer either monthly, bi-monthly or quarterly. In between, the Commission has also received representation from various consumer groups and the distribution licensees seeking clarity and simplicity in the FPPCA mechanism adopted by the Commission. In light of the above and the experiences gained during these years, the Commission has decided to examine the FPPCA mechanism followed in other States vis-à-vis the FPPCA mechanism adopted by the Commission and identify the best practices.

A detailed examination of the methodology followed across other States for calculation of variations in the Fuel and Power Purchase Cost Adjustment revealed the following observations:

- Every State has a different formula for determination of the FPPCA charges. However the fundamental objective of all of them remains the same i.e. to pass on the incremental cost of power procurement to the consumers
- FPPCA charges are composed of different elements in different States with power purchase cost from approved and long term sources being the only element common across all States
- FPPCA charges are mostly determined on the Discom Periphery across all the States
- Power purchase cost considered as base for calculation of FPPCA charges is determined in the TO
- For States, procuring power from own generation plants, the Station Heat Rate and other components such as Auxiliary consumption, losses etc. are considered as base as approved in the Tariff Order for calculating the variations in the power purchase costs

The key takeaways with respect to certain parameters of the formula are provided in the table below:

Table 123: Key Takeaways

S. No.	Parameter	Takeaways
1.	*Time Period*	• Time period for levy of the FPPCA is quarterly in most of the States except in Chhattisgarh and Bihar where recovery is on bi-monthly and monthly basis respectively.
2.	*Approval Process*	• Some of the SERCs allow the Discoms to recover FPPCA charges upto a certain limit via automatic route (without approval of the Commission) thereby reducing the administrative burden. However, in most of the States like Maharashtra, Kerala, Madhya Pradesh etc. prior approval from the Commission is required.
3.	*Elements included while determining FPPCA charges*	• In all the States, power purchase cost from long term approved sources is considered while calculating the FPPCA charges • Central Transmission charges are considered in the States of Gujarat, Maharashtra, Delhi and Uttar Pradesh; • Adjustments (Under-recovery/ Over-recovery) due to previous FPPCA period is considered in the States like Bihar, Karnataka , Kerala and Maharashtra; • Power Purchase cost from short term sale/ purchase, bilateral exchange, IEX etc. is considered in the States of Gujarat, Maharashtra and Uttar Pradesh; • In States like Karnataka and Madhya Pradesh, only variable cost of power purchase is considered while calculating the FPPCA charges; • In Uttar Pradesh (UP) any kind of arrears/refunds etc. in the period are also considered
4.	*Elements excluded while determining FPPCA charges*	• Short term power procurement cost is excluded while calculating FPPCA in most of the States except Gujarat, Maharashtra and Uttar Pradesh • In UP, power purchase cost from unapproved plants is excluded • DSM charges are excluded in most of the States • In Bihar, the Regulations categorically define exclusion of any kind of penalties due to delayed payment, while calculating FPPCA charges • In Chhattisgarh power purchase cost from renewable sources is excluded. • In the NCT of Delhi, past arrear/ credits are not considered unlike UP where they are considered.

S. No.	Parameter	Takeaways
5.	*Categories excluded*	• Almost all categories are covered under the ambit of the FPPCA charges except in the State of Kerala where the domestic consumers upto a certain consumption limit are not levied FPPCA charges. • In Gujarat State, the FPPCA charges for the Agriculture category are subsidized by the State Government.
6.	*T&D losses considered for determination*	• In most of the States, the T&D losses approved in the Tariff Order are considered for calculation of gross units; however, in Gujarat and Bihar, the approved or actual losses whichever are lower are considered • In Maharashtra, the actual T&D losses are considered.
7.	*Notification via Regulations/ Tariff Order*	• In most of the States like Delhi, Maharashtra, Madhya Pradesh etc., the FPPCA methodology is defined in the Tariff regulations except in Karnataka and Kerala where individual regulations are notified.
8.	*Ceiling within a month (%) for recovery*	• In States like Maharashtra, Gujarat, Bihar and Karnataka, the upper ceiling of the FPPCA charges is provided which is applicable to all categories.
9.	*Ceiling within a month for a category*	• Ceiling of the FPPCA charges in a quarter for categories such as Domestic and Agriculture in Chhattisgarh State.
10.	*Recovery Mechanism*	• FPPCA charges are recovered from the consumers and are part of their electricity bills • In some States like Gujarat and Madhya Pradesh, a uniform FPPCA charge is recovered depending on the billed units while in States like Maharashtra and UP, the category wise FPPCA charges based on the category ABR is determined

The existing FPPCA mechanism notified by the Commission is in the form of an amendment in the existing Regulation - *Joint Electricity Regulatory Commission for the State of Goa and UT's (Multi Year Distribution Tariff) (Second Amendment) Regulations, 2016*. These Regulations are sub-legislations and making any changes in the Regulation involves legal process which is cumbersome and time consuming. The Commission, therefore, proposes to repeal the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) (Second Amendment) Regulations, 2016 and provide the formula for the FPPCA mechanism in the Tariff Order issued by the Commission.

In the section below, the Commission has discussed the proposed FPPCA formula for inclusion in the Tariff Order for the FY 2018-19.

9.4. New formula

Based on the review of the existing formula and examination of the formulas and the best practices adopted by the various SERC's, the Commission proposes the following mechanism for calculation and passing on of variations in the Fuel and Power Purchase Cost Adjustment (FPPCA) in the end consumer tariff, which shall come into force w.e.f. 1st April 2018 (i.e. Power Purchased by the Licensee from 1st April 2018 onwards). For power purchased by the Licensee for the period from 1st January 2018 till 31st March 2018, the FPPCA will be calculated based on the earlier formula.

1. **Periodicity for recovery (Cycle)**

   The licensee shall compute the fuel and power procurement cost variations on a quarterly basis. The adjustment shall be made in the consumers bills starting after a month following the end of the quarter on the units billed in the months following the quarter.

For example, FPPCA for the quarter April- June shall be done in the month of July and shall be reflected in the consumer bills raised in the months of August, September and October on the units billed for the months of July, August and September respectively.

2. Chargeability

FPPCA charges shall be levied on all consumer categories excluding Below Poverty Line (BPL) and Agriculture category consumers on per unit basis on monthly/ bi-monthly consumption depending on the billing cycle.

3. Formula

The FPPCA formula shall contain the following three components:

1. Power Purchase Cost adjustments which shall contain the following elements:
   - Variation in the Power Purchased from long term/ firm sources viz. CGS, IPP's, State, Own generation etc. This may consist of fixed cost, variable costs, arrears, other charges but excluding any kind of penalties
   - Variation in Short term power purchase cost through IEX, Bilateral etc. (shall be allowed upto a certain ceiling rate as may be fixed in the Tariff Order by the Commission).
   - Variation on account of Deviation Settlement Mechanism – Shall be allowed, but the incentive/penalty shall be excluded
2. Transmission cost adjustments which shall contain the following elements:
   - Variation on account of Central Transmission Charges including arrears/ revisions.
   - Variation on account of State Transmission charges including arrears/revisions
3. Other Charges which shall contain all the other elements not forming part of the above two components for example:
   - Any adjustments /reversals due to over recovery of charges
   - Any adjustments due to under recovery of charges in case the Commission decides to limit the FPPCA charges in previous quarters to avoid tariff shock or other reasons
   - Any other adjustments on account of factors not envisaged at the time of tariff fixation
4. Less any revenue from Additional Surcharge collected from Open Access consumer towards the stranded power purchase cost.

Based on the components as defined above, the new FPPCA formula can be represented as follows:

$$\boldsymbol{FPPCA\left(\frac{Rs.}{Unit}\right) = .\left(\frac{(Pact + Tact + Oact - ASact) * 10}{\{[PPOact * (1 - TLapp) + PPIact - PSOact] * (1 - DLapp)\} - Zact}\right) - Rapp}$$

Where:

- $Pact(in\ Rs.Cr.)$: Actual Power purchase cost inclusive of fixed cost, variable costs, arrears, and other charges excluding any kind of penalties incurred in the quarter. This shall include:
  - Cost of procurement from sources outside the State,
  - Cost of procurement from sources within the State,
  - Cost of DSM excluding any penal charges,
  - Cost of procurement from the Bilateral/ exchange etc.
  - Less: Revenue from sale of surplus power/ DSM
- $Tact\ (in\ Rs.Cr.)$: Actual Transmission cost inclusive of any kind of arrears, other charges etc. and excluding any kind of penalties incurred in the quarter. This shall include:
  - Inter-State transmission cost (PGCIL charges),
  - Intra-State transmission cost
- $Oact\ (in\ Rs.Cr.)$: Adjustments from the previous FPPCA quarter on account of over/ under recovery and any other incidental costs not accounted for at the time of retail tariff fixation
- $ASact\ (in\ Rs.Cr.)$: Revenue from Additional Surcharge collected from Open Access consumer towards the stranded power purchase cost
- $PPOact\ (in\ MU)$: Quantum of power purchased in the quarter from sources outside State/ Union Territory

- $TLapp\ (in\ \%)$: Approved Inter- State transmission losses for the year in consideration as provided in the relevant Tariff Order
- $PPIact\ (in\ MU)$: Quantum of power purchased in the quarter from sources within State/Union Territory, Bilateral/ Exchange and Over-drawal under the DSM
- $PSOact\ (in\ MU)$: Actual quantum of sale of surplus power/ under-drawal under the DSM in the quarter
- $DLapp\ (in\ \%)$: Approved T&D losses for the year in consideration as provided in the relevant Tariff Order
- $Zact\ (in\ MU)$: Actual energy sales for agriculture and BPL category consumers in the quarter

$$Rapp\ (\frac{Rs}{unit}) = \left(\frac{(Papp + Tapp) * 10}{\{[PPOapp * (1 - TLapp) + PPIapp - PSOapp] * (1 - DLapp)\} - Zapp}\right)$$

- $Papp\ (in\ Rs.Cr.)$: Total power purchase cost approved in the Tariff Order for a quarter inclusive of fixed costs, variable costs etc. and containing the following elements:
  - Cost of procurement from sources outside the State,
  - Cost of procurement from sources within the State,
  - Cost of procurement from the Bilateral/ exchange etc.
  - Less: Revenue from sale of surplus power
- $Tapp\ (in\ Rs.Cr.)$: Total transmission charges approved in the Tariff Order for a quarter consisting of the following elements:
  - Inter-State transmission charges (PGCIL charges),
  - Intra-State transmission charges
- $PPOapp\ (in\ MU)$: Quantum of power to be procured from sources outside State/ Union Territory in a quarter as approved in the Tariff Order
- $TLapp\ (in\ \%)$: Approved Inter- State transmission losses for the year in consideration as provided in the relevant Tariff Order
- $PPIapp\ (in\ MU)$: Quantum of power to be procured from sources within the State, bilateral/ exchange in a quarter as approved in the Tariff Order
- $DLapp\ (in\ \%)$: Approved T&D losses for the year in consideration as provided in the Tariff Order
- $PSOapp\ (in\ MU)$: Quantum of sale of surplus power approved in the Tariff Order for a quarter
- $Zapp\ (in\ MU)$: Sales for agriculture and BPL category consumers for a quarter as approved in the relevant Tariff Order

4. Other Terms and conditions

1. For the purpose of the Fuel and Power Purchase Cost Adjustment, all the bills admitted and credits, if any, received by the distribution licensee during the period in consideration, irrespective of the period to which they pertain, may be considered.
2. The FPPCA charges determined as per the formula above may be recovered from the consumers of all categories based on their billed units excluding the BPL and the agriculture category consumers.
3. The FPPCA charges for a quarter shall be limited to a 10% of the ABR of the consumer category. The distribution licensee shall be allowed to collect the FPPCA without obtaining approval from the Commission. However, the distribution licensee shall be required to submit the FPPCA calculation to the Commission at least one week before levying the same on the consumers.
4. The per unit FPPCA so worked out is charged differentially as per the approved retail tariff of the consumers. The determination of differential per unit FPPCA is mentioned below:
   - Step 1: Determination of Value of K

$$\frac{Approved\ Retail\ Tariff\ for\ a\ category\ or\ sub\ category\ (\frac{Rs.}{unit})}{Weighted\ Average\ Retail\ Tariff\ (WART)(\frac{Rs.}{unit})}$$

The value of K for different consumer category or sub category for the year in consideration is considered as approved in this Tariff Order.

- Step 2: Determination of proportionate FPPCA (Rs/unit) consumer category/sub-category wise

$$FPPCA\left(\frac{Rs.}{Unit}\right) = Average\ FPPCA * K\ for\ that\ consumer\ category\ or\ sub - category$$

5. The Petitioner shall compute fuel and power procurement cost variations, and adjustments shall be made in the consumer bills based on the Fuel and Power Purchase Cost Adjustment (FPPCA) formula notified by the Commission in this Order.
For the purpose of calculation, the approved per unit cost of power purchase (Rapproved) shall be taken as Rs 4.46 per unit for the FY 2018-19.

Table 124: $R_{approved}$ determined by Commission for FY 2018-19

Particulars	Amount
Total Power Purchase Cost (Rs Cr), except Transmission charges, P_{app}	669.87
Transmission Charges (Rs Cr), T_{app}	67.15
Power Purchase Quantum from CGS Stations at Generator periphery (MU), PPO_{app}	1741.54
Approved Inter-State Transmission Loss (%), TL_{app}	4.21%
Power Purchase Quantum from sources within State/ Open Market (MU), PPI_{app}	217.45
Approved Intra-State T&D Loss (%), DL_{app}	12.25%
Energy Sales for BPL and Agriculture consumer category (MU), Z_{app} (MU)	1.59
R_{app} (Rs/kWh)	**4.46**

10. Chapter 10: Directives

Over the years, the Commission has issued various directives to the Petitioner for necessary action at its end. It has been observed that the Petitioner is not fully complying with many of the directives issued by the Commission. In order to strengthen the effective monitoring and ensure timely implementation of all the directives in true spirit, the Commission hereby directs that the Petitioner shall now compulsorily submit:

- ***The detailed action plan for compliance of all the directives <u>within 1 month of the issuance of this Order</u>.***
- ***The quarterly progress report as per the detailed action plan for all the directives issued in the subsequent sections <u>within 10 days of the end of each quarter of the calendar year</u>.***

10.1. Directives continued in this Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it is observed that some of the directives issued in the previous Tariff Orders have not been fully complied with by the Petitioner.

The Commission is of the view that substantial time has already been given to the utility for compliance with these directions. Thus, the Commission hereby directs the utility to comply with the directions mentioned below in the given timeframe, failing which the Commission shall be constrained to take appropriate action under Section 142 of the Electricity Act 2003 and various other provisions of the Act, and Regulations framed by JERC.

10.1.1. Management Information System

Originally Issued in Tariff Order dated 7th May 2012
Commission's Latest Directive in Tariff Order Dated 04th May 2017 *The Commission observes that the Petitioner is yet to ensure full compliance of this directive (to ensure that an effective MIS is in place). The Commission thus directs that pending the implementation/roll out of the relevant IT module, the Petitioner shall finalize the formats (for manual compilation of MIS) within 1 month of issuance of this Order and submit quarterly MIS for the information of the Commission*
Petitioner's Response in the Present Tariff Petition *The M/s NIELIT has already been designated for computerized billing of all types of consumers of the CED, who fully support the CED and supply all types of MIS in required format time to time. The CED regularly forwards the MIS data like monthly SOP details, metering & billing information, RPO information etc. to Hon'ble commission in prescribed format time to time.* *The CED requests the Commission to approve the enclosed format of MIS-1 to MIS-5, so that the information may be supplied by the CED accordingly.*
Commission's Response *The Commission believes that the Petitioner is well equipped to formulate the structure of its MIS and the Commission does not intend to intervene in the same. The Commission thus directs the Petitioner to complete the roll-out of the MIS for the Discom at the earliest under intimation to the Commission.*

10.1.2. Metering /replacement of Non-Functional or defective/ 11KV Meters

Originally Issued in Tariff Order dated 16th July 2011
Commission's Latest Directive in Tariff Order Dated 04th May 2017 *The Commission has taken a serious view of the fact that the Petitioner is yet to ensure full compliance (including installation of smart meters as per Clause 8.4(3) of National Tariff Policy notified on 28th January 2016) despite repeated directives of the Commission. The Commission directs the Petitioner to identify and submit a detailed action plan to ensure 100% fully functional 11 kV meters within 1 month of issuance of this order and ensure compliance of this directive before 31st December 2017. No further extension will be entertained by the Commission in this context.*
Petitioner's Response in the Present Tariff Petition *The necessary data/information is being supplied quarterly on regular basis and information for 2nd quarter has been provided vide the office Memo No. 2595 dated 03/10/17.*
Commission's Response *The Commission has observed that the quarterly report is only being submitted for consumer meters. The Petitioner is directed to submit the quarterly report of 11 kV feeder meters and DT meters also.*

10.1.3. Energy Audit

Originally Issued in Tariff Order dated 16th July 2011
Commission's Latest Directive in Tariff Order Dated 04th May 2017 *The Commission has taken a serious view of the fact that the Petitioner is yet to ensure full compliance despite repeated directives of the Commission. The Commission now directs the Petitioner to expedite all pre-requisite actions for undertaking energy audit in its licensee area and ensure compliance of this directive within this financial year only. No further extension will be entertained by the Commission in this context*
Petitioner's Response in the Present Tariff Petition *The estimate for installation of DLMS meters as well as Smart Meters at all node points of 66 KV & 11 KV for energy audit purpose is under process of approval by the competent authority. The CED is facing difficulty in procurement of HT/EHT Meters. As per R-APDRP Scheme, DLMS meters with software work are available easily in market. However, due to mandate of installation of smart meters, the CED is facing problems since the Smart HT/EHT Meters are not easily available, are not being tested by CPRI/ Govt. Labs and there are also communication issues. Since the CED has no data centre, the CED requests the Commission to allow installation of HT/EHT DLMS Meters with modem for energy audit. The communication of data will be outsourced and regular reports will be received. This will help the CED to carry out Division wise energy audit. Further, energy audit with DTs shall be carried out after successful implementation of pilot Smart Grid Project for Sub Division No. 5, Industrial Area, Chandigarh for which work has been allotted to M/s RECPDCL (PSU of MOP) on 05.09.2016 but due to various issues in implementation of Smart Meters, the work could not be started on agreed fixed date. Therefore, the Hon'ble Commission may allow installation of HT/EHT DLMS Meters with modem for energy audit.*
Commission's Response *The Commission believes that the Petitioner is well equipped to carry out the Energy Audit in its territory and the Commission does not intend to intervene in the operational decision making of the Petitioner. The Commission thus directs the Petitioner to carry out the Energy Audit at the earliest and submit the same to the Commission along with the next tariff Petition.*

10.1.4. Demand Side Management and Energy Conservation

Originally Issued in Tariff Order dated 16th July 2011

Commission's Latest Directive in Tariff Order Dated 04th May 2017

The Commission observes that Petitioner has not yet reverted with the status of the action plan for installation of ToD meters. The Commission also observes that the Petitioner is also yet to submit the detailed roll-out plan of LED Bulbs in the UT of Chandigarh. The Commission directs the Petitioner to take up the matter with the highest authorities and submit the roll-out for ToD metering as well as distribution of LED bulbs in the licensee area of the CED within one month of issuance of this order so as to fully comply with both the directives before 30th November 2017. No further extension will be entertained by the Commission in this matter and any further non-compliance will be viewed seriously.

Petitioner's Response in the Present Tariff Petition

The Ujala Scheme for distribution of LED Bulb, LED Tube Light & Energy Efficient Fan has been launched through M/s EESL in Chandigarh on dated 06.03.2017 and as per the report downloaded dated 11 Dec-2017 from NATIONAL UJALA DASHBOARD, Ministry of Power, GoI. 3,72,571 Nos. LED Bulbs, 41,548 Nos. LED Tube Lights and 11,752 Nos. Energy Efficiency Fans have been distributed through this scheme. The impact of these appliances is as under:-

S.No.	Parameter	Saving / Impact
1	Energy Saved per year	48,396 MWh (Approx.)
2	Avoided Peak Demand per year	11 MW (Approx.)
3	CO_2 Reduction per year	40,688 Tonnes (Approx.)

The smart meter have an additional feature of TOD metering and the work for installation of smart meters and its allied infrastructure under the area of SDO-5, has already been allotted to M/s REC. Further, DPR for whole Chandigarh for approximate Rs. 250.95 Crore, has already approved by the empowered Committee, MOP, GoI. under NSGM scheme.

Commission's Response

The Commission notes the progress made by the CED regarding distribution of LED bulbs through the UJALA scheme. However, the Commission takes a serious view of the fact that the Petitioner is yet to roll-out TOD metering for its consumers. The Petitioner is directed to submit an action plan in this regard.

10.1.5. Manpower Deployment

Originally Issued in Tariff Order dated 16th July 2011

Commission's Latest Directive in Tariff Order Dated 04th May 2017

The Commission directs the Petitioner to arrange follow up at the level of the Secretary (Power) of the UT with the Government of India in this matter. Further the Petitioner should make recruitment of manpower as per the report approved by the Commission and submit the status report by 30th September 2017

Petitioner's Response in the Present Tariff Petition

The proposal for implementation of Manpower deployment is under consideration with the competent authority.

Commission's Response

The Commission notes that the Petitioner has repeatedly failed to comply with the above directive. The Commission advises that the Chief Engineer and the Secretary (Power) to take up the matter at their level to convince the competent authority in this regard in the interest of the consumers.

10.1.6. Segregation of T&D losses and loss reduction trajectory

Originally Issued in Tariff Order dated 7th May 2012
Commission's Latest Directive in Tariff Order Dated 04th May 2017 *The Commission has taken a serious view of the fact that the Petitioner has repeatedly failed to comply with the directive over the years on the pretext of ensuring compliance under one scheme or another.* *The Commission now directs the Petitioner to submit the action plan for installation of interface meters at all feeders within 1 month of issuance of this order. The Commission also directs the Petitioner to submit a detailed report of voltage wise T&D losses before 31st October 2017 failing which the Commission will be constrained to take appropriate action against the Petitioner.*
Petitioner's Response in the Present Tariff Petition *The RFP for appointment of accredited consultant for the assessment of component wise AT&C Losses with segregated T&D Losses is under preparation with the CED. Tender will be floated after approval of RFP from competent authority*
Commission's Response *The Commission directs the Petitioner to expedite the execution of the study. The Commission also directs the Petitioner to submit a detailed report of voltage wise T&D losses along with the next Tariff Petition.*

10.2. Directives dropped in this Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it has been observed that some of the directives issued in previous Tariff Orders are no longer required.

The Commission is of the view that since these directions have been complied with satisfactorily, these directions are no longer required in the present context and are required to be dropped or replaced with new directions. No further compliance/status is required to be submitted by the Petitioner for the following directives:

10.2.1. Capital Expenditure

Originally Issued in Tariff Order dated 7th May 2012
Commission's Latest Directive in Tariff Order Dated 04th May 2017 *The action taken is noted (The Petitioner was directed to submit the detailed statement of capital expenditure incurred and capitalisation for every quarter, within 15 days in the subsequent quarter). The capital expenditure status report was received on 02nd December 2016. The Commission directs the Petitioner to submit the detailed statement of capital expenditure incurred and capitalisation for every quarter, within 15 days in the subsequent quarter.*
Petitioner's Response in the Present Tariff Petition *The necessary data/information is being supplied quarterly on regular basis and information for 2nd quarter was supplied vide the office Memo No. 3166 dated -11/12/17.*
Commission's Response *The Commission expects that the Petitioner will continue its compliance of the above mentioned directive and accordingly this directive is dropped from the Tariff Order.*

10.2.2. Initiate action for Corporatization of the Electricity Department

Originally Issued in Tariff Order dated 10th April 2015
Commission's Latest Directive in Tariff Order Dated 04th May 2017 *The Commission directs the Petitioner to expedite the compliance of this directive (corporatization of Electricity Department)*
Petitioner's Response in the Present Tariff Petition *The proposal of Corporatization is under process with the higher authorities and further course of action will be taken on the decision on the issue.*

Originally Issued in Tariff Order dated 10th April 2015

Commission's Latest Directive in Tariff Order Dated 04th May 2017

The Commission directs the Petitioner to expedite the compliance of this directive (corporatization of Electricity Department)

Commission's Response

The Commission notes that decision for corporatization is pending with the administration of UT, Chandigarh and the Petitioner has limited say in the matter. The Commission has accordingly decided to drop this directive from the Tariff Order.

10.2.3. Renewable Purchase Obligation

Originally Issued in Tariff Order dated 7th May 2012

Commission's Latest Directive in Tariff Order Dated 04th May 2017

Action taken is noted. The Petitioner is required to comply with the revised RPO requirements of the Commission amendment in Regulations dated 22nd August 2016. The non-solar requirement can be tied up with PTC.

Petitioner's Response in the Present Tariff Petition

The Hon'ble commission vide its order on Dt-20/09/17 in the review petition No-2396/2017, has revised the RPO targets of the CED and accordingly relevant information of RPO achievement up to the 2nd Qtr (up to Sept-17) has already been submitted to Hon'ble commission vide this office memo No-2700 Dt-17/10/17 . The status of RPOs up to 2nd Qtr is as under :-

S. No.	Description	Target RPO to be met (MU) in FY-2017-18	RPO Met up to 30/09/17 (2nd Qtr)	Surplus in RPO compliance as per order Dt-20/09/17 in review petition No-239/2017	Total RPO met up to 30/09/17 in MU	Total RPO met up to 30/09/17 % age
1	Non-solar	26.75	22.00	36.00	58.00	216.82
2	Solar	15.92	8.765	18.57	27.336	171.70
Total		**42.67**	**30.765**	**54.57**	**85.335**	**199.99**

As per above data , the CED has already achieved the targets of Solar and Non-Solar RPOs for the FY-2017-18 and presently , the CED is a surplus utility with regard to Solar and Non-Solar RPOs.

Further, M/s CREST is already nominated as a nodal agency for installation of all types of solar power plants in Chandigarh UT and as per the report the total installed capacity for achieving the RPO targets is as under :-

Sl No	FY	Installed capacity (MW) Projected	Installed capacity (MW)
1	2016-17	10	5.536
2	2017-18	16	14.34

Originally Issued in Tariff Order dated 7th May 2012
Commission's Latest Directive in Tariff Order Dated 04th May 2017
Action taken is noted. The Petitioner is required to comply with the revised RPO requirements of the Commission amendment in Regulations dated 22nd August 2016. The non-solar requirement can be tied up with PTC.

			(As on 30.09.17) Feasibility for 21.86 MW of Solar Plant already granted by the CED
3	2018-19	23	
4	2019-20	30	
5	2020-21	40	
6	2021-22	50	

Commission's Response
The Commission notes the compliance and drops this directive.

10.2.4. Strengthen the CGRF and give it wide publicity

Originally Issued in Tariff Order dated 10th April 2015
Commission's Latest Directive in Tariff Order Dated 04th May 2017
The Commission has noted the compliance of the Directive. The Commission further directs the Petitioner to expedite shifting of CGRF to the new office premise.
Petitioner's Response in the Present Tariff Petition
1. *The CED is already publicizing the CGRF by printing the details on the front side of electricity bills. In addition to above, the details of CGRF and Ombudsman further got published through the load declaration forms attached with electricity bills in every six months (Copy Enclosed). Further, details are available on website at www.chdengineering.gov.in.*   2. *Accommodation is already renovated at Sector-19 for the CGRF and the tender for requisite infrastructure like civil work, electronic works, furniture works and electrical works etc. of amount 7.30 Lacs has already been allotted to M/s N.D. Enterprises, # 3578, Sector 37-D, Chd for execution of work of CGRF building at sector-19 . The office of CGRF has started functioning in new building.*   3. *The Interview for the post of Chairman CGRF have already been conducted on 07/12/17 and the list of panel has been sent to Hon'ble commission for consideration and approval.*
Commission's Response
The action taken is noted by the Commission. The Commission hereby drops this directive.

10.3. New Directives issued in this Order

10.3.1. Assets created from consumer contribution

The Petitioner has failed to submit the details of assets created through consumer contribution, if any. The Petitioner is not entitled to get depreciation on these assets. The Commission has currently considered the entire GFA towards depreciation and will reduce the depreciation in future, once the details of the consumer contribution are made available. The Commission directs the Petitioner to submit detailed scheme wise consumer contributions, the impact of which shall be accounted by the Commission in future Tariff Orders.

10.3.2. Creation of SLDC

Currently the functions of scheduling of power are being performed by the CED itself. The Commission directs the Petitioner to form a separate SLDC which is ring fenced from the CED. The Petitioner is directed to deploy employees dedicated to the SLDC operations, which are independent from the CED. Till the operationalization of SLDC, the Petitioner is directed to immediately appoint an officer responsible for receipt and processing of Open Access applications.

10.3.3. Operational safety and policy for accidents and compensation

The Commission directs the Petitioner to ensure that proper safety manuals are in place and are updated on a regular basis. To check enforcement of established safety procedures, the CED is directed to ensure periodic Safety Audits through independent professional agencies and adequate training of construction supervisory staff.

The Commission also directs the Petitioner to develop a compensation policy for the victims of accidents caused due to the working of the Petitioner.

10.3.4. Non-achievement of capitalization target

The Commission observes that the capitalisation achieved by the Petitioner in the FY 2-16-17 is much lower, almost one-tenth, than approved by the Commission in the APR Order. The Petitioner has also submitted that a capitalisation of only Rs 2.40 Cr has been achieved till January 2018 in the FY 2017-18 against a total approved capitalisation of Rs 38.52 Cr as approved by the Commission in the ARR Order. Lower capitalisation signifies that not enough efforts have been undertaken in enhancing the reliability and quality of supply to the consumers. Accordingly, the Commission directs the Petitioner to increase its efforts towards undertaking capital expenditure activities necessary for improving the service quality and targeting 24x7 supply to all consumers.

10.3.5. Delay in submission of Tariff Petition

The Commission has taken a serious view of the delay in filing of Petition by the CED. The Petitioner is directed to file the subsequent tariff Petitions before 30th November of the respective year as per the applicable provisions of the MYT Regulations 2014. Further, the Commission has observed that although the Petitioner has carried out a load forecasting study, the Petitioner has not been using any scientific method to project the demand, power purchase quantum and cost in its Tariff Petitions. The Commission directs the Petitioner to ensure that its future submission regarding sales, power purchase cost are based on detailed analysis of the past trends and applicable tariffs of the power sources available.

Annexures

Annexure 1: Public Notices published by the Petitioner

ਚੰਡੀਗੜ੍ਹ/ਆਸ-ਪਾਸ

ਚੰਡੀਗੜ੍ਹ ਪ੍ਰਸ਼ਾਸਨ

ਜਨਤਕ ਸੂਚਨਾ

ਜੁਆਇੰਟ ਇਲੈਕਟਰੀਸਿਟੀ ਰੈਗੂਲੇਟਰੀ ਕਮਿਸ਼ਨ (ਜੇ ਈ ਆਰ ਸੀ) ਕੋਲ ਇੰਜੀਨੀਅਰਿੰਗ ਵਿਭਾਗ ਦੇ ਬਿਜਲਈ ਵਿੰਗ ਦੁਆਰਾ ਦਾਖ਼ਲ ਕੀਤੇ ਵਿੱਤੀ ਸਾਲ 2018-19 ਲਈ ਏ ਆਰ ਆਰ ਅਤੇ ਟੈਰਿਫ ਪ੍ਰਸਤਾਵ ਦੇ ਸਬੰਧ ਵਿਚ

ਇੰਜੀਨੀਅਰਿੰਗ ਵਿਭਾਗ, ਯੂ. ਟੀ. ਚੰਡੀਗੜ੍ਹ ਦੇ ਬਿਜਲਈ ਵਿੰਗ ਦੁਆਰਾ ਪੇਸ਼ ਕੀਤੀ ਵਿੱਤੀ ਸਾਲ 2016-17 ਦੀ ਟਰੂ ਅਪ, ਵਿੱਤੀ ਸਾਲ 2017-18 ਦੀ ਐਨੂਅਲ ਪ੍ਰਫਾਰਮੈਂਸ ਰੀਵਿਊ ਅਤੇ ਵਿੱਤੀ ਸਾਲ 2018-19 ਲਈ ਐਗਰੀਗੇਟ ਰੈਵੀਨਿਊ ਰਿਕੁਆਇਰਮੈਂਟ (ਏ ਆਰ ਆਰ) ਅਤੇ ਟੈਰਿਫ ਪ੍ਰਸਤਾਵ ਲਈ ਪਟੀਸ਼ਨ 'ਤੇ ਵੱਖ-ਵੱਖ ਸਟੇਕ ਹੋਲਡਰਾਂ ਤੋਂ ਇਤਰਾਜ਼ਾਂ/ਟਿੱਪਣੀਆਂ ਦੀ ਮੰਗ ਕੀਤੀ ਜਾਂਦੀ ਹੈ।

1. ਵੱਖ-ਵੱਖ ਸਟੇਕ ਹੋਲਡਰਾਂ ਨੂੰ ਇਸ ਦੁਆਰਾ ਸੂਚਨਾ ਦਿੱਤੀ ਜਾਂਦੀ ਹੈ ਕਿ ਬਿਜਲੀ ਦੀ ਵੰਡ ਅਤੇ ਵੱਖ-ਵੱਖ ਗਤੀਵਿਧੀਆਂ ਵਿਚ ਲੱਗੇ ਇੰਜੀਨੀਅਰਿੰਗ ਵਿਭਾਗ, ਯੂ. ਟੀ. ਚੰਡੀਗੜ੍ਹ ਦੇ ਬਿਜਲਈ ਵਿੰਗ ਨੇ ਸਮੇਂ-ਸਮੇਂ 'ਤੇ ਸੋਧੇ ਅਨੁਸਾਰ ਜੇ ਈ ਆਰ ਸੀ (ਮਲਟੀ ਯਿਅਰ ਟੈਰਿਫ) ਰੈਗੂਲੇਸ਼ਨ 2014, ਜੇ ਈ ਆਰ ਸੀ (ਕੰਡਕਟ ਆਫ ਬਿਜ਼ਨੈੱਸ) ਰੈਗੂਲੇਸ਼ਨ 2009 ਦੇ ਅਨੁਸਾਰ ਅਤੇ ਇਲੈਕਟਰੀਸਿਟੀ ਐਕਟ 2003 ਦੀ ਧਾਰਾ 45, 46, 61, 62 ਅਤੇ 64 ਅਧੀਨ ਜੁਆਇੰਟ ਇਲੈਕਟਰੀਸਿਟੀ ਰੈਗੂਲੇਟਰੀ ਕਮਿਸ਼ਨ (ਜੇ ਈ ਆਰ ਸੀ) ਕੋਲ ਵਿੱਤੀ ਸਾਲ 2016-17 ਲਈ ਟਰੂ ਅਪ ਅਤੇ ਵਿੱਤੀ ਸਾਲ 2017-18 ਲਈ ਏ ਪੀ ਆਰ, ਇਸ ਦੇ ਡਿਸਟਰੀਬਿਊਸ਼ਨ ਬਿਜ਼ਨੈਸ ਲਈ ਵਿੱਤੀ ਸਾਲ 2018-19 ਲਈ ਐਗਰੀਗੇਟ ਰੈਵੀਨਿਊ ਰਿਕੁਆਇਰਮੈਂਟ ਅਤੇ ਟੈਰਿਫ ਪ੍ਰਸਤਾਵ ਦਾਖਲ ਕੀਤੇ ਹਨ। ਉਕਤ ਐਮ ਵਾਈ ਟੀ ਪਟੀਸ਼ਨ, ਮਾਣਯੋਗ ਜੇ ਈ ਆਰ ਸੀ ਦੁਆਰਾ ਪਟੀਸ਼ਨ ਨੰਬਰ 254/2018 ਦੁਆਰਾ ਦਾਖ਼ਲ ਕੀਤੀ ਗਈ ਹੈ।
   ਕਮਿਸ਼ਨ ਨੇ ਵਿਭਾਗ ਨੂੰ ਨਿਰਦੇਸ਼ ਦਿੱਤਾ ਹੈ ਕਿ ਵੱਖ-ਵੱਖ ਸਟੇਕ ਹੋਲਡਰਾਂ ਤੋਂ ਇਤਰਾਜ਼/ਟਿੱਪਣੀਆਂ ਦੀ ਮੰਗ ਕਰਨ ਲਈ ਇਕ ਜਨਤਕ ਸੂਚਨਾ ਪ੍ਰਕਾਸ਼ਿਤ ਕੀਤੀ ਜਾਵੇ।
2. ਵਿੱਤੀ ਸਾਲ 2017-18 ਲਈ ਬਿਜਲੀ ਕਾਰੋਬਾਰ ਦੀ ਇਸ ਦੀ ਵੰਡ ਲਈ ਸੀ ਈ ਡੀ ਦੁਆਰਾ ਦਾਖ਼ਲ ਕੀਤੀ ਪਟੀਸ਼ਨ ਦਾ ਸੰਖੇਪ ਵੇਰਵਾ ਹੇਠਾਂ ਲਿਖੇ ਅਨੁਸਾਰ ਹੈ :-
   2.1 ਵਿੱਤੀ ਸਾਲ 2016-17 ਲਈ ਐਗਰੀਗੇਟ ਰੈਵੀਨਿਊ ਰਿਕੁਆਇਰਮੈਂਟ ਅਤੇ ਕਮੀ (ਰੁਪਏ ਕਰੋੜ):

ਲੜੀ ਨੰ:	ਵੇਰਵੇ	ਟੀ. ਓ. ਮਿਤੀ 28 ਅਪ੍ਰੈਲ 2016 ਵਿਚ ਪ੍ਰਵਾਨਿਤ	ਰੀਵਿਊ ਪਟੀਸ਼ਨ ਟੀ. ਓ. 04 ਮਈ 2017 ਵਿਚ ਪ੍ਰਵਾਨਿਤ	ਅਸਲ
1.	ਸਾਰੇ ਸਾਲ ਲਈ ਖਰੀਦੀ ਬਿਜਲੀ ਦੀ ਕੀਮਤ	728.70	638.15	671.26
2.	ਕਰਮਚਾਰੀ ਲਾਗਤਾਂ	65.35	64.65	64.01
3.	ਪ੍ਰਸ਼ਾਸਨ ਅਤੇ ਆਮ ਖਰਚੇ	6.16	6.09	3.58
4.	ਆਰ ਐਂਡ ਐਮ ਖਰਚੇ	6.70	11.03	9.45
5.	ਅਣ ਮੁਲਣ	14.40	15.76	11.63
6.	ਵਿਆਜ ਅਤੇ ਵਿੱਤ ਖਰਚੇ	7.19	5.74	3.94
7.	ਵਰਕਿੰਗ ਪੂੰਜੀ ਤੇ ਵਿਆਜ	-	-	-
8.	ਐਨ ਐਫ ਏ/ਇਕਇਟੀ ਤੇ ਰਿਟਰਨ	12.69	20.54	19.52
9.	ਡੁੱਬੇ ਕਰਜ਼ ਦੀ ਵਿਵਸਥਾ	-	-	8.15
10.	ਸਕਿਓਰਟੀ ਜਮ੍ਹਾਂ ਤੇ ਵਿਆਜ	10.95	10.79	7.21
11.	ਕੁੱਲ ਰੈਵੀਨਿਊ ਰਿਕੁਆਇਰਮੈਂਟ	852.14	772.75	798.75
12.	ਘੱਟ : ਨਾਨ ਟੈਰਿਫ ਆਮਦਨ	24.48	23.02	42.66
13.	ਘੱਟ : ਯੂ ਆਈ ਰਾਹੀਂ ਵਿਕਰੀ ਤੋਂ ਰੈਵੀਨਿਊ	-	3.15	9.06
14.	ਨਿਰੋਲ ਰੈਵੀਨਿਊ ਰਿਕੁਆਇਰਮੈਂਟ	827.66	746.59	747.03
15.	ਮੌਜੂਦਾ ਟੈਰਿਫ 'ਤੇ ਰਿਟੇਲ ਵਿਕਰੀਆਂ ਤੋਂ ਰੈਵੀਨਿਊ	827.72	838.76	814.85
16.	ਸਾਲ ਦੌਰਾਨ ਐਫ ਪੀ ਪੀ ਪੀ ਸੀ ਏ ਬਿਲਡ	-	87.27	121.23
17.	ਸਾਲ ਲਈ ਰੈਵੀਨਿਊ ਸਰਪਲੱਸ/(ਗੈਪ)	0.06	179.44	189.05

2.2 ਸੋਧੇ ਹੋਏ ਏ ਆਰ ਆਰ ਅਤੇ ਰੈਵੀਨਿਊ ਪ੍ਰੋਜੈਕਸ਼ਨ 'ਤੇ ਅਧਾਰਿਤ ਵਿੱਤੀ ਸਾਲ 2017-18 ਲਈ ਰੈਵੀਨਿਊ ਗੈਪ (ਰੁਪਏ ਕਰੋੜ) :-

ਲੜੀ ਨੰ:	ਵੇਰਵੇ	ਟੀ. ਓ. ਮਿਤੀ 28 ਅਪ੍ਰੈਲ 2016	ਟੀ. ਓ. ਮਿਤੀ 04 ਮਈ, 2017	ਅੰਦਾਜ਼ਨ

चंडीगढ़ प्रशासन
सार्वजनिक सूचना

ज्वाईंट इलेक्ट्रीसिटी रेगुलेटरी कमीशन (जेईआरसी) के साथ इलेक्ट्रीसिटी विंग ऑफ इंजीनियरिंग डिपार्टमेंट द्वारा भरी वित्तीय वर्ष 2018-19 हेतु एआरआर एवं टेरिफ की पेशकश ।

विभिन्न स्टैक होल्डरों से इलेक्ट्रीसिटी विंग ऑफ इंजीनियरिंग डिपार्टमेंट यूटी चंडीगढ़ द्वारा वित्तीय वर्ष 2018-19 हेतु एग्रीगेट राजस्व आवश्यकता (एआरआर) एवं टेरिफ पेशकश तथा वित्तीय वर्ष 2017-18 की वार्षिक निष्पादन समीक्षा, वित्तीय वर्ष 2016-17 की ट्रयू-अप हेतु पटीशन पर आपत्तियां / सुझाव आमंत्रित हैं ।

1. एतदद्वारा विभिन्न स्टैक होल्डरों को सूचना दी जा रही है कि इलेक्ट्रीसिटी विंग ऑफ इंजीनियरिंग डिपार्टमेंट यूटी चंडीगढ़ इलेक्ट्रीसिटी के वितरण तथा विभिन्न गतिविधियों में शामिल है, जो समय समय से संशोधित अनुसार जेईआरसी (मल्टी ईयर टैरिफ) रेगुलेशन 2014 जेईआरसी (कंडक्ट ऑफ बिजनेस) रेगुलेशन 2009 की अनुवर्ती में तथा इलेक्ट्रीसिटी एक्ट 2003 के सेक्शन 45, 46, 61, 62 तथा 64 के अधीन ज्वाईंट इलेक्ट्रीसिटी रेगुलेटरी कमीशन (जेईआरसी) के समक्ष वित्तीय वर्ष 2016-17 हेतु ट्रयू अप एवं वित्तीय वर्ष 2017-18 हेतु एपीआर, अपने डिस्ट्रीब्यूशन बिजनेस हेतु वित्तीय वर्ष 2018-19 के लिए एग्रीगेट रेवन्यू आवश्यकता एवं टैरिफ पेशकश के भरा है । कथित एमवाईटी पटीशन को माननीय जेईआरसी द्वारा पटीशन सं. 254/2018 के संदर्भ में जमा किया गया है ।

कमीशन ने विभिन्न स्टैक होल्डरों से आपत्ति/ सुझाव आमंत्रण हेतु सार्वजनिक सूचना प्रकाशन करने के लिए डिपार्टमेंट को निर्देश दिया है ।

2. वित्तीय वर्ष 2017-18 हेतु इलेक्ट्रीसिटी बिजनेस के अपने डिस्ट्रीब्यूशन हेतु सीईडी द्वारा भरी पटीशन की संक्षिप्त विचार धारा निम्न अनुसार है ।

2.1 वित्तीय वर्ष 2016-17 हेतु एग्रीगेट रेवन्यू अपेक्षता तथा घाटा (करोड़ रु. में) :-

S. No	Particulars	Approved in T.O. dated 28th April 2016	Approved in Review Petition T.O. 4th May 2017	Actual
1	Cost of power purchase for full year	728.70	638.15	671.26
2	Employee costs	65.35	64.65	64.01
3	Administration and general expenses	6.16	6.09	3.58
4	R&M expenses	6.70	11.03	9.45
5	Depreciation	14.40	15.76	11.63
6	Interest and finance charges	7.19	5.74	3.94
7	Interest on working capital	-	-	-
8	Return on NFA/Equity	12.69	20.54	19.52
9	Provision for Bad Debt	-	-	8.15
10	Interest on Security Deposit	10.95	10.79	7.21
11	**Total Revenue Requirement**	**852.14**	**772.75**	**798.75**
12	Less: Non-Tariff Income	24.48	23.02	42.66
13	Less: Revenue from Sale through UI	-	3.15	9.06
14	**Net Revenue Requirement**	**827.66**	**746.59**	**747.03**
15	Revenue from retail sales at Existing Tariff	827.72	838.76	814.85
16	FPPPCA billed during the year	-	87.27	121.23
17	**Revenue Surplus/(Gap) for the Year**	**0.06**	**179.44**	**189.05**

2.2 वित्तीय वर्ष 2017-18 हेतु संशोधित एआरआर तथा राजस्व परियोजना, राजस्व अंतराल पर आधारित (करोड़ रु.) :-

THE TRIBUNE – 23/01/2018

CHANDIGARH ADMINISTRATION

PUBLIC NOTICE

In respect of

ARR & Tariff Proposal for the FY-2018-19

Filed by Electricity Wing of Engineering Department

With **Joint Electricity Regulatory Commission(JERC)**

Objections/Comments invited from various stakeholders on Petition **for True-Up Of FY 2016-17, Annual Performance Review Of FY 2017-18 And Aggregate Revenue Requirement (ARR) & Tariff Proposal For FY 2018-19 submitted by** Electricity Wing of Engineering Department, UT Chandigarh.

1. Notice is hereby given to various stakeholders that the Electricity Wing of Engineering Department, UT Chandigarh engaged in Electricity Distribution and related activities has filed the Aggregate Revenue Requirement as Tariff Proposal for the FY-2018-19 for its distribution business, APR for FY 2017-18 &.True Up for FY 2016-17 before the Joint Electricity Regulatory Commission (JERC) under section 45, 46, 61, 62 and 64 of Electricity Act 2003 and in accordance with JERC (Multi Year Tariff) regulation 2014, JERC (Conduct of Business) Regulation 2009 as amended from time to time. The said MYT petition has been admitted by Hon'ble JERC vide petition number- 254/2 018.

   The Commission has directed the department to publish a public notice for inviting objections/comments from various stakeholders.

2. Brief overview of Petition filed by the CED for its Distribution of Electricity Business for the FY-2017-18 is as under:

2.1 The Aggregate Revenue Requirement and deficit for the FY-2016-17 (Rs Crore):-

Sr. No.	Particulars	Approved in T.O. dated 28th April 2016	Approved in Review Petition T.O. 4th May 2017	Actual
1	Cost of power purchase for full year	728.70	638.15	671.26
2	Employee costs	65.35	64.65	64.01
3	Administration and general expenses	6.16	6.09	3.58
4	R&M expenses	6.70	11.03	9.45
5	Depreciation	14.40	15.76	11.63
6	Interest and finance charges	7.19	5.74	3.94
7	Interest on working capital	-	-	-
8	Return on NFA/Equity	12.69	20.54	19.52
9	Provision for Bad Debt	-	-	8.15
10	Interest on Security Deposit	10.95	10.79	7.21
11	**Total Revenue Requirement**	**852.14**	**772.75**	**798.75**
12	Less: Non-Tariff Income	24.48	23.02	42.66
13	Less: Revenue from Sale through UI	-	3.15	9.06
14	**Net Revenue Requirement**	**827.66**	**746.59**	**747.03**
15	Revenue from retail sales at Existing Tariff	827.72	838.76	814.85
16	FPPPCA billed during the year	-	87.27	121.23
17	**Revenue Surplus/(Gap) for the Year**	**0.06**	**179.44**	**189.05**

2.2 Based on the revised ARR and revenue projection, the revenue gap for FY 2017-18 (Rs Crore):-

Sr. No.	Particulars	Approved in T.O. dated 28th April 2016	Approved in T.O. dated 4th May 2017	Estimated

Annexure 2: Public Notices published by the Commission

ਜੁਆਇੰਟ ਇਲੈਕਟ੍ਰੀਸਿਟੀ ਰੈਗੂਲੇਟਰੀ ਕਮਿਸ਼ਨ

(ਗੋਆ ਰਾਜ ਅਤੇ ਕੇਂਦਰੀ ਸ਼ਾਸਿਤ ਪ੍ਰਦੇਸ਼ਾਂ ਲਈ)

ਦੂਸਰੀ ਮੰਜ਼ਿਲ, ਐੱਚ.ਐੱਸ.ਆਈ.ਆਈ. ਡੀ.ਸੀ. ਦਫਤਰ ਕੰਪਲੈਕਸ, ਵਾਣਿਜਯ ਨਿਕੁੰਜ ਕੰਪਲੈਕਸ, ਉਦਯੋਗ ਵਿਹਾਰ, ਫੇਜ਼-V ਗੁੜਗਾਓਂ (ਹਰਿਆਣਾ), ਫੋਨ: 0124-2342851, 2342852, ਫੈਕਸ : 0124-2342853, ਈਮੇਲ : secretaryjerc@gmail.com Website : www.jercuts.gov.in

ਜਨਤਕ ਸੂਚਨਾ

ਸਾਰੇ ਚਾਹਵਾਨ ਵਿਅਕਤੀਆਂ ਨੂੰ ਇਸ ਦੁਆਰਾ ਸੂਚਨਾ ਦਿੱਤੀ ਜਾਂਦੀ ਹੈ ਕਿ ਬਿਜਲੀ ਐਕਟ 2003 ਦੀਆਂ ਧਾਰਾਵਾਂ 45, 46, 61, 62 ਅਤੇ 64 ਅਧੀਨ ਦਮਨ ਅਤੇ ਦਿਊ ਦੇ ਕੇਂਦਰੀ ਸ਼ਾਸਿਤ ਪ੍ਰਦੇਸ਼ਾਂ ਲਈ ਚੰਡੀਗੜ੍ਹ ਦੇ ਬਿਜਲੀ ਵਿਭਾਗ ਨੇ ਵਿੱਤੀ ਸਾਲ 2016-17 ਲਈ ਟਰੂ ਅਪ, ਵਿੱਤੀ ਸਾਲ 2017-18 ਦੀ ਸਾਲਾਨਾ ਪ੍ਰਫਾਰਮੈਂਸ ਰੀਵਿਊ (ਏ ਪੀ ਆਰ) ਅਤੇ ਵਿੱਤੀ ਸਾਲ 2018-19 ਲਈ ਸਾਲਾਨਾ ਰੈਵੀਨਿਊ ਰਿਕੁਆਰਮੈਂਟ (ਏ ਆਰ ਆਰ) ਅਤੇ ਟੈਰਿਫ ਰਿਵੀਜਨ ਪ੍ਰਸਤਾਵ ਲਈ ਪਟੀਸ਼ਨ ਦਾਖਲ ਕੀਤੀ ਹੈ। ਇਹ ਪਟੀਸ਼ਨ ਨੰ: 254/2018 ਵਜੋਂ ਦਾਖਲ ਕੀਤੀ ਗਈ ਹੈ ਅਤੇ ਕਮਿਸ਼ਨ ਦੀ ਵੈੱਬਸਾਈਟ www.jercuts.gov.in 'ਤੇ ਉਪਲਬਧ ਹੈ।

ਚਾਹਵਾਨ ਵਿਅਕਤੀ ਉਪਰੋਕਤ ਪਟੀਸ਼ਨ 'ਤੇ ਛੇ ਕਾਪੀਆਂ ਵਿਚ ਇਤਰਾਜ/ਸੁਝਾਅ ਨਿੱਜੀ ਰੂਪ ਵਿਚ ਜਾਂ ਈਮੇਲ secretaryjerc@gmail.com ਰਾਹੀਂ ਜਾਂ ਰਜਿਸਟਰਡ ਡਾਕ ਰਾਹੀਂ ਪੇਸ਼ ਕਰ ਸਕਦੇ ਹਨ ਜੋ ਸੈਕਟਰੀ, ਜੇ.ਈ. ਆਰ ਸੀ (ਗੋਆ ਅਤੇ ਯੂ ਟੀ'ਜ਼ ਲਈ) ਦੇ ਪਤੇ 'ਤੇ ਭੇਜੇ ਜਾਣ ਜੋ ਉਨ੍ਹਾਂ ਕੋਲ 09.02.2018 ਨੂੰ ਜਾਂ ਇਸ ਤੋਂ ਪਹਿਲਾਂ ਪਹੁੰਚ ਜਾਣ ਇਸ ਦੀ ਇਕ ਕਾਪੀ ਸੁਪ੍ਰਿੰਟੈਂਡਿੰਗ ਇੰਜੀਨੀਅਰ ਬਿਜਲੀ ਵਿਭਾਗ, ਯੂ.ਟੀ. ਚੰਡੀਗੜ੍ਹ, ਇਲੈੱਕਟ੍ਰੀਸਿਟੀ ਵਿੰਗ ਆਫ ਇੰਜੀਨੀਰਿੰਗ ਵਿਭਾਗ ਚੰਡੀਗੜ੍ਹ ਡੀਲਕਸ ਬਿਲਡਿੰਗ, ਸੈਕਟਰ-9 ਡੀ, ਚੰਡੀਗੜ੍ਹ (ਈ-ਮੇਲ seelecty@gmail.com) ਨੂੰ ਭੇਜੀ ਜਾਵੇ। ਕਮਿਸ਼ਨ ਮਿਤੀ 13 ਫਰਵਰੀ 2018 ਨੂੰ ਸਵੇਰੇ 10.00 ਵਜੇ ਚੰਡੀਗੜ੍ਹ ਵਿਖੇ ਜਨਤਕ ਸੁਣਵਾਈ ਵੀ ਆਯੋਜਿਤ ਕਰੇਗਾ।

ਸਹੀ/-
(ਕੀਰਤੀ ਤਿਵਾੜੀ)
ਸੈਕਟਰੀ।

संयुक्त विद्युत नियामक आयोग

(गोवा राज्य एवं केन्द्र शासित प्रदेशों हेतु)

दूसरी मंजिल एचएसआईआईडीसी कार्यालय काम्पलैक्स, वाणिज्य निकुंज कॉम्पलैक्स,
उद्योग विहार फेस-5, गुड़गांव (हरियाणा), फोन 0124-2342851, 2342852, फैक्स-0124-2342853,
ईमेल : secretaryjerc@gmail.com website : www.jercuts.gov.in

सार्वजनिक सूचना

सभी इच्छुक व्यक्तियों को एतद्द्वारा सूचना दी जाती है कि विद्युत विभाग चंडीगढ़ ने विद्युत अधिनियम 2003 की धाराओं 45, 46, 61, 62 एवं 64 अधीन दमन एवं दीव केन्द्रशासित प्रदेश हेतु वित्तीय वर्ष 2016-17 हेतु ट्रू-अप के अनुमोदन, वित्तीय वर्ष 2017-18 के वार्षिक कारगुजारी समीक्षा (एपीआर) तथा वार्षिक राजस्व आवश्यकता (एआरआर) एवं वित्तीय वर्ष 2018-19 हेतु टैरिफ संशोधन प्रस्ताव के लिए एक पटीशन दायर की है। इसे पटीशन नं. 254/2018 अनुसार स्वीकार किया जा चुका है तथा आयोग की वैबसाईट www.jercuts.gov.in पर उपलब्ध है।

इच्छुक व्यक्ति उपरोक्त पटीशन पर 6 प्रतियों में आपत्तियां/सुझाव व्यक्तिगत रूप में अथवा ई-मेल www.secretaryjerc@gmail.com द्वारा अथवा सचिव, जेईआरसी (गोवा एवं केन्द्रशासित प्रदेशों हेतु) को संबोधित पंजीकृत डाक द्वारा दर्ज करा सकते हैं, जो अधीक्षण अभियंता विद्युत विभाग यूटी चंडीगढ़, विद्युत विंग अभियांत्रिकी विभाग, चंडीगढ़ डीलक्स भवन, सेक्टर-9 डी, चंडीगढ़ को एक प्रति सहित 9.2.2018 तक अथवा पहले पहुंच जाने चाहिए। (Email: seelecty@gmail.com)

आयोग 13 फरवरी 2018 को प्रातः 10.00 बजे चंडीगढ़ में एक सार्वजनिक सुनवाई का आयोजन करेगा।

हस्ता/- (कीर्ति तिवारी) सचिव

संयुक्त विद्युत विनियामक आयोग

(कृते गोवा राज्य एवं केंद्र शासित प्रदेश)

द्वितीय तल, एचएसआईआईडीसी कार्यालय परिसर, वाणिज्य निकुंज काम्पलेक्स,
उद्योग विहार, फेस-V, गुरुग्राम (हरियाणा), दूरभाष 0124-2342851, 2342552
...स :- 0124-2342853, ई-मेल : secretaryjerc@gmail.com वेबसाईट : www.jercuts.gov.in

सार्वजनिक सूचना

सभी इच्छुक व्यक्तियों की जानकारी हेतु सूचित किया जाता है कि विद्युत विभाग चंडीगढ़ ने वित्त वर्ष
16-17 हेतु ट्रू-अप, वित्त वर्ष 2017-18 के वार्षिक निष्पादन अवलोकन (एपीआर) तथा विद्युत अधिनियम
03 की धारा 45,46, 61, 62 एवं 64 के अधीन दमन एवं दीव की यूटी हेतु वित्त वर्ष 2018-19 के लिए वार्षिक
राजस्व आवश्यकता (एआरआर) तथा टैरिफ रिवीजन प्रोपोजल के अनुमोदन हेतु एक याचिका दर्ज की है। यह
चिका संख्या 254/2018 के तौर पर स्वीकृत की गई है तथा आयोग की वेबसाईट www.jercuts.gov.in पर
लब्ध है। इच्छुक व्यक्ति सचिव, जेईआरसी (कृते गोवा एवं यूटी) के पते पर पंजीकृत डाक के माध्यम से अथवा
-मेल www.secretaryjerc@gmail.com के माध्यम से अथवा व्यक्तिगत तौर पर उक्त याचिका पर छः
तियों में अपने सुझाव/आपत्तियां दर्ज करे, जो अधीक्षण अभियंता, विद्युत विभाग, यूटी चंडीगढ़, विद्युत विंग,
भियांत्रिकी विभाग, चंडीगढ़ डीलक्स, सेक्टर-9डी चंडीगढ़ को एक प्रति के साथ 09.02.2018 को अथवा पूर्व
हुंचने चाहिए। (ई-मेल seelecty@gmail.com) आयोग चंडीगढ़ में 13 फरवरी 2018 को प्रातः 10.00
जे सार्वजनिक सुनवाई आयोजित करेगा।

हस्ता/-
(कीर्ति तिवारी)
सचिव

Joint Electricity Regulatory Commission

(For the State of Goa and Union Territories)

2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana), Ph :0124-2342851, 2342852
Fax: 0124-2342853, Email: secretaryjerc@gmail.com Website: www.jercuts.gov.in

PUBLIC NOTICE

Notice is hereby given to all the interested persons that the Electricity Department of Chandigarh has filed a Petition for approval of True-up for the FY 2016-17, Annual Performance Review (APR) of the FY 2017-18 and Annual Revenue Requirement (ARR) and Tariff Revision Proposal for the FY 2018-19 for the UT of Daman and Diu under Sections 45, 46, 61, 62 and 64 of the Electricity Act, 2003. The same has been admitted as Petition No. 254/2018 and is available on the Commission's website www.jercuts.gov.in

Interested persons may file objections/suggestions in six copies on the above Petition in person or through E-mail www.secretaryjerc@gmail.com or through registered post addressed to The Secretary, JERC (for Goa & UTs) to reach on or before 09.02.2018 with a copy to The Superintending Engineer, Electricity Department UT of Chandigarh, Electricity Wing of Engineering Department, Chandigarh Delux Building, Sector- 9D Chandigarh. (E-mail seelecty@gmail.com) The Commission shall hold a Public Hearing on 13th February, 2018 at 10.00AM at Chandigarh.

Sd/-
(Keerti Tewari)
Secretary

ਜੁਆਇੰਟ ਇਲੈਕਟ੍ਰੀਸਿਟੀ ਰੈਗੂਲੇਟਰੀ ਕਮਿਸ਼ਨ

(ਗੋਆ ਰਾਜ ਅਤੇ ਕੇਂਦਰ ਸ਼ਾਸਿਤ ਪ੍ਰਦੇਸ਼ਾਂ ਲਈ)
ਦੂਜੀ ਮੰਜ਼ਿਲ, ਐਚ.ਐਸ.ਆਈ.ਆਈ.ਡੀ.ਸੀ. ਦਫ਼ਤਰ ਕੰਪਲੈਕਸ, ਵਾਣਿਜਯ ਨਿਕੁੰਜ, ਉਦਯੋਗ ਵਿਹਾਰ, ਫੇਜ਼-V, ਗੁਰੂਗ੍ਰਾਮ (ਹਰਿਆਣਾ) ਫੋਨ: 0124-2342851, 2342852
ਫੈਕਸ: 0124-2342853, ਈਮੇਲ: secretaryjerc@gmail.com, Website: www.jercuts.gov.in

ਮਿਤੀ 19.01.2018 ਨੂੰ ਪ੍ਰਕਾਸ਼ਿਤ ਜਨਤਕ ਸੂਚਨਾ ਨੂੰ ਜਾਰੀ ਰੱਖਦੇ, ਯੂ.ਟੀ. ਚੰਡੀਗੜ੍ਹ ਦੇ ਸਟੇਕਹੋਲਡਰਾਂ ਨੂੰ ਇਸ ਦੁਆਰਾ ਸੂਚਿਤ ਕੀਤਾ ਜਾਂਦਾ ਹੈ ਕਿ ਚੰਡੀਗੜ੍ਹ ਦੇ ਬਿਜਲੀ ਵਿਭਾਗ ਨੇ ਇਲੈਕਟ੍ਰੀਸਿਟੀ ਐਕਟ 2003 ਦੀਆਂ ਧਾਰਾਵਾਂ 45, 46, 61, 62 ਅਤੇ 64 ਅਧੀਨ ਵਿੱਤੀ ਸਾਲ 2016-17 ਲਈ ਟਰੂ-ਅਪ, ਵਿੱਤੀ ਸਾਲ 2017-18 ਲਈ ਐਨੂਅਲ ਪ੍ਰਫਾਰਮੈਂਸ ਰਿਵੀਊ (ਏ.ਪੀ.ਆਰ.) ਅਤੇ ਵਿੱਤੀ ਸਾਲ 2018-19 ਲਈ ਐਨੂਅਲ ਰੈਵੀਨਿਊ ਰਿਕੁਆਇਰਮੈਂਟ (ਏ.ਆਰ.ਆਰ.) ਅਤੇ ਟੈਰਿਫ ਨਿਰਧਾਰਨ ਪ੍ਰਪੋਜ਼ਲ ਦੀ ਪ੍ਰਵਾਨਗੀ ਲਈ ਪਟੀਸ਼ਨ ਦਾਖ਼ਲ ਕੀਤੀ ਹੈ। ਇਹ ਪਟੀਸ਼ਨ ਨੰ. 234/2018 ਵਜੋਂ ਦਾਖ਼ਲ ਕੀਤੀ ਗਈ ਹੈ ਅਤੇ ਕਮਿਸ਼ਨ ਦੀ ਵੈੱਬਸਾਈਟ www.jercuts.gov.in 'ਤੇ ਉਪਲਬਧ ਹੈ।

ਕਮਿਸ਼ਨ ਉਪਰੋਕਤ ਪਟੀਸ਼ਨ ਤੇ ਹੇਠਾਂ ਲਿਖੇ ਸ਼ਡਿਊਲ ਅਨੁਸਾਰ ਜਨਤਕ ਸੁਣਵਾਈ ਆਯੋਜਿਤ ਕਰੇਗਾ।

ਮਿਤੀ/ਦਿਨ/ਸਾਲ	ਸਮਾਂ	ਸਥਾਨ
13 ਫਰਵਰੀ (ਮੰਗਲਵਾਰ), 2018	ਸਵੇਰੇ 10.00 ਵਜੇ ਤੋਂ	ਆਡੀਟੋਰੀਅਮ ਹਾਲ, ਗੌਰਮਿੰਟ ਮਿਊਜ਼ੀਅਮ ਐਂਡ ਆਰਟ ਗੈਲਰੀ, ਸੈਕਟਰ 10-ਸੀ, ਜਨ ਮਾਰਗ, ਯੂ.ਟੀ. ਚੰਡੀਗੜ੍ਹ

ਇਹ ਸੂਚਿਤ ਕੀਤਾ ਜਾਂਦਾ ਹੈ ਕਿ ਇਸ਼ਤਿਹਾਰ ਮਿਤੀ 19.01.2018 ਵਿਚ ਟਾਈਪ ਦੀ ਗਲਤੀ ਕਾਰਨ ਕਮਿਸ਼ਨ ਦੀ ਈਮੇਲ ਆਈ.ਡੀ. www.secretaryjerc@gmail.com ਦਿੱਤੀ ਗਈ ਹੈ, ਸਹੀ ਈਮੇਲ ਆਈ.ਡੀ. secretaryjerc@gmail.com ਹੈ।

ਕੀਰਤੀ ਤਿਵਾੜੀ (ਸਕੱਤਰ)

ज्वाइंट इलेक्ट्रिसिटी रेगुलेटरी कमीशन

(गोवा एवं संघ राज्य क्षेत्र)

[illegible] कॉम्प्लेक्स, वाणिज्य निकुंज,
उद्योग विहार, फेज-V, गुरुग्राम (हरियाणा)
फोन: 0124-[illegible] फैक्स: 0124-2342853
ई-मेल: secretaryjerc@gmail.com वेबसाइट: www.jercuts.gov.in

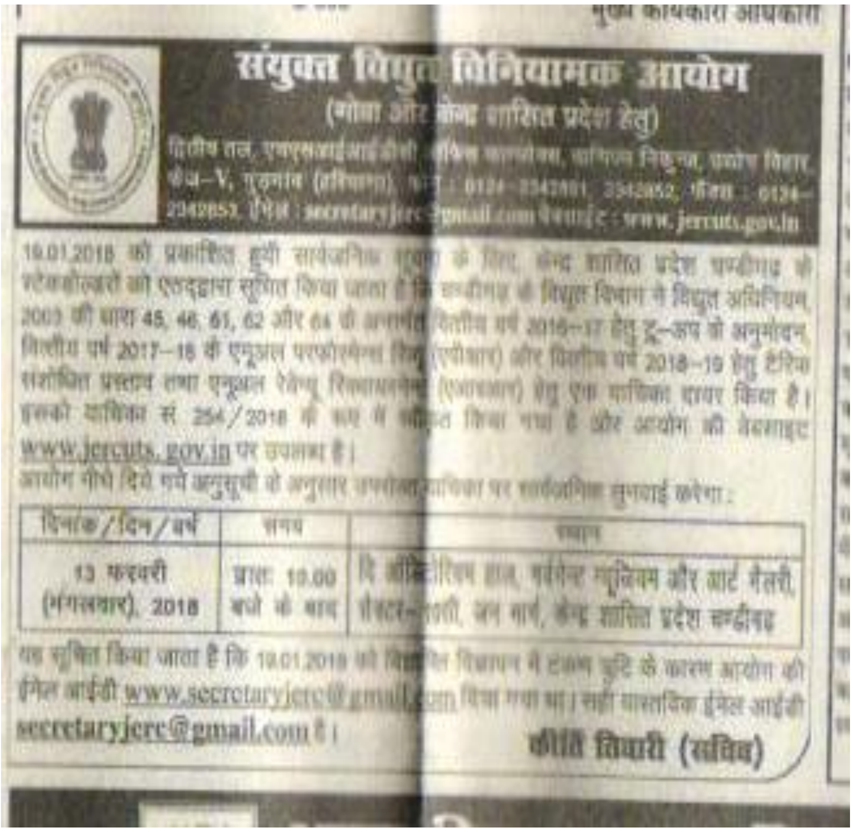
19.01.2018 को प्रकाशित सार्वजनिक सूचना के संदर्भ में चंडीगढ़ संघ राज्य के सभी स्टेक होल्डर्स को सूचित किया जाता है कि इलेक्ट्रिसिटी विभाग, चंडीगढ़ ने वित्तीय वर्ष 2016-17 के ट्रू अप की स्वीकृति, वित्तीय वर्ष 2017-18 की वार्षिक प्रदर्शन समीक्षा (एपीआर) तथा वित्तीय वर्ष 2018-19 के लिए वार्षिक रेवेन्यू अपेक्षा (एआरआर) एवं टैरिफ निर्धारण प्रस्ताव की स्वीकृति के लिए पेटीशन इलेक्ट्रिसिटी एक्ट, 2003 के सेक्शन 45, 46, 61, 62 एवं 64 के अंतर्गत दाखिल किया है। उक्त पेटीशन क्र. 254/2018 के रूप में स्वीकृत है तथा कमीशन वेबसाइट www.jercuts.gov.in पर उपलब्ध है।

कमीशन उक्त पेटीशन पर निम्न शेड्यूल के अनुसार जनसुनवाई आयोजित करेगा

तिथि / दिवस	समय	वेन्यू
13 फरवरी (मंगलवार), 2018	10:00 बजे से	ऑडिटोरियम हॉल, गा. म्यूज़ियम व आर्ट गैलरी, सेक्टर 10 सी, जन मार्ग, यूटी चंडीगढ़

सूचित किया जाता है कि विज्ञापन दिनांक 19.01.2018 में टाइपोग्राफिकल त्रुटि की वजह से कमीशन का ई-मेल आईडी www.secretaryjerc@gmail.com दिया गया था सही ई-मेल आईडी secretaryjerc@gmail.com है।

कीर्ति तिवारी (सेक्रेटरी)



संयुक्त विद्युत विनियामक आयोग

(गोवा और केन्द्र शासित प्रदेश हेतु)

द्वितीय तल, एचएसआईआईडीसी ऑफिस कॉम्प्लेक्स, वाणिज्य निकुन्ज, उद्योग विहार, फेज–V, गुड़गांव (हरियाणा), फोन : 0124-2342851, 2342852, फैक्स : 0124-2342853, ईमेल : secretaryjerc@gmail.com वेबसाइट : www.jercuts.gov.in

19.01.2018 को प्रकाशित हुयी सार्वजनिक सूचना के लिए, केन्द्र शासित प्रदेश चण्डीगढ़ के स्टेकहोल्डरों को एतद्द्वारा सूचित किया जाता है कि चण्डीगढ़ के विद्युत विभाग ने विद्युत अधिनियम, 2003 की धारा 45, 46, 61, 62 और 64 के अन्तर्गत वित्तीय वर्ष 2016–17 हेतु ट्रू–अप के अनुमोदन, वित्तीय वर्ष 2017–18 की एन्यूअल परफोरमेन्स रिव्यू (एपीआर) और वित्तीय वर्ष 2018–19 हेतु टैरिफ संशोधित प्रस्ताव तथा एन्यूअल रेवेन्यू रिक्वायरमेन्ट (एआरआर) हेतु एक याचिका दायर किया है। इसको याचिका सं. 254/2018 के रूप में पंजीकृत किया गया है और आयोग की वेबसाइट www.jercuts.gov.in पर उपलब्ध है।

आयोग नीचे दिये गये अनुसूची के अनुसार उपरोक्त याचिका पर सार्वजनिक सुनवाई करेगा :

दिनांक/दिन/वर्ष	समय	स्थान
13 फरवरी (मंगलवार), 2018	प्रातः 10.00 बजे के बाद	दि ऑडिटोरियम हाल, गवर्नमेन्ट म्यूजियम और आर्ट गैलरी, सैक्टर–10, जन मार्ग, केन्द्र शासित प्रदेश चण्डीगढ़

यह सूचित किया जाता है कि 19.01.2018 को विज्ञापित विज्ञापन में टंकण त्रुटि के कारण आयोग की ईमेल आईडी www.secretaryjerc@gmail.com दिया गया था। सही वास्तविक ईमेल आईडी secretaryjerc@gmail.com है।

कीर्ति तिवारी (सचिव)

Joint Electricity Regulatory Commission

(For the State of Goa and Union Territories)

2nd Floor, HSIIDC Office Complex, Vanijya Nikunj, Udyog Vihar, Phase-V, Gurgaon (Haryana), Ph :0124-2342851, 2342852

Fax: 0124-2342853, Email: secretaryjerc@gmail.com Website: www.jercuts.gov.in

Further to the Public Notice published on 19.01.2018, the stakeholders of the UT of Chandigarh are hereby informed that the Electricity Department of Chandigarh has filed a Petition for approval of True-up for the FY 2016-17, Annual Performance Review (APR) of the FY 2017-18 and Annual Revenue Requirement (ARR) and Tariff Revision Proposal for the FY 2018-19 under Sections 45, 46, 61, 62 and 64 of the Electricity Act, 2003. The same has been admitted as Petition No. 254/2018 and is available on the Commission's website www.jercuts.gov.in

The Commission shall hold the Public Hearing on the above Petition as per the schedule given below:

Date/Day/Year	Time	Venue
13th February (Tuesday), 2018	10.00 AM onwards	The Auditorium Hall, Government Museum and Art Gallery, Sector- 10C, Jan Marg, U.T of Chandigarh

It is informed that in the advertisement dated 19.01.2018, due to a typographical error the Email id of the Commission was given as www.secretaryjerc@gmail.com. The correct Email id is secretaryjerc@gmail.com.

Keerti Tewari (Secretary)

Annexure 3: List of Stakeholders

The following is the list of the stakeholders who have given written/oral submissions:

1. Air Marshall, Randhir Singh
2. Sh. Pawan Bansal, Ex-MP, Chandigarh
3. Sh. Gopal Datt Joshi, UT Powerman Union
4. Sh. Shantanu, Infosys Ltd.
5. Sh. Puneet Randhawa, Infosys Ltd.
6. Sh. Narendra, Infosys Ltd.
7. Sh. Narendra Sharma, NCAG
8. Major Gen. Sudesh Kumar
9. Group Capt. Sh. R.C. Goyal
10. Sh. J.S. Gogia, FOSWAC
11. Sh. Jagpal Singh, Doctor
12. Sh. S.K. Khosla, RWA, Sector-40, Chandigarh
13. Sh. Ajay Jagga
14. Sh. Rakesh Rattan Aggarwal, Laghu Udyog Bharti
15. Sh. Sanjeev Gupta, Laghu Udyog Bharti
16. Sh. Akshay Chugh, Laghu Udyog Bharti
17. Sh. Man Singh Parmar, Laghu Udyog Bharti
18. Sh. Rakesh Tariyal, Laghu Udyog Bharti
19. Sh Chander Verma, Chandigarh Converted Plot Owners Association
20. Sh M S Chadha, Chandigarh Converted Plot Owners Association
21. Sh. Avi Bhasin, CIVA
22. Sh. Arun Sharma, LUB
23. Sh. A S Ahuja, Consumer Association Chandigarh
24. Sh. Roopi Singh, Industry Association
25. Sh. M S Johal, Sector 8
26. Sh. Ashok Goel, Chamber of Chandigarh Industries
27. Sh. Vikram Hans, Multi Overseas
28. Sh. Ranwinder Singh Gill, House Holder Association, Sector-8
29. Sh. Manmohan Chadha, Chandigarh Industrial Converted Plot Owner Association
30. Sh. Naveen Mangla, Chamber of Chandigarh Industry
31. Sh. P.C. Sanghi, Chandigarh First Forum
32. Sh. Anil Kaushal, Aqua Solutions
33. Sh. Baljinder Singh, FOSWAC
34. Sh. Hitesh Puri, FOSWAC
35. Sh. Arun Mahajan, Industry Association of Chandigarh
36. Sh. M P S Chawla, Chandigarh Industrial Association
37. Sh. Arvind Jain, Vapaar Sadan, Chandigarh
38. Sh. Pardeep Chopra, Citizen's Association
39. Sh. Amarpal Singh, Chamber of Chandigarh Industries

40. Sh. Arvinderpal Singh, Hotel & Restaurant Association, Chandigarh
41. Sh. Charanjiv Singh, Chairman Chandigarh Vyopar Mandal
42. Sh. Pardeep Malhotra, Chairman Chandigarh Vyopar Mandal
43. Sh. Parshotam Mahajan, Pattern, Chandigarh Vyopar Mandal
44. Sh. Kanwaljit Singh Panchi, President Traders Association, Sector-17
45. Sh. V.B. Khanna, Anti-Corruption Front, UT, Chandigarh
46. Sh. Vinod Sharma,
47. Major R.S. Gujral, President Chandigarh Defence Colony, W.A. Sector-35
48. Sh. Avinash Singh Sharma, National President, Pravasi Bhalai Sangthan
49. Sh. Kamal Kishore Sharma, RTI Activist
50. Sh. Sanjeev Sagar Sharma, Chandigarh Industrial Area Tenant Association
51. Sh. Sukhwinder Chugh, Crest
52. Sh. Gurinder Juneja, Hotel and Restaurant Association, Chandigarh

Annexure 4: Sample calculation for advance payment rebate

From	To	Bill issue date	Due date	Total bill amount (Rs)	Energy charges+Fixed charges+FPPCA	Bill isue date of previous cycle	Payment date	Payment made (considered under advance payment) (Rs)	Payment made (considered under Prompt payment) (Rs)	Advance payment rebate (Rs)	Prompt payment rebate (Rs)	Rest Payment (After adjustment of all dues) (Rs)
20/09/2017	20/11/2017	20/12/2017	07/01/2018	2500	2000	20/10/2017	19/10/2017	6000	-	20	-	3520
20/11/2017	20/01/2018	20/02/2018	07/03/2018	3000	2500	20/12/2017	-	-	-	25	-	545
20/01/2018	20/03/2018	20/04/2018	07/05/2018	3500	3000	20/02/2018	21/02/2018	-	3000	-	7.5	-

Notes:

1. Prompt Payment Rebate at 0.25% - If bill amount due is paid prior to 7 days of due date and after/as on bill issue date of previous bill
2. Advance Payment Rebate at 1% - If amount is paid in advance before the bill issue of previous bill
3. Prompt and advance payment shall be given on the bill amount (limited to energy charges+fixed charges+FPPCA only)
4. Those consumers having positive arrears shall not be entitled for prompt rebate/advance payment
5. Prompt and advance payment rebate to be given only if the payment made by the consumer is more than bill due amount