PETITION FOR TRUE-UP OF FY 2017-18, ANNUAL PERFORMANCE REVIEW OF FY 2018-19 AND MULTI-YEAR AGGREGATE REVENUE REQUIREMENT (ARR) FOR THE CONTROL PERIOD OF FY 2019-20 TO FY 2021-22 & TARIFF PROPOSAL OF FY 2019-20 of ELECTRICITY WING OF ENGINEERING DEPARTMENT, CHANDIGARH

Joint Electricity Regulatory Commission, Gurgaon

ELECTRICITY WING OF ENGINEERING DEPARTMENT, CHANDIGARH

BEFORE THE HON'BLE JOINT ELECTRICITY REGULATORY COMMISSION

Filing No:
Case No:

IN THE MATTER OF:	Petition for True-Up of FY 2017-18, Annual Performance Review of FY 2018-19 and Aggregate Revenue Requirement (ARR) for the control period of FY 2019-20 to FY 2021-22 & Tariff Proposal of FY 2019-20 of Electricity Wing of Engineering Department, Chandigarh
AND IN THE MATTER OF:	Electricity Wing of Engineering Department, Chandigarh Deluxe Building, Sector - 9D Chandigarh - UT **PETITIONER**

PETITIONER, UNDER SECTIONS 45, 46, 61, 62 AND 64 OF THE ELECTRICITY ACT, 2003 FILES FOR INITIATION OF PROCEEDINGS BY THE HON'BLE COMMISSION FOR DECIDING ON THE MATTERS CONCERNING THE APPROVAL OF THE TRUE-UP FOR FY 2017-18, ANNUAL PERFORMANCE REVIEW FOR FY 2018-19 AND TARIFF PETITION FOR FY 2019-20 OF ELECTRICITY WING OF ENGINEERING DEPARTMENT, CHANDIGARH

The applicant respectfully submits hereunder:

1) The Petitioner, the Electricity Wing of Engineering Department, Chandigarh (EWEDC) has been allowed to function as an integrated Distribution licensee for the license area of Chandigarh UT.

2) Pursuant to the enactment of the Electricity Act, 2003, EWEDC is required to submit its Annual Revenue Requirement (ARR) and Tariff Petition as per the procedures outlined in section 61, 62 & 64 of EA 2003, and the governing regulations thereof.

3) EWEDC has submitted its petition for determination of Annual Revenue Requirement and tariff proposal for FY 2019-20 on the basis of the principles outlined in the MYT Regulations, 2018 notified by the Hon'ble Commission.

4) This petition includes the True-Up Petition for FY 2017-18, Review Petition for FY 2018-19 and ARR for the control period of FY 2019-20 to FY 2021-22 & Tariff Petition for FY 2019-20.

5) EWEDC is submitting the True-up for the FY 2017-18 based on the accounts prepared on commercial accounting principle and dully vetted by the Asst. Controller (Finance and accounts), Electricity Department. The same has already been submitted to AG UT and the AG UT has started the audit of EWEDC's accounts for FY 2017-18. The audited accounts by AG UT shall be submitted shortly.

6) EWEDC along with this petition is submitting the statutory formats with additional/ supplementary data & information available and shall further make available the same to the extent available with EWEDC as may be required by the Hon'ble Commission during its processing.

Prayers to the Commission

EWEDC respectfully prays that the Hon'ble Commission may

a. Admit this Petition filed by EWEDC.
b. Examine the proposal submitted by the Petitioner for a favourable dispensation as detailed in the enclosed proposal;
c. Consider the submissions and allow the True-Up for FY 2017-18, revised estimate for FY 2018-19 and approve Aggregate Revenue Requirement for the control period of FY 2019-20 to FY 2021-22 and Retail Tariff for FY 2019-20;
d. Approve the revenue gap and appropriate tariff increase as detailed in the enclosed proposal;
e. Pass suitable orders for implementation of the tariff proposals for the FY 2019-20 for making it applicable from April 1, 2019 onwards;
f. Approve the terms and conditions of Tariff Schedule and various other matters as and the proposed changes therein;
g. Approve the new Tariff category as proposed;
h. Approve the Miscellaneous and General Charges as proposed;
i. Condone any inadvertent omissions/ errors/ shortcomings and permit EWEDC to add/ change/ modify / alter this filing and make further submissions as may be required at a future date;
j. Pass such orders as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case;

Electricity Wing of Engineering Department, Chandigarh

Petitioner

Place: Chandigarh.
Date: .....11.2018.

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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
EWEDC	Electricity Wing of Engineering Department, Chandigarh
DSM	Deviation Settlement Mechanism
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

Abbreviation	Full Form
IPP	Independent Power Producer
ISTS	Inter State Transmission System
JERC	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
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
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 Loss	Transmission & Distribution Loss
UI	Unscheduled Interchange
UT	Union Territory

Chapter 1: Introduction and Background

Electricity Wing of Engineering Department, Chandigarh

1.1 Union Territory of Chandigarh came into existence with effect from 1st November, 1966 after re-organization of erstwhile state of Punjab. An early entrant to the planning process, Chandigarh has emerged as one of the most developed Union Territories in India and even achieved the ranking of one of the best UTs in India with regards to investment environment, infrastructure and tourism. The total population of the Union Territory is around 10.5 Lakhs as per 2011 census.

1.2 The Local Distribution of electricity in Chandigarh was taken over by the Chandigarh Administration from the PSEB on 2nd May, 1967. The Electricity Wing of Engineering Department, Chandigarh is part of Chandigarh Administration, UT of Chandigarh and is responsible for Transmission and Distribution of power supply up to consumers' door-step. The electricity department of Chandigarh is responsible for ensuing quality and continuous power supply to each and every resident of Chandigarh. The Electricity Operation Circle is headed by Superintending Engineer along with five Executive Engineers.

1.3 The Electricity Wing of Engineering Department, Chandigarh of UT Administration of Chandigarh, hereinafter called "EWEDC", 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 Electricity Wing of Engineering Department, Chandigarh (EWEDC) has been allowed to function as an integrated distribution licensee of Union Territory of Chandigarh. The Electricity Wing of Engineering Department, Chandigarh doesn't have its own generation and procures power from its allocation from central generating stations NTPC, NHPC, NPCIL, BBMB, SJVNL and THDC. The remaining is met through short term purchase under bilateral transactions and power exchange.

1.4 All the sectors of Chandigarh are electrified and any desiring consumer can avail power supply by submitting requisition in the prescribed form to the appropriate office of the Department subject to fulfilment of the requisite conditions and payment of charges. EWEDC is under control of Administration of Union Territory of Chandigarh and the maintenance of the accounts or Income and expenditure statement was being done on "cash" basis i.e. single entry system. However as per

the directives of Hon'ble Commission EWEDC has converted to accounting system based on Accrual Basis i.e. double entry system. EWEDC has prepared and submitted the audited annual accounts prepared on commercial principle for FY 2017-18 along with Fixed Asset Register as on 31.03.2018 (from the starting of the Electricity Department to 31.03.2018)

Regulatory Process

1.5 EWEDC had filed its first petition for Annual Revenue Requirement and Determination of Tariff for the FY 2011-12 under section 62 of the Electricity Act, 2003 and under the JERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2009 to the Hon'ble Commission on 13th January, 2011. The Tariff Order was issued by the Hon'ble Commission on 16th July, 2011 and the new tariff was made effective from 1st April, 2011.

1.6 EWEDC filed its second Petition for Tariff determination of FY 2012-13. In the Petition, EWEDC had requested for review of Tariff Order for FY 2011-12 based on the actual numbers for part year and projected ARR for FY 2012-13. The Hon'ble Commission processed the Petition and issued a Tariff Order for FY 2012-13 on 7th May, 2012 which included review for FY 2011-12. The tariff was made applicable from 1st May, 2012.

1.7 On 7th February, 2013, the Petitioner filed its petition for approval of provisional true up of ARR for FY 2011-12, revised estimates of ARR for FY 2012-13 and approval of ARR and Tariff for the FY 2013-14. The Hon'ble Commission issued the Tariff Order on 15th April, 2013. However, the Hon'ble Commission had not conducted the provisional true-up of ARR of the FY 2011-12 as the audited accounts were not available during that time. The tariff was made applicable from 1st May, 2013.

1.8 The department subsequently filed its fourth petition for determination of Aggregate Revenue Requirement (ARR) & Retail Tariff for distribution and retail sale of electricity for the FY 2014-15, Review of FY 2013-14 & Truing up of FY 2011-12 and FY 2012-13 on 20th January, 2014 according to principles outlined in the JERC Tariff Regulations, 2009. The Commission issued tariff order on 11th April, 2014.

Filing of Multi Year Tariff Petition and Annual Performance Review Petition

1.9 The Joint Electricity Regulatory Commission (JERC) for the State of Goa and Union Territories, in exercise of powers conferred by sub section (1) of section 181 and clauses (zd), (ze) and (zf) of sub section (2) of section 181, read with sections 61, 62, 83 and 86, of the Electricity Act 2003 (36 of 2003) and all other powers enabling it in this behalf, has issued the Multi Year Distribution Tariff Regulations, 2014, hereinafter referred to as "MYT Regulations, 2014".

1.10 As per the MYT Regulations, 2014, the Distribution Licensee were required to file a Business Plan for Control Period of three financial years from April 1, 2015 to March 31, 2018, which shall comprise but not be limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets before the Hon'ble Commission as part of the Tariff Filing before the beginning of the Control Period. However, the Control Period was postponed by a year and the revised Control Period was notified as April 1, 2016 to March 31, 2019.

1.11 Accordingly, the Electricity Wing of Engineering Department, Chandigarh had filed a revised Business Plan for the Control Period of FY 2016-17 to FY 2018-19 based on the available data for the FY 2014-15 and previous financial years against which the Hon'ble Commission issued an Order dated 28th December, 2015. In the Order for Business Plan, the Hon'ble Commission had directed the EWEDC for submission of MYT Petition for the Control Period FY 2016-17 to FY 2018-19 within 30 days from issuance of the Order for Business Plan.

1.12 As per the directives of the Hon'ble Commission, EWEDC filed Tariff Petition for approval of Annual Revenue Requirement for MYT Control period FY 2016-17 to FY 2018-19 and determination of retail tariff for the FY 2016-17 in accordance to the principles laid down under section 61, 62 and 64 of the Electricity Act 2003, JERC MYT Regulations, 2014, provisions of National Electricity Policy & National Tariff Policy, JERC (Conduct of Business) regulations 2009 and other relevant regulations. The Hon'ble Commission in its order dated 28.04.2016 approved True-up of FY 2011-12 to FY 2014-15, carried out performance review of FY 2015-16 and had approved Annual Revenue Requirement for FY 2016-17 to FY 2018-19 and retail tariff for FY 2016-17.

1.13 As per the multi-year framework outlined in MYT Regulations, 2014, the licensee is required to file Annual Performance Review petition in the subsequent years of the Control Period along with True-up of previous year and Retail Tariff proposal for ensuing year. Accordingly, in line with the MYT Regulations, 2014, Electricity Wing of Engineering Department, Chandigarh had filed the petition comprising of True-up of the FY 2015-16, performance review of the FY 2016-17 and revised ARR and retail tariff proposal for the FY 2017-18. The Hon'ble Commission in its order dated 04th May, 2017 approved True-up of the FY 2015-16, carried out performance review of the FY 2016-17 and had approved and retail tariff for the FY 2017-18.

1.14 On 12th January, 2018, the Petitioner filed its petition for approval of True-up of the FY 2016-17, performance review of the FY 2017-18 and revised ARR and retail tariff proposal for the FY 2018-19. The Hon'ble Commission in its order dated 28th March, 2018 approved True-up of the FY 2016-17, carried out performance review of the FY 2017-18 and had approved and retail tariff for the FY 2018-19.

1.15 As per the MYT Regulations, 2018, the Distribution Licensee were required to file a Business Plan for Control Period of three financial years from April 1, 2019 to March 31, 2022, which shall comprise but not be limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets before the Hon'ble Commission as part of the Tariff Filing before the beginning of the Control Period.

1.16 Accordingly, the Electricity Wing of Engineering Department, Chandigarh had filed a Business Plan for the Control Period of FY 2019-20 to FY 2021-22 on 29th August, 2018 based on the available data for the FY 2017-18 and previous financial years against which the Hon'ble Commission issued an Order dated 12th November, 2018.

1.17 Further, Electricity Wing of Engineering Department, Chandigarh is filing the instant petition for approval of True-up for the FY 2017-18, Annual Performance Review for the FY 2018-19 in accordance with the MYT Regulations, 2014 and Aggregate Revenue Requirement (ARR) for the 2nd control period of FY 2019-20 to FY 2021-22 & retail tariff proposal for the FY 2019-20 in accordance with the MYT Regulations, 2018.

Chapter 2: True up of FY 2017-18

2.1 The Hon'ble Commission in the MYT order dated 28th April, 2016 has approved ARR for the Control period of FY 2016-17 to FY 2018-19 and Tariff for the FY 2016-17.

2.2 Tariff for the FY 2017-18 was approved by the Hon'ble Commission in the Tariff Order dated 04th May, 2017.

2.3 Further, Annual Performance Review of ARR for the FY 2017-18 was undertaken by the Hon'ble Commission in the Tariff Order dated 28th March, 2018. JERC MYT Regulations, 2014 requires that the True-up is to be done on the basis of the audited accounts for each year of the Control period.

2.4 Additionally, EWEDC had submitted a review petition dated 16.06.2016 with respect to the MYT Order dated 28th April, 2016. The Hon'ble Commission vide its Order dated 26.07.2016 had mentioned the following:

"In view of the above, the Commission is of the considered view that the issues raised here may be raised before the Commission at the time of true up of the impugned Order dated 28.04.2016. The Commission therefore directs the Review Petitioner to raise the said issues at the time of true up of the impugned Tariff Order."

2.5 Therefore, EWEDC has raised the issues covered under its review petition dated 16.06.2016 at the relevant places in the current and subsequent chapters in the True-up petition for the FY 2017-18 for the consideration of the Hon'ble Commission.

2.6 The annual accounts for the FY 2017-18 have been prepared and accordingly, the truing-up for the FY 2017-18 has been prepared. The annual accounts have already been forwarded to AG UT on 08.08.2018 & the audited accounts shall be submitted. Accordingly, the Hon'ble Commission is requested to kindly consider the same for truing-up of the FY 2017-18. The audited accounts of the FY 2017-18 shall be submitted at the earliest to the Hon'ble Commission after completion of audit from AG UT of Chandigarh.

Energy Sales, Number of Consumers and Connected Load for FY 2017-18

2.7 The total energy sales for FY 2017-18 stand at 1588.80 MUs based on actuals as against 1591.48 MUs approved earlier by the Commission during the review of the FY 2017-18 vide its Tariff Order dated 28th March, 2018.

2.8 The tables below summarize the approved and actual energy sales for EWEDC for the FY 2017-18:

Table 1: Approved and Actual Sales for FY 2017-18 (in MUs)

Sl. No.	Categories	Approved in T.O. dated 28th April, 2016	Approved in Review Petition T.O. dated 28th March, 2018	Actual
1	Domestic	818.46	734.58	731.94
2	Commercial	507.00	489.41	494.02
3	Large Supply	117.00	123.21	119.85
4	Medium Supply	21.00	117.57	119.33
5	Small Power	104.82	20.30	19.50
6	Agriculture	2.02	1.59	1.43
7	Public Lighting	27.74	20.29	17.73
8	Bulk Supply	92.26	79.89	80.60
9	Others Temporary Supply	7.00	4.64	4.40
	Grand Total	**1,697.30**	**1,591.48**	**1,588.80**

Power Purchase Quantum and Cost

2.9 EWEDC 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 EWEDC procures power from short–term sources i.e. power exchange, UI, banking etc.

2.10 The table below shows the summary of actual Power Purchase from various sources for the FY 2017-18 including Transmission Charges, UI charges and purchase from short term sources i.e. power exchange, UI etc. Further, Power Purchase Cost is inclusive of LC Charges of Rs. 0.80 Crores for the FY 2017-18 which is shown in the Schedule – 17 of Accounts.

Table 2: Power Purchase Cost for FY 2017-18 (in Rs. Crores)

Source	Approved in T.O. dated 28th April, 2016	Approved in Review Petition T.O. dated 28th March, 2018	Actual
NTPC Stations	169.21	139.57	108.04
NHPC Stations	47.19	91.91	90.95
NPCIL	26.18	49.67	60.83
SJVNL	15.21	26.40	27.07
BBMB	253.39	205.89	210.89
THDC	58.51	85.06	77.96
CREST	7.43	2.75	3.12
Pvt. Solar	-	0.65	0.76
Aravali Power Company Private Limited	11.63	26.14	25.69
Bilateral/Power Exchange	71.07	12.92	15.97
UI (Overdrawl)	-	6.86	26.69
REC (Solar & Non-Solar)	9.66	3.55	3.35
Others (PGCIL, Reactive Power, NRLDC)	90.65	51.12	30.05
LC Charges	-	-	0.80
Grand Total	**760.16**	**702.48**	**682.17**

2.11 As against the Commission approved total power purchase cost of Rs. 702.48 Crores for the FY 2017-18, EWEDC has incurred actual power purchase cost of Rs. 682.17 Crores. The petitioner requests the Hon'ble Commission to approve the total power purchase cost of Rs. 682.17 Crores against power purchase for the FY 2017-18.

2.12 The Hon'ble Commission had notified amendment to the JERC (Procurement of Renewable Energy) Regulations, 2010 on 22nd August, 2016. As per the amendment issued, the Petitioner has to purchase 6.70% of total energy purchase from renewable sources for the FY 2017-18 including 2.50% for Solar and 4.20% for Non-Solar.

2.13 EWEDC has also been able to meet its RPO requirement for the FY 2017-18 (solar and non-solar). Besides the REC purchase, EWEDC has also purchased energy from solar plants under gross metering and net metering, details of which are as below:

Table 3: Effective Energy Sales (Excluding Hydro) for FY 2017-18

Sl. No.	Particular	Formula	FY 2017-18
1	Energy Sales within UT (In MUs)	a	1,588.80
2	Hydro Power Purchase (In MUs)	b	1,253.57
3	Inter-State Loss	c	3.60%
4	Inter-State Loss (In MUs)	d=b*c	45.18
5	Intra-State Loss	e	9.51%
6	Intra-State Loss (In MUs)	f=e*(b-d)	114.97
7	Hydro Power Consumed (In MUs)	g=b-d-f	1,093.42
8	**Conventional Power Consumed (In MUs)**	**h=a-g**	**495.38**

Table 4: RPO Requirement (Solar and Non-Solar) for FY 2017-18

Particulars	RPO %	Target		Actual
		Conventional Power Consumed (in MUs)	Units (in MUs)	Units (in MUs)
Solar	2.50%	495.38	12.38	19.23
Non-Solar	4.20%	495.38	20.81	22.00
Total	**6.70%**		**33.19**	**41.23**

Table 5: Sources of Solar Power Procurement against the Solar RPO FY 2017-18

Particulars	2017-18 (in MUs)
Power generated/procured	15.45
Power procured from CREST	3.78
Solar REC purchase	-
Total Solar RPO Met	**19.23**

Intra-State Transmission and Distribution (T&D) Loss

2.14 Considering actual sales of 1588.80 MUs as above, the actual T&D works out to be 9.51% as against a loss level of 12.75% approved by the Hon'ble Commission for the FY 2017-18 vide Tariff Order dated 28th March, 2018. The computation of T&D loss for the FY 2017-18 is provided in table below:

Table 6: Energy Balance for FY 2017-18

Energy Available	**FY 2017-18**
Units Procured	1,948.43
Less: Outside Sale - Trading	131.74
Energy Available	1,816.70
Inter-State Transmission Loss	3.60%
Transmission Loss (Mus)	65.47
Net Energy Available at UT Periphery	**1,751.23**
Power Available within UT	
Power procured from Gross & NET Metering Mode (In MUs)	4.64
Total Energy Available	**1,755.87**
Actual Energy Sales (Mus)	1,588.80
T&D Loss (%)	9.51%
T&D Loss (in MUs)	167.06
Total Energy Required at UT Periphery (MUs)	**1,755.87**
Demand Supply (Gap) / Surplus	**0.00**

Error! Not a valid link.2.15 It is submitted that EWEDC has been constantly endeavouring to reduce its T&D losses. The EWEDC has been able to reduce its losses from 24.22% in FY 2003-04 to 9.51% in the FY 2017-18. In this regard EWEDC submits that the system improvement and augmentation work executed each year under the planned schemes have resulted in the reduction of T&D losses in its distribution area.

2.16 EWEDC has achieved T&D loss level of 9.51% for the FY 2017-18. The sharp fall in T&D losses in the FY 2017-18 is on account of the following factors:

i. There has been increase in energy sale through UI/exchange from 36.76 MUs in FY 2016-17 to 131.74 MUs in FY 2017-18.

ii. The excess energy sale was due to return of 48 MUs towards banked units to J&K during the FY 2017-18 against energy received in the FY 2015-16 & FY 2016-17 and sale of excess power through UI/exchange during different intervals of time.

Operation and Maintenance Expenses

2.17 The summary of approved and actual Employee Expenses, R&M Expenses and A&G Expenses as incurred by the EWEDC in the FY 2017-18 is as below:

Table 7: O&M Expenses for FY 2017-18 (in Rs. Crores)

O & M Expenses	Approved in T.O. dated 28th April, 2016	Approved in Review Petition T.O. dated 28th	Actual
Employee Expenses	69.67	66.82	68.82
R & M Expenses	8.64	12.97	8.50
A & G Expenses	6.61	6.34	4.81
Total O&M Expenses	**84.91**	**86.13**	**82.13**

2.18 The actual R&M expenses and A&G expenses for the FY 2017-18 are lower than that approved by the Hon'ble Commission while actual employee expenses are higher than the figures approved in the APR of the FY 2017-18.

2.19 The petitioner requests the Hon'ble Commission to approve the same on actual basis as the total O&M expenses of Rs. 82.13 Crores for FY 2017-18 are lower than the approved O&M expenses of Rs. 86.13 Crores for FY 2017-18.

GFA and Depreciation

2.20 It is submitted that EWEDC has prepared the Fixed Asset Register for the FY 2017-18 and considered the GFA accordingly. Further, depreciation for the year has been considered as per the Fixed Asset Register.

2.21 The table below presents the approved and actual asset details for the FY 2017-18. The Hon'ble Commission is requested to approve the same:

Table 8: Asset Addition for FY 2017-18 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April, 2016	Approved in Review Petition T.O. dated 28th March, 2018	Actual
Asset Addition during FY 2017-18	38.52	2.40	8.07

2.22 The table below presents the approved and actual depreciation during the FY 2017-18:

Table 9: Depreciation for FY 2017-18 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April, 2016	Approved in Review Petition T.O. dated 28th March, 2018	Actual
Depreciation for the year	16.69	11.74	15.96

2.23 EWEDC humbly requests the Hon'ble Commission to approve the depreciation based on actuals as recorded in the accounts.

Interest on Loan

2.24 The EWEDC has completed the compilation of fixed asset register incorporating all the assets from inception till 31.03.2018. The same has also been incorporated in Annual Accounts and submitted to AG UT for audit. Previously, the assets prior to 31.03.2005 was not included in the GFA. Hence, post finalisation of FAR, GFA as per FAR as on 31.03.2018 has been considered for calculation of normative loan. Accordingly, for calculating opening normative loan for the FY 2017-18, EWEDC has considered 70% of the opening GFA as on 01.04.2017 and deducted the cumulative depreciation (considering the same as cumulative normative loan repayment) as on that date. The addition in normative loan has been considered based on 70:30 debt-equity ratio in line with the Regulations notified by the Hon'ble Commission. Repayment of the loan has been considered to be equal to the depreciation for the year, similar to the methodology considered by the Commission in APR for FY 2017-18. An interest rate of 13.45% as on April 1st, 2018 which is the SBI PLR rate has been applied on the average normative debt in order to estimate the normative interest cost for the FY 2017-18.

2.25 The Hon'ble Commission is requested to approve the interest on normative loans as computed in the table below:

Table 10: Interest on Normative Capital Loan for FY 2017-18 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April, 2016	Approved in Review Petition T.O. dated 28th March, 2018	Actual
Opening Normative Loan	60.84	24.21	54.45
Add: Normative Loan during the year	26.96	1.68	5.65
Less: Normative Repayment	16.69	11.74	15.96
Closing Normative Loan	71.12	14.14	44.13
Average Normative Loan	65.98	19.17	49.29
Rate of Interest (@SBAR rate)	14.05%	13.85%	13.85%
Interest on Normative Loan including bank charges	**9.27**	**2.66**	**6.83**

Error! Not a valid link. Interest on Consumer Security Deposit

2.26 As per the provision of Tariff Regulations & in accordance with Clause 47(4) of Electricity Act 2003, the distribution licensee is required to pay interest on security deposit collected from the consumers, equivalent to the bank rate or more as may be specified by the Commission. The actual opening balance and addition in consumer security deposit for the FY 2017-18 and claim of interest on security deposit is given in the table below:

Table 11: Interest on Consumer Security Deposit for FY 2017-18 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April, 2016	Approved in Review Petition T.O. dated 28th March, 2018	Actual
Opening Consumer Security Deposit	143.84	147.81	147.81
Net Addition During the year	5.00	5.00	45.62
Less: Deposit Refunded	-	-	2.47
Closing Consumer Security Deposit	148.84	152.81	190.96
Interest on Consumer Security Deposit	**11.34**	**9.77**	**11.72**

Error! Not a valid link. Interest on Working Capital

2.27 Interest on working capital has been computed as per Regulation 25 of MYT Regulations, 2014. As per methodology followed by the Commission in previous tariff order, the closing balance of security deposit has been deducted from the total normative working capital requirement for computing the working capital requirement.

2.28 The requirement for working capital and interest thereon is as given in the table below:

Table 12: Interest on Working Capital for FY 2017-18 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April, 2016	Approved in Review Petition T.O. dated 28th March, 2018	Actual
Receivables of 2 Months Billing	145.24	134.81	140.88
Power Purchase Cost of 1 month	63.35	58.54	56.85
Consumer Security Deposit Excl. BG/FDR	148.84	150.31	190.96
Inventory Based on Annual Requirement for Previous FY	0.34	4.08	2.57
Total Working Capital after adjusting Consumer Security Deposit	-	-	-
SBI Base Rate (%)	9.30%	9.30%	8.70%
Interest on Working Capital	-	-	-

Return on Equity

2.29 Provision of Regulation 27 of MYT Regulation, 2014 provides that Return on Equity shall be computed on 30% of the capital base or the actual equity whichever is lower @ 16% p.a. The EWEDC has computed the Return on Capital base on the opening GFA for the FY 2017-18 and 30% of assets capitalised during the year in accordance with the above provision & methodology followed by the Hon'ble Commission in the Tariff Order dated 28th March, 2018.

2.30 Return on Equity computed is provided in the table given below.

Table 13: Return on Net Fixed Assets for FY 2017-18 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April, 2016	Approved in Review Petition T.O. dated 28th March, 2018	Actual
Opening equity	86.52	122.84	128.79
Addition in Equity	11.56	0.72	2.42
Closing Equity	98.07	123.56	131.21
Average Equity Amount	92.29	123.20	130.00
Reasonable return @ 16%	14.77	19.71	20.80

Non-Tariff Income

2.31 The table below presents the approved and actual Non-Tariff Income for the FY 2017-18:

Table 14: Non-Tariff Income for FY 2017-18 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April, 2016	Approved in Review Petition T.O. dated 28th March, 2018	Actual
Non-Tariff Income	25.71	23.64	24.97

Revenue from Sale of UI Power

2.32 As per the Accounts, EWEDC has received Rs. 23.92 Crores during the FY 2017-18 towards sale of UI power which has been reduced from the ARR for the FY 2017-18.

Revenue on Current Tariff

2.33 The billed revenue on actual sales and prevailing tariff as approved by the Commission is given in the table below.

Table 15: Revenue on Current Tariff for FY 2017-18 (in Rs. Crores)

Particulars	Approved in Review Petition T.O. dated 28th March, 2018	Actual
Domestic	295.45	300.51
Commercial	300.22	324.62
Large Supply	77.60	75.11
Medium Supply	68.27	71.29
Small Power	10.77	10.65
Agriculture	0.46	0.40
Public Lighting	11.67	10.73
Bulk Supply	49.45	48.03
Others Temporary Supply	3.76	3.90
Total	**817.65**	**845.25**

FPPCA Billed during the year

2.34 EWEDC has additionally billed a total of Rs. 189.44 Crores as FPPCA from the consumers during the FY 2017-18. Total FPPCA billed for the FY 2017-18 is given in the

table below:

Table 16: FPPCA billed for FY 2017-18 (in Rs. Crores)

Particulars	Approved in Review Petition T.O. dated 28th March, 2018	Actual
FPPCA	109.96	189.44

Regulatory Surcharge Billed during the year

2.35 EWEDC has additionally billed a total of Rs. 0.12 Crores as Regulatory Surcharge from the consumers during the FY 2017-18. Total Regulatory Surcharge billed for the FY 2017-18 is given in the table below:

Table 17: Regulatory Surcharge billed for FY 2017-18 (in Rs. Crores)

Particulars	Approved in Review Petition T.O. dated 28th March, 2018	Actual
Regulatory Surcharge	-	0.12

Aggregate Revenue Requirement and Surplus for FY 2017-18

2.36 The Aggregate Revenue Requirement and surplus for the FY 2017-18 is as given in the table below:

Table 18: Aggregate Revenue Requirement and Surplus for True-Up of FY 2017-18 (in Rs. Crores)

S. No.	Particulars	Approved in T.O. dated 28th April, 2016	Approved in Review Petition T.O. dated 28th March, 2018	Actual
1	Cost of power purchase	760.16	702.48	682.17
2	Employee costs	69.67	66.82	68.82
3	Administration and general expenses	6.61	6.34	4.81
4	R&M expenses	8.64	12.97	8.50
5	Depreciation	16.69	11.74	15.96
6	Interest and finance charges	9.27	2.66	6.83
7	Interest on working capital	-	-	-
8	Return on NFA /Equity	14.77	19.71	20.80
9	Provision for Bad Debt	-	-	-
10	Interest on Security Deposit	11.34	9.77	11.72
11	**Total Revenue Requirement**	**897.15**	**832.49**	**819.61**
12	Less: Non-Tariff Income	25.71	23.64	24.97
13	Less: Revenue from Sale through UI	-	-	23.92
14	**Net Revenue Requirement**	**871.44**	**808.85**	**770.72**
15	Revenue from retail sales at Existing Tariff		817.65	845.25
16	FPPCA billed during the year		109.96	189.44
17	Regulatory Surcharge billed during the year		-	0.12
18	**Revenue Surplus/(Gap) for the Year**		**118.76**	**264.09**

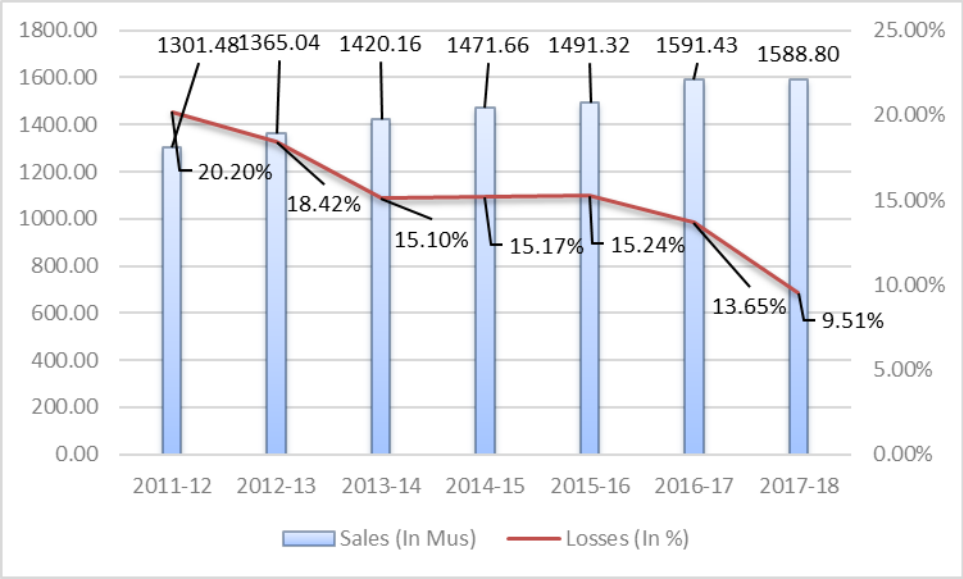
2.37 Based on the actual ARR and Revenue for the FY 2017-18 as per the accounts, it is observed that there is a revenue surplus of Rs. 264.09 Crores. **Therefore, EWEDC requests the Hon'ble Commission to approve the above revenue surplus of Rs. 264.09 Crores for FY 2017-18 as presented above and carry forward the same to the FY 2019-20.**

Chapter 3: T&D Loss for FY 2018-19 & FY 2019-20 to FY 2021-22

Intra-state T&D Losses

3.1 The T&D loss trajectory as approved by the Hon'ble Commission in the MYT Business Plan Order dated 12th November, 2018 for the FY 2019-20, FY 2020-21 & 2021-22 is 9.40%, 9.30% & 9.20% as against EWEDC's submission of 13.05%, 12.85% & 12.65% respectively. Further, the Hon'ble Commission had approved the T&D loss for the FY 2018-19 as 12.25% as per the MYT Order dated 28th April, 2016 as against EWEDC's submission of 13.50%. While EWEDC is dedicated for reducing the intra-state T&D losses in the UT of Chandigarh, it is submitted that the Hon'ble Commission may kindly consider the constraints in this regard as discussed in the previous chapter. EWEDC has highlighted that while the sales have increased in the last three years, losses remained stagnant without much improvement due to majority of the increase in the sales in the LT category. EWEDC submits to the Hon'ble Commission that the losses have been in the range of 15% to 15.24% during the period of FY 2013-14 to FY 2015-16. EWEDC has restricted the T&D loss for the FY 2016-17 at 13.65% & FY 2017-18 at 9.51%. The trajectory of loss from FY 2011-12 to FY 2017-18 is provided in the figure below:

Graph 1: T&D loss trajectory for the period FY 2011-12 to FY 2017-18



3.2 As can be observed from the above graph, EWEDC has been successful in maintaining the T&D losses within 20% in spite of having a consumer profile where majority of the consumers are LT category consumers. EWEDC has achieved T&D loss level of 9.51% for the FY 2017-18. The sharp fall in T&D losses in the FY 2017-18 is on account of the following factors:

i. There has been increase in energy sale through UI/exchange from 36.76 MUs in FY 2016-17 to 131.74 MUs in FY 2017-18.

ii. The excess energy sale was due to return of 48 MUs towards banked units to J&K during the FY 2017-18 against energy received in the FY 2015-16 & FY 2016-17 and sale of excess power through UI/exchange during different intervals of time.

3.3 In view of the above, T&D loss of 9.51% cannot be taken as base for determination of future loss trajectory. Therefore, EWEDC has considered the actual loss level of 13.65% for the FY 2016-17 as base and has projected 0.20% reduction in loss year over year. Accordingly, T&D loss for the FY 2018-19 has been projected at 13.25%. It is submitted that it is very difficult to reduce loss from the current level due to dominance of domestic category in the sales mix. In spite of an increase in overall sales, maximum increase in sales have 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.

3.4 It is further submitted that while the distribution area of EWEDC is small, the scope for addition of HT consumers is limited or negligible. As a result, the sales to such categories is generally restricted hence, further, reduction in T&D loss is very difficult. With over 80% of the sales to LT consumers, EWEDC feels that further reduction in the T&D loss in the UT of Chandigarh shall be possible after implementation of its various IT/strengthening schemes under IPDS and Smart Grid project which are under approval with Government of India.

3.5 In addition to the issue of higher LT sales, another important factor is the absence of interconnection point within the UT boundary which has been also submitted to the Hon'ble Commission in its past submissions.

3.6 The energy input in EWEDC is currently being metered at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB) which has resulted in higher T&D losses for EWEDC. The EWEDC has to bear around 3% additional losses of interstate circuit due to not having any interstate point in its boundary. In this regard it is submitted that construction of a 220/66 kV substation at Hallo Majra is under progress by M/s PGCIL. This substation shall cater to the future load growth of Chandigarh resulting in lower losses due to commissioning of an interconnection point within the UT periphery.

3.7 In view of the above, it is submitted that the Hon'ble Commission may kindly consider & approve the future T&D loss trajectory at a level which is achievable under the circumstances detailed above.

3.8 Clause 8.2.1. of the Tariff Policy 2006 states:

"(1) All power purchase costs need to be considered legitimate unless it is established that the merit order principle has been violated or power has been purchased at unreasonable rates. The reduction of Aggregate Technical & Commercial (ATC) losses needs to be brought about but not by denying revenues required for power purchase for 24 hours supply and necessary and reasonable O&M and investment for system upgradation."

3.9 As a sole distribution utility in the state of Chandigarh, EWEDC in this regard submits that the various technical and technological improvement proposed under IPDS, smart grid and other schemes shall be useful in bringing about the desired reduction in loss levels. Since these schemes are currently under implementation/progress, EWEDC requests the Hon'ble Commission to revise the T&D loss level for FY 2018-19 to achievable target as proposed.

3.10 In the Section 3.5. of the Tariff Order for the FY 2018-19, the Hon'ble Commission had referred that:

"*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.*"

In this regard, it is submitted that above mentioned utilities are either private/corporate utilities or DISCOMs, wherein and probably, a large amount of investment is already made by these utilities under T&D loss reduction programme like – R-APDRP (Part – A and Part – B), IPDS, SCADA, Smart Grid etc. However, EWEDC is a Govt. Department, and no such programme is implemented till date, therefore EWEDC can never be compared with these utilities.

3.11 It is further mentioned that there are a number of slum dwellers/juggles and houses build outside Laldora. Most of the residents of these areas steal the electricity by KUNDI Connections etc. as the electricity is a basic amenity. However, the new electricity connections to these residents could not be released due to mandatory provisions of Supply Code Regulation for releasing of new connection. Therefore, it is requested to allow the **SINGLE POINT SUPPLY (SPS)** connection category as requested by EWEDC in previous Tariff Petitions**.** So that, electricity connection may be released to the leading person of that area for further distribution of electricity in the said area. This will further reduce the AT&C losses of EWEDC in future.

3.12 It is further submitted that while the distribution area of EWEDC is small, the scope for addition of HT consumers is limited or negligible and more than 80% of sales is on LT consumers. Therefore, further reduction in T&D losses is very difficult. Hence, the Hon'ble Commission may reduce the element of HT connection from 100 Kw to 60 Kw. So that the eligible consumers having load more than 60 Kw may be shifted from LT to HT side.

3.13 Accordingly, EWEDC had estimated the T&D losses of 13.05%, 12.85% & 12.65% for the FY 2019-20, FY 2020-21 & FY 2021-22 respectively in the MYT Petition which was considered reasonable based on the past loss level as well as additional loss due to absence of interconnection point within the UT periphery.

3.14 In view of the above submissions, it is requested that the Hon'ble Commission may kindly consider & approve the T&D loss target of 13.25%, 13.05%, 12.85% and 12.65% as proposed by the EWEDC for the FY 2018-19, FY 2019-20, FY 2020-21 and FY 2021-22 respectively.

Chapter 4: Review of ARR for FY 2018-19

4.1 The Joint Electricity Regulatory Commission had notified the Multi Year Distribution Tariff Regulations, 2014 (MYT Regulations 2014). The regulations applies to all the distribution licensees in the state of Goa and Union Territories except Delhi. These Regulations were earlier applicable for the Control Period FY 2015-16 to FY 2017-18. However, the Commission had revised the Control Period to FY 2016-17 to FY 2018-19 in view of the delays.

4.2 EWEDC had filed a revised business plan for the period of FY 2016-17 to FY 2018-19 along with requisite details as provided in JERC (Multi-Year Tariff) Regulations 2014. Subsequently, the Hon'ble Commission had issued an order on revised business plan on 28th December, 2015. The Hon'ble Commission in the MYT Order dated 28th April, 2016 had approved ARR for the Control Period of FY 2016-17 to FY 2018-19 as per the MYT Regulations, 2014.

4.3 Regulation 8 of the MYT Regulations, 2014 states the following:

"(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"."

4.4 The petitioner is hereby filing annual performance review for FY 2018-19 as per the MYT framework and request the Hon'ble Commission to consider the revision in parameters based on the 6 months actual figures and balance six months estimates.

4.5 Additionally, EWEDC had submitted a review vide petition No. 239/2017 with respect to the MYT Order dated 4th May, 2017. The Hon'ble Commission vide its Order dated 20th September, 2017 disposed of the Review petition and revised the RPO target as per the Procurement of Renewable Energy (3rd Amendment Regulations, 2016). EWEDC has considered the same for projecting the RPO requirement & compliance.

Energy sales and Connected Load

4.6 The sales for the FY 2018-19 has been estimated based on CAGR of actual sales approved by the Hon'ble Commission for the FY 2011-12 to FY 2016-17. The CAGR for past five/three/two/one-year growth have been applied appropriately on the actual sales for the FY 2017-18 to arrive at the estimated sales for the FY 2018-19. The calculation of five/three/two/one-year CAGR is approved by the Hon'ble Commission vide Business Plan Order dated 12th November, 2018. The approved and estimated sales for full year and actual sales for six months of FY 2018-19 is given in the table below:

Table 19: Energy sales for FY 2018-19 (in MUs)

S. No.	Categories	Approved in T.O. dated 28th April 2016	Approved in T.O. dated 28th March 2018	Actual 6 Months	Estimated for FY 2018-19
1	Domestic	881.11	770.85	411.49	759.39
2	Commercial	523.71	507.90	279.96	507.56
3	Large Supply	117.00	124.13	64.53	119.85
4	Medium Supply	104.92	124.46	56.75	123.76
5	Small Power	21.00	20.86	9.83	19.75
6	Agriculture	2.18	1.59	0.77	1.46
7	Public Lighting	29.96	20.36	6.13	17.73
8	Bulk Supply	95.57	79.89	31.58	82.36
9	Others Temporary Supply	7.00	4.64	2.20	4.40
	Grand Total	**1,782.45**	**1,654.68**	**863.23**	**1,636.26**

4.7 The revised estimate of sales for FY 2018-19 may kindly be approved.

Intra-state T&D Losses

4.8 As per the Tariff Order dated 28th March, 2018, the T&D loss as approved by the Commission for the FY 2018-19 is 12.25% as against EWEDC's submission of 13.40%. While EWEDC is dedicated for reducing the intra-state T&D losses in the UT of Chandigarh, there are constraints in reducing the T&D loss further. It is submitted that while the sales have increased in the last three years, losses remained stagnant without much improvement due to majority of the increase in the sales in the LT category.

4.9 In addition to the issue of higher LT sales, another important factor is the absence of interconnection point within the UT boundary which has been also submitted to the Hon'ble Commission in its past submissions.

4.10 The energy input in EWEDC is currently being metered at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB) which has resulted in higher T&D losses for EWEDC. The EWEDC has to bear around 3% additional losses of interstate circuit due to not having any interstate point in its boundary. In this regard it is submitted that construction of a 220/66 kV substation at Hallo Majra is under progress by M/s PGCIL. This substation shall cater to the future load growth of Chandigarh resulting in lower losses due to commissioning of an interconnection point within the UT periphery.

4.11 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.

4.12 The trend of T&D losses over the period of last 5 years, shows that EWEDC has been able to reduce the T&D loss substantially year over year. However, further reduction within the present infrastructural conditions & constraints explained in above paras would be difficult. **The detailed submission on the constraints faced by EWEDC in further reduction of T&D loss from the current levels is made in Chapter 3 above.** Accordingly, EWEDC has proposed a T&D loss target of 13.25% for the FY 2018-19.

4.13 In view of the above submissions, it is requested that the Hon'ble Commission may kindly consider & approve the T&D losses target for the FY 2018-19 at 13.25%.

Energy Requirement

4.14 For computation of energy requirement, EWEDC has estimated inter-state transmission losses based on the approved inter-state transmission losses of 3.60% in the Business Plan Order dated 12th November, 2018.

4.15 The revised energy balance for FY 2018-19 is as given in the table below, the Hon'ble Commission is requested to approve the same:

Table 20: Energy Balance for FY 2018-19

Energy Available	**FY 2018-19**
Units Procured	2,016.39
Less: Outside Sale - Trading	84.60
Energy Available	1,931.79
Inter-State Transmission Loss	3.60%
Transmission Loss (Mus)	69.54
Net Energy Available at UT Periphery	**1,862.24**
Power procured from Gross & NET Metering Mode (In MUs)	23.95
Total Energy Available	**1,886.19**
Actual Energy Sales (Mus)	1,636.26
T&D Loss (%)	13.25%
T&D Loss (in MUs)	249.92
Total Energy Required at UT Periphery (MUs)	**1,886.18**
Demand Supply (Gap) / Surplus	**(0.00)**

Power Purchase Quantum and Cost

4.16 The Petitioner submits that it procures power from following sources:

- Central Generating Stations (CGS) such as that of NTPC, NHPC and NPCIL
- Other Generating Stations such as that of SJVNL, BBMB, THDC and APCPL
- Other Sources such as bilateral agreement, banking arrangement, power exchange, UI etc.

4.17 For the purpose of review for the FY 2018-19 power purchase quantum, EWEDC has considered actual six months power availability from various sources including short- term sources and balance six months availability has been computed based on the firm and unallocated power allocation from the various Central Generating Stations as per the recent revised allocation statement issued by Northern Regional Power Committee against the Ministry of Power letter No. NRPC/Comml/201/REA/2018/10199-10237 dated 04.09.2018.

4.18 Shortfall in power from allocations, if any, based on the estimated sales and losses for FY 2018-19 has been considered to be procured from short term sources i.e. power exchange, UI & other trading sources.

4.19 The actual six months power purchase quantum and cost is given in the table below:

Table 21: Actual 6 months Power Purchase Unit & Cost for FY 2018-19

Particulars	Units (in MUs)	Actual Cost (in Rs. Cr.)
NTPC	174.39	73.11
NHPC	223.95	70.28
APCPL	26.38	15.61
NPCIL	103.99	37.57
SJVNL	95.17	21.02
BBMB	338.96	100.14
THDC	109.74	49.36
Bilateral/Exchange	146.34	44.02
CREST	5.20	4.98
Pvt. Solar	0.68	0.56
PGCIL Charges		19.92
NRLDC Charges		0.09
Reactive Energy		0.95
REC Cost		2.43
Short-Term Purchase		
Grand Total	**1,224.80**	**440.04**

4.20 The Hon'ble Commission had notified amendment to the JERC (Procurement of Renewable Energy) Regulations, 2010 on 22nd August, 2016. As per the amendment issued, the Petitioner has to purchase 9.00% of total energy purchase from renewable sources for the FY 2018-19 including 3.60% for Solar and 5.40% for Non-Solar.

4.21 EWEDC shall be able to meet its RPO requirement for the FY 2018-19 (solar and non-solar). Further, based on the revised sales for FY 2018-19, applicable RPO and actual renewable power/REC procured during first six months of FY 2018-19, the balance RPO compliance during the six months have been computed. Besides the REC purchase, EWEDC has also purchased energy from solar plants under gross metering and net metering, details of which are as below:

Table 22: Effective Energy Sales (Excluding Hydro) for FY 2018-19

S. No.	Particular	Formula	FY 2018-19
1	Energy Sales within UT (In MUs)	a	1,636.26
2	Hydro Power Purchase (In MUs)	b	1,282.23
3	Inter-State Loss	c	3.60%
4	Inter-State Loss (In MUs)	d=b*c	46.16
5	Intra-State Loss	e	13.25%
6	Intra-State Loss (In MUs)	f=e*(b-d)	163.78
7	Hydro Power Consumed (In MUs)	g=b-d-f	1,072.29
8	**Conventional Power Consumed (In MUs)**	**h=a-g**	**563.97**

Table 23: RPO Requirement (Solar and Non-Solar) for FY 2018-19

Particulars	RPO %	Target		Actual 2018-19 H1	RPO to be Procured 2018-19 H2 (In MUs)
		Conventional Power Consumed (in MUs)	Units (in MUs)	Units (in MUs)	
Solar	3.60%	563.97	20.30	23.95	-
Non-Solar	5.40%	563.97	30.45	19.60	10.85
Total	**9.00%**		**50.76**	**43.55**	

Table 24: Sources of Solar Power Procurement against the Solar RPO for FY 2018-19

Particulars	FY 2018-19 (in MUs)
Power generated/procured	19.24
Power procured from CREST	4.71
Solar REC purchase	-
Total Solar RPO Met	**23.95**

4.22 The power purchase cost for FY 2018-19 is computed based on the estimated units to be procured from the generating stations as per the allocations

a. The fixed cost for each plant is computed based upon the % allocation of the plant capacity to EWEDC and corresponding annual fixed charges approved for the generating stations as per their recent tariff orders approved by CERC. For generating plants where tariff orders are still pending, fixed charges from first six months of FY 2018-19 have been considered.

b. The variable charge for the thermal and nuclear power plants has been considered based on the actual variable charge during the first six months of FY 2018-19.

c. In case of BBMB, the average rate of power as per the recent invoices have been considered for the purpose of projections.

d. The generation units available from thermal and nuclear plant are computed considering the average PLF of the plants in 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.

e. The deficit in energy is proposed to be met through short term power.

f. PGCIL, NRLDC and reactive Energy charges are computed based upon the half yearly figures available and have been pro-rated for the balance period.

4.23 Based on the actual six months power purchase cost and projected six months power purchase quantum and cost, the revised estimation of annual power purchase units and cost is summarized in the table below:

Table 25: Estimated Power Purchase Quantum and Cost for FY 2018-19

Particulars	Approved in T.O. dated 28th April 2016		Approved in T.O. dated 28th March, 2018		Estimated	
	Units (in MUs)	Cost (in Rs. Cr.)	Units (in MUs)	Cost (in Rs. Cr.)	Units (in MUs)	Cost (in Rs. Cr.)
NTPC	438.31	184.43	445.57	151.10	333.70	138.66
NHPC	218.43	48.06	219.57	65.57	284.09	103.75
APCPL			54.24	22.54	51.97	40.95
NPCIL	92.01	26.18	166.40	48.40	185.68	67.67
SJVNL	65.89	15.47	75.48	18.98	119.77	34.04
BBMB	768.48	253.39	666.90	213.92	645.58	172.71
THDC	182.87	59.35	113.38	73.32	188.79	98.86
Bilateral/Exchange	313.59	94.08	213.40	65.73	206.83	64.90
CREST			3.31	2.48	7.70	6.68
Pvt. Solar	30.84	12.90	0.74	0.66	1.10	0.79
PGCIL Charges		90.23		62.71		42.04
NRLDC Charges		0.30		4.44		0.17
Reactive Energy		0.12				0.95
REC Cost		8.23		7.18		3.77
Short-Term Purchase						-
Grand Total	**2,110.42**	**792.73**	**1,958.99**	**737.02**	**2,025.19**	**775.96**

4.24 While the Commission had approved a total power purchase cost of Rs. 737.02 Crores for FY 2018-19 in the Tariff order dated 28th March, 2018, the estimated power purchase cost is higher primarily on account of increase in per unit rate and also higher projected units.

In view of above, EWEDC proposes total power purchase units of 2025.19 MUs and power purchase cost of Rs. 775.96 Crores for the FY 2018-19.

The Hon'ble Commission may kindly consider the above submissions and approve the power purchase units & cost as proposed.

Operations and Maintenance Expenses

4.25 Operation & Maintenance Expenses consists of three elements viz. Employee Expenses, A&G Expenses and R&M Expenses. As per the MYT Regulations, 2014, O&M expenses shall be treated as controllable parameter and shall not be revised except those attributable to directions of the Hon'ble Commission.

4.26 EWEDC has estimated the Employee Expenses, A&G Expenses and R&M Expenses for the FY 2018-19 based on the actual for the period April, 2018 to September, 2018 and projected figures for the period of October, 2018 to March, 2018.

4.27 The actual O&M expenses for first six months of FY 2018-19 under the three heads Employee expenses, R&M expenses and A&G expenses are summarized in table below:

Table 26: Actual O&M Expense for six months of FY 2018-19 (in Rs. Crores)

Particulars	Actual FY 2018-19 (Apr-Sep)
Employee Expenses	32.33
R&M Expenses	4.96
A&G Expenses	3.20
Total O&M Expenses	**40.48**

4.28 Based on the actual for six months, the estimated figures of various heads under O&M expenses for the FY 2018-19 is provided in the table below along with the respective approved expenses:

Table 27: Approved and Estimated O&M Expenses for FY 2018-19 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April 2016	Approved in T.O. dated 28th March 2018	Estimated for FY 2018-19
Employee Expenses	74.38	74.38	74.38
R&M Expenses	10.51	10.51	10.51
A&G Expenses	7.10	7.10	7.10
Total O&M Expenses	**91.99**	**91.99**	**91.99**

4.29 The Hon'ble Commission is requested to consider and approve the total O&M expenses as computed in the table above.

Capital Expenditure and Capitalization

4.30 The Hon'ble Commission had approved a capital expenditure in the MYT Order dated 28th April, 2016 of Rs. 94.80 Crores for the FY 2018-19. EWEDC has submitted below the actual capital expenditure for the 1st half of FY 2018-19 & total estimated expenditure planned to be incurred in the FY 2018-19. Further, capitalisation details for the year are also provided in the table.

Table 28: Capital Expenditure and Capitalization for first 6 months of FY 2018-19 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April 2016	Approved in T.O. dated 28th March 2018	Actual FY 2018-19 (Apr-Sep)	FY 2018-19 Estimated
Capital Expenditure	94.80	11.50	14.46	28.92
Capitalization	94.80	11.50	4.07	15.95

4.31 The Hon'ble Commission is requested to consider and approve the total Capital Expenditure & Capitalization for the FY 2018-19 as computed in the table above.

GFA and Depreciation

4.32 It is submitted that EWEDC has prepared the Fixed Asset Register for the FY 2017-18. EWEDC has considered the closing GFA for the FY 2017-18 amounting to Rs. 437.38 Crores as opening GFA for the FY 2018-19.

4.33 The table below presents the approved and estimated asset details for the FY 2018-19.

4.34 EWEDC requests the Hon'ble Commission to approve the projected value of fixed assets in the table below:

Table 29: Approved and Estimated Assets Addition for FY 2018-19 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April 2016	Approved in T.O. dated 28th March 2018	FY 2017-18 (Actual)	FY 2018-19 (Estimated)
Opening GFA	326.91	411.87	429.31	437.38
Asset Capitalized	94.80	11.50	8.07	15.95
Closing GFA	421.71	423.37	437.38	453.33

4.35 Depreciation has been calculated on the basis of the opening GFA & proposed additions during the FY 2018-19 at the rate prescribed in the MYT Regulations. The approved and revised depreciation for FY 2018-19 is provided below:

Table 30: Approved and Estimated Depreciation for FY 2018-19 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April 2016	Approved in T.O. dated 28th March 2018	Estimated
Opening Assets at the Beginning of the year	326.91	411.87	437.38
Addition of assets during the year	94.80	11.50	15.95
Gross Fixed assets at the end of the year	421.71	423.37	453.33
Average Assets	374.31	417.62	445.36
Average Rate of Depreciation	5.40%	2.86%	3.77%
Depreciation for the year	**20.21**	**11.94**	**16.79**

Interest on Loan

4.36 In line with the methodology adopted by EWEDC for consideration of GFA as detailed above, the opening normative loan has also been considered on the same lines. The opening normative loan has been considered as 70% of GFA as per Fixed Asset Register as on 31.03.2018 reduced by the Accumulated Depreciation as on that date. Further, 70% of proposed capitalisation for the FY 2018-19 has been considered as addition to the normative loan.

4.37 Repayment of the normative loan during FY 2018-19 has been considered equivalent to the depreciation for the year in line with the MYT Regulations.

4.38 The interest at the SBI PLR rate of 13.45% as on April 1st, 2018 has been applied on the average normative debt in order to project the interest on normative loans for FY 2018-19. The Hon'ble Commission is requested to approve the interest on normative loans as computed in the table below:

Table 31: Approved and Estimated Interest on Normative Loan for FY 2018-19 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April 2016	Approved in T.O. dated 28th March 2018	Estimated
Opening Normative Loan	71.12	14.14	44.13
Add: Normative Loan during the year	66.36	8.05	11.17
Less: Normative Repayment	20.21	11.94	16.79
Closing Normative Loan	117.27	10.25	38.51
Average Normative Loan	94.20	12.20	41.32
Rate of Interest (@SBAR rate)	14.05%	13.40%	13.45%
Interest on Normative Loan including bank charges	**13.23**	**1.63**	**5.56**

Interest on Working Capital

4.39 As per clause 25 of JERC MYT Regulations, 2014 the working capital of a licensee shall consist of

a. Receivable of two months of billing
b. Less power purchase cost of one month
c. Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt
d. Inventory for two months based on Annual Revenue Requirement for previous year

4.40 The SBI base rate as on 1st April, 2018 8.70% is considered for computation of interest on working capital. The EWEDC requests the Commission to approve the revised working capital requirement and interest computed as per the regulations. The same is summarized in the table below:

Table 32: Interest on Working Capital for FY 2018-19 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April 2016	Approved in T.O. dated 28th March 2018	Estimated
Receivables of 2 Months Billing	153.48	140.91	141.72
Power Purchase Cost 1 Month	66.06	61.43	64.66
Consumer Security Deposit Excl. BG /FDR	153.84	155.31	198.96
Inventory Based on Annual Requirement for Previous FY	0.34	4.08	2.57
Total Working Capital after deduction of Consumer Security Deposit	**0.00**	**0.00**	**0.00**
SBI Base Rate (%)	9.30%	8.65%	8.70%
Interest on Working Capital	**0.00**	**0.00**	**0.00**

Interest on Consumer Security Deposit

4.41 In accordance with Clause 47(4) of Electricity Act 2003, the distribution licensee is required to pay interest on security deposit collected from the consumers, equivalent to the bank rate as approved by the Hon'ble Commission. Opening consumer security deposit has been considered based on the actual closing for FY 2017-18. The addition during the 1st six months of the current financial year is Rs. 4.05 Crores. It is estimated that total addition during the year shall be Rs. 8.00 Crores. The opening & closing balance, estimated addition during the FY 2018-19 and claim of interest on security deposit is given in the table below, EWEDC requests the Commission to approve the same.

Table 33: Interest on Consumer Security Deposit for FY 2018-19 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April 2016	Approved in T.O. dated 28th March 2018	Estimated
Opening Consumer Security Deposit	148.84	152.81	190.96
Net Addition During the year	5.00	5.00	8.00
Closing Consumer Security Deposit	153.84	157.81	198.96
Average Deposit	151.34	155.31	194.96
Bank Rate	7.75%	6.25%	6.25%
Interest on Consumer Security Deposit	**11.73**	**9.71**	**12.18**

Return on Equity

4.42 Regulation 27 of MYT Regulations 2014 provides for Return on Equity (RoE) as follows:

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

4.43 In line with the methodology adopted by EWEDC for calculation of normative loan as detailed above, the opening equity has also been considered on the same lines. The opening equity as 30% of GFA as per Fixed Asset Register as on 31.03.2018 & 30% of proposed capitalisation for the FY 2018-19 has been considered for arriving at the total equity for the year. The proposed RoE for FY 2018-19 is as below:

Table 34: Approved and Estimated Return on Equity for FY 2018-19 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April 2016	Approved in T.O. dated 28th March 2018	Estimated
Opening Equity	98.07	123.56	131.21
Addition in Equity	28.44	3.45	4.79
Closing Equity	126.51	127.01	136.00
Average Equity Amount	112.29	125.29	133.61
Reasonable return @ 16%	**17.97**	**20.05**	**21.38**

Provision for Bad and Doubtful Debt

4.44 In accordance with Clause 32 of JERC MYT Regulations, 2014, the generating company/licensee gets the receivables audited, allow actual provision for bad debts up to 1% of receivables in the revenue requirement of the licensee.

4.45 Accordingly, EWEDC has not proposed any provision for bad and doubtful debts for FY 2018-19. EWEDC shall claim the same at the time of true-up for the FY 2018-19 when the audited figures are available.

Non-Tariff Income

4.46 Non-Tariff Income for FY 2018-19 has been estimated based on the actual Non-Tariff Income for the 1st six months of the year. The approved and the estimated figures are provided in the table below:

Table 35: Approved and Estimated Non-Tariff Income for FY 2018-19 (in Rs. Crores)

Particulars	Approved in T.O. dated 28th April 2016	Approved in T.O. dated 28th March 2018	Actual FY 2018-19 (Apr-Sep)	Estimated for FY 2018-19
Non-Tariff Income	26.99	26.99	20.15	40.30

Revenue on Current Tariff

4.47 The revised estimation of revenue based on the estimated sales and approved tariff for FY 2018-19 is provided in the table below:

Table 36: Approved and Estimated Revenue on Existing Tariff for FY 2018-19 (in Rs. Crores)

S. No.	Category / Slab of Consumers	Approved in T.O. dated 28th March 2018	Estimated for FY 2018-19
A	Domestic	320.26	315.75
B	Commercial	316.16	306.85
C	Large Supply	79.59	76.59
D	Medium Supply	70.83	76.08
E	Small Power	10.34	10.20
F	Agriculture	0.46	0.42
G	Public Lighting	11.75	10.33
H	Bulk Supply	49.44	50.52
I	Others Temporary Supply	3.76	3.56
	Total	**862.60**	**850.31**

FPPCA Billed during the year

4.48 EWEDC has additionally billed a total of Rs. 21.80 Crores as FPPCA from the consumers during the first six months of FY 2018-19. The same has been considered towards revenue for FPPCA for the FY 2018-19.

Regulatory Surcharge Billed during the year

4.49 EWEDC has estimated a total of Rs. 42.52 Crores as Regulatory Surcharge from the consumers for the FY 2018-19. In the Tariff Order dated 28th March, 2018, the Hon'ble Commission approved the Regulatory Surcharge @ 5% of revenue billed for the FY 2018-19 onwards. The same has been considered towards Regulatory Surcharge for the FY 2018-19.

Table 37: Approved and Estimated Regulatory Surcharge for FY 2018-19 (in Rs. Crores)

Particulars	Approved in Review Petition T.O. dated 28th March, 2018	Actual
Regulatory Surcharge	43.13	42.52

Estimated Aggregate Revenue Requirement and Surplus for FY 2018-19

4.50 Based on the revised ARR and revenue projection, the revenue surplus for FY 2018-19 shall be as below:

Table 38: Approved and Estimated Aggregate Revenue Requirement for the FY 2018-19 (in Rs. Crores)

S. No.	Particulars	Approved in T.O. dated 28th April 2016	Approved in T.O. dated 28th March 2018	Estimated
1	Cost of power purchase for full year	792.73	737.02	775.96
2	Employee costs	74.38	74.38	74.38
3	R&M expenses	10.51	10.51	10.51
4	Administration and general expenses	7.10	7.10	7.10
5	Depreciation	20.21	11.94	16.79
6	Interest and finance charges	13.23	1.63	5.56
7	Interest on working capital	0.00	0.00	0.00
8	Return on Equity	17.97	20.05	21.38
9	Provision for Bad Debt	0.00	0.00	0.00
10	Interest on Consumer Security Deposit	11.73	9.71	12.18
11	**Total Revenue Requirement**	**947.86**	**872.34**	**923.86**
12	Less: Non-Tariff Income	26.99	26.99	40.30
13	Less: Revenue from Sale through UI	-	-	30.42
14	**Net Revenue Requirement (11-12-13)**	**920.87**	**845.35**	**853.15**
15	Revenue from retail sales		862.60	850.31
16	FPPCA			21.80
17	Regulatory Surcharge		43.13	42.52
18	**Revenue Surplus/(Gap) for the Year**		**60.38**	**61.48**

4.51 **The revenue surplus determined for the FY 2018-19 amounts to Rs. 61.48 Crores and the Hon'ble Commission is requested to approve the same. This revenue surplus has been carried forward to FY 2019-20.**

Chapter 5: Capital Investment Plan for the MYT control period of FY 2019-20 to FY 2021-22

5.1 As per the MYT Regulations, 2018, the Distribution Licensee is required to file the Business Plan for the control period of three financial years from April 1, 2019 to March 31, 2022, which shall comprise but not be limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets before the Hon'ble Commission as part of the Tariff Filing before the beginning of the control period.

5.2 Based upon the above mandate the CAPEX Plan proposals (scheme wise) for the FY 2019-20 to FY 2021-22 under the MYT control period of the FY 2019-20 to FY 2021-22 have been formulated by Electricity Wing of Engineering Department, Chandigarh in order to enable better planning, budgeting and monitoring at macro & micro levels. The capital expenditure plan has been separately prepared into two categories:

- Capital Investment Plan for 66 KV and above works
- Capital Investment Plan for 11 KV and below works

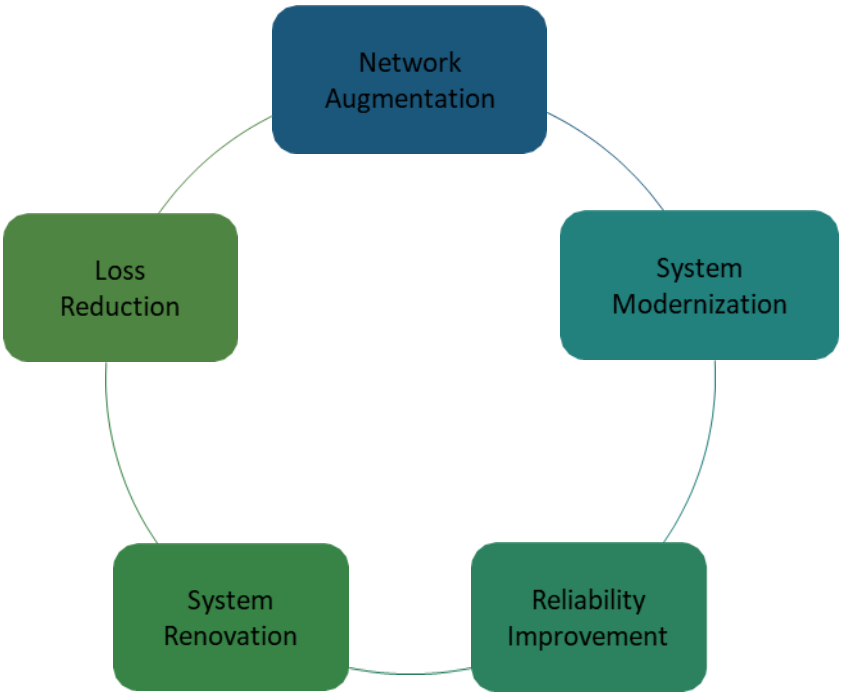
5.3 Electricity Wing of Engineering Department, Chandigarh has prepared the capex plan taking into consideration all the factors which would affect the operations of the company. The capex plan includes the details of various capital expenditure schemes in the identified areas and their respective estimates for each year of the MYT control period of the FY 2019-20 to FY 2021-22.

5.4 The capital investments of Electricity Wing of Engineering Department, Chandigarh can largely be categorized in following areas:

- Investments in New Transmission Infrastructure to support the demand requirements or power evacuation from generation projects.

- System augmentation and strengthening including renovation and modernization to maintain the performance of the existing system and to deter investments.

The figure below provides a wider overview of the capital investment avenues planned by the Electricity Wing of Engineering Department, Chandigarh.



5.5 Since capital investment is an ongoing activity for any transmission and distribution licensee, EWEDC has categorized the schemes under the followings two categories i.e. On-going schemes and new schemes. The year wise details of proposed capital expenditure under the two categories has been furnished a below.

CAPITAL EXPENDITURE FOR 66KV NEW SCHEMES

5.6 EWEDC has planned for 10 new 66kV schemes in view of the system upgradation requirement and improvement of reliability. The details of the new 66kV capital schemes along with the investment rationale is provided in table below:

Table 39: Capital Expenditure for 66 KV New Schemes for the Control Period

Sl. No.	66KV New Scheme	Total Exp. (Rs. in Crores)
1	Replace the existing battery bank and battery charger	0.09
Scheme Details	Revised Rough Cost Estimate for Supply, Delivery, Testing & Commissioning of 220V Volts 50 Amp full wave FCBC to replace the existing battery bank and battery charger at 66KV Grid Sub Station, Sector 39, Chandigarh. Rationale: The scheme is aimed at improving system reliability and system up-gradation.	

2	Providing 66kV outgoing feeders from upcoming 220kV	76.00
Scheme Details	Providing 06 Nos., 66kV outgoing feeders from upcoming 220kV GIS Hallomajra, UT Chandigarh. a) 66kV Double Circuit (underground) to existing 66kV GSS Sector 52, UT Chandigarh each consisting of single core 4x630mm2 Aluminum conductor XLPE insulated cable (11.5x2 = 23KM Approx for each circuit) with further extended link of one 66kV circuit to 33kV GSS Sector 34, UT Chandigarh (4x4 = 16KM Approx.) i.e. going to be upgraded to 66KV GSS. b) 66kV Double Circuit (underground) to existing 66kV GSS Sector 47, UT Chandigarh each consisting of single core 4x630mm2 Aluminum conductor XLPE insulated cable (6.5x2 = 13KM Approx. for each circuit) c) 66kV Single Circuit (underground) for 66kV GSS I/A Phase-I, UT Chandigarh consisting of single core 4x630mm2 Aluminum conductor XLPE insulated cable (1KM Approx.) terminated at poultry farm chowk Chandigarh on existing 66KV overhead tower line circuit in between 66KV GSS I/A Ph-I & II, UT Chandigarh. d) 66kV Single Circuit (underground) for 66kV GSS I/A Phase-II, UT Chandigarh consisting of single core 4x630mm2 Aluminum conductor XLPE insulated cable (1KM Approx.) terminated at poultry farm chowk Chandigarh on existing 66KV overhead tower line circuit in between 66KV GSS I/A Ph-I & II, UT Chandigarh. Rationale: The scheme will help in improving service reliability to the consumers of the area and to meet Standards of Performance of JERC.	
3	Replacement/ augmentation of damaged 66/11KV, 10/12.5MVA Power Transformers with 20MVA Power Transformers	4.36
Scheme Details	Replacement/ augmentation of 3 Nos. damaged 66/11KV, 10/12.5MVA Power Transformers with 20MVA Power Transformers at 66KV Grid Sub Station, Sector 1, BBMB and Industrial area Phase II, Chandigarh. Rationale: The scheme will help in improving service reliability to the consumers of the area and to meet Standards of Performance of JERC.	
4	Replacement/ augmentation of damaged 66/11KV, 10/12.5MVA Power Transformers with 20MVA Power Transformers	1.38
Scheme Details	Replacement/augmentation of 01 No. damaged 66/11kV, 10/12.5MVA Power Transformers with 20 MVA Power Transformers at 66KV Grid Sub Station, Industrial Area, Phase-I, UT Chandigarh. Rationale: The scheme will help in improving service reliability to the consumers of the area and to meet Standards of Performance of JERC.	
5	Providing 1x30MVA 66/11KV additional Power TF & Replacement of 14 Nos. MOCB	10.37

Scheme Details	a) Providing 1x30MVA 66/11KV additional Power TF At 66kv Grid Sub Station Sec-39 UT Chd. b) Replacement of 14 Nos. MOCB with SF6, Breakers at 66KV Grid Substation Sector-52 and Sector –12 UT Chandigarh. Rationale: The scheme will help in improving service reliability to the consumers of the area and to meet Standards of Performance of JERC.	
6	Replacement of obsolete and old 66 kV isolator, 66 kV SF-6 breaker, 11 kV VCB and allied items	4.99
Scheme Details	RCE for the replacement of obsolete and old 66 kV isolator, 66 kV SF-6 breaker, 11 kV VCB and allied items at 66 kV Grid Sub Station I/A Phase-I & Phase-II and 33 kV Grid Sub Station I/A Phase-I, UT Chandigarh. Rationale: The scheme is aimed at improving system reliability and system up-gradation.	
7	Providing 2x20MVA, 66 / 11KV Gas Insulated Sub Station	27.29
Scheme Details	Providing 2x20MVA, 66 / 11KV Gas Insulated Sub Station at Sector-26 UT Chandigarh along with 66 KV D/C line from I.T Grid Sub Station Kishangarh to 66KV Grid Sub Station Sector-26 UT Chd. Rationale: The scheme will help in improving service reliability to the consumers of the area and to meet Standards of Performance of JERC.	
8	Providing GIS 2x20MVA, 66/11KV Power Transformer along with 66 kV associated 66 kV T/L	36.98
Scheme Details	Conversion of existing 33KV Sub Station Sector-18 to 66KV Sub Station Sector-18 by Providing GIS 2x20MVA, 66/11KV Power Transformer along with 66 kV associated 66 kV T/L with underground cable from 66 kV Sector-26 to 66 kV Sector 18. Rationale: The scheme intends to upgrade transmission network of EDC. It also help to meet peak demand. The upgradation of Sub-station will be provided better service to the consumers.	
9	Providing Hot Spare	2.50
Scheme Details	Providing Hot Spare 16/20MVA, 66/11KV Power Transformer. Rationale: The scheme is aimed at improving system reliability and system up-gradation.	
10	Conversion of 66 kV Single Circuit to Double Circuit T/L and U/G cable	7.37

Scheme Details	Conversion of 66 kV Single Circuit to Double Circuit T/L and U/G cable from 220 kV GSS Kishangarh to 66 kV Sub Station Sector-12 UT Chandigarh to double circuit T/L. Rationale: The scheme will help in improving service reliability to the consumers of the area and to meet Standards of Performance of JERC.

CAPITAL EXPENDITURE FOR 66KV ONGOING SCHEMES

5.7 The table below provides the information about 66 KV ongoing works. Further, the table provides details about each individual scheme as well as original cost of the project.

Table 40: Capital Expenditure for 66 KV Ongoing Schemes for the Control Period

Sl. No.	66KV Ongoing Scheme	Total Exp. (Rs. in Crores)
1	Providing 66KV Transmission Line	11.03
Scheme Details	Prov. 66KV Transmission Line to upcoming 66KV G/S/Stn alongwith assosiate 66KV Line Bays at Raipure Kalan, CHD. Rationale: The scheme will help in improving service reliability to the consumers of the area and to meet Standards of Performance of JERC.	
2	Providing 2x20MVA, 66/11KV Grid Sub-Station	9.74
Scheme Details	Providing 2x20MVA, 66/11KV Grid Sub-Station at Raipur Kalan. Rationale: The scheme will help in improving service reliability to the consumers of the area and to meet Standards of Performance of JERC.	
3	Providing double circuit 66 KV overhead TL tussled monopoles	3.12
Scheme Details	Providing double circuit 66 KV overhead TL tussled monopoles from T off point 60 proposed 66/11 KV Grid substation village Sarangpur ,UT Chandigarh. Rationale: The scheme is aimed at improving system reliability and system up-gradation.	
4	Construction of Double Circuit 66KV over head Transmission line & Construction of 2 Nos. Line Bays	1.18

Scheme Details	A) Prov. Construction of Double Circuit 66KV over head Transmission line on tubular monopoles from T-OFF Point to proposed 66KV G/S/Stn at Institutional Area in Village - Sarangpure, CHD B) Prov. Construction of 2 Nos. Line Bays at 66/11KV G/S/Stn, Village - Sarangpure, CHD. Rationale: The scheme is aimed at improving system reliability and system up-gradation.	
5	Turnkey execution of new 66KV 2x20 MVA Grid S/Stn.	9.89
Scheme Details	Turnkey execution of new 66KV 2x20 MVA Grid S/Stn. at institutional Area, Village-Sarangpur, UT, Chandigarh. Rationale: The scheme will help in improving service reliability to the consumers of the area and to meet Standards of Performance of JERC.	
6	Up gradation of T/F capacity	7.12
Scheme Details	Up gradation of T/F capacity 66/11KV Grid S/Stn. IT Park by replacing 2x12.5 MVA with 2x20MVA T/F and shifting & reinstallation 2x12.5 MVA at Civil Sectt. Sector-1 & Sector-12, Chd. Rationale: The scheme will help in improving service reliability to the consumers of the area and to meet Standards of Performance of JERC.	
7	Up gradation of existing 33KV S/Stn. To 66KV	7.22
Scheme Details	Up gradation of existing 33KV S/Stn. To 66KV by providing 1x30MVA, 66/11KV power T/F at Sector-34, chd. Rationale: The scheme will help in improving service reliability to the consumers of the area and to meet Standards of Performance of JERC.	
8	Providing 66 kV Transmission line with underground cable	7.90
Scheme Details	Providing 66 kV Transmission line with underground cable from Sector-32 Grid Sub Station to Sector 34 Grid Sub Station. Rationale: The scheme will help in improving service reliability to the consumers of the area and to meet Standards of Performance of JERC.	

CAPITAL EXPENDITURE FOR 11 KV SCHEMES

5.8 The details of Capital Investment Plan for 11 KV and below works is as below:

5.9 The Capex Plan proposal (Scheme wise) for FY 2019-20 to 2021-22 under the MYT control period of the FY 2019-20 to 2021-22 have been formulated by Electricity Wing of Engineering Department, Chandigarh keeping in view various parameters that come into play to ensure better supply of power to end consumers.

5.10 The table below provides the information about 11 KV ongoing & proposed works as well as estimated cost on such works to be incurred during the control period.

Table 41: Capital Expenditure for 11 KV & below Schemes for the Control Period

Sl. No.	Particulars	Total Exp. (Rs. in Crores)
1	General Service Connection (GSC) and Industrial Service Conection (ISC) including replacement of Electromechanical meters to Static meters	11.26
Scheme Details	Provide additional distribution network with transformer centers & HT/LT services lines for arranging power supply to various categories of HT & Lt consumers. Rationale: Network and system expansion to help/serve new consumers.	
2	Strengthening of Distribution Network by providing 11KV underground power distribution system	8.91
Scheme Details	The various U/G system shall be laid in different parts of UT Chandigarh during the control period. This will provide relief to the existing system. The scheme will provide alternate 11 KV feeders from other nearby 66/11 KV Sub Stations. Rationale: The scheme intends to provide U/G cable power distribution system and removing O/H lines to render uninterupted and stable power supply to urban, rural and industrial areas of UT Chandigarh, the scheme is part of planned system augmentation.	
3	Providing and Augmentation of the LT O/H ACSR conductors	0.55
Scheme Details	Provide/augment the LT overhead conductor in the area of the Chandigarh. Further, the old LT O/H ACSR conductors shall be replaced with the new one of suitable capacity in phased manner. Rationale: The augmentation of LT O/H ACSR conductor shall reduce the technical losses. The proposed replacement of old LT O/H conductor aims to improve the reliability of power supply.	

4	Strengthening of Distribution Network by providing/augmentation of 11/0.400KV, 1000/315/200/100 KVA Distribution Transformers along with ACB.	8.82
Scheme Details	Installation of the 315 KVA/100 KVA distribution transformers in the vicinity of the UT Chandigarh. The distribution transformers shall be installed at different locations specifically at load centers. Rationale: To provide reliable power, proper voltage to the prospective consumers. The LT line shall automatically be reduced.	
5	Providing 11KV/LT Aerial Bunched Cable	2.92
Scheme Details	Provide the HT/LT Airial Bunched cable in UT Chandigarh in the phased manner. This cable shall be provided in thickly plantation/forest area. Rationale: To reduce the breakdowns/faults thereby improving reliability of power in the respective area.	
6	Providing improved metering system, special tools, testing equipments, vehicle, skylift, safety devices, office equipment etc.	2.00
Scheme Details	Provide the metering system, special tools, testing equiments, vehicles, skylift, safety devices & office equipments etc. to the various offices of the EWEDC. Rationale: The EWEDC intends to improve its functionality thus its services to the consumers. The new equipment will help in plugging gaps in services.	
7	Improvement and augmentation of 66/11 KV existing sub-station and 11KV Indoor sub-stations including HT/LT Panels, ACB/OCB, Battery bank, CT/PT, HT/ LT Shunt Capacitors etc. on the existing distribution transformers	21.24
Scheme Details	The scheme will provide the replacement of old MOCB with SF. Breakers, replacement of old and obsolete panels and other allied equipment etc. The battery charger alongwith battery bank and DCDB at 66 KV Grid Substations has also been proposed to replaced. Rationale: The scheme is provided system augmentation & upgradation.	
8	Miscellaneous such as Renovation of houses in Electricity Colony, Unforseen Works etc.	6.07
Scheme Details	Renovate the old buildings/offices of EWEDC & misc. works. Rationale: The EWEDS intends to improve its functionality thus its services to the consumers.	

9	Smart Grid Project Under Sub-Division No.5	25.20
Scheme Details	A pilot project has taken by EWEDC for Smart Grid Project. Rationale: The scheme will help in improving service reliability to the consumers, System Up-gradation and to meet Standards of Performance of JERC.	
10	Conversion of Existing Overhead HT/ LT Lines into underground Equipments of 11 kV I/D S/Stn. Including Street Light System in Sector 8, UT, Chandigarh on Turnkey Basis	18.14
Scheme Details	Conversion of Overhead HT/LT lines into underground will help to reduce the losses & faults thereby improving the reliability of power supply. Rationale: The scheme will help in improving service reliability to the consumers, System Up-gradation and to meet Standards of Performance of JERC.	
11	Smart Grid Project of whole Chandigarh	256.00
Scheme Details	The Smart Grid Project of whole Chandigarh is under approval by NSGM/MoP. Rationale: The scheme will help in improving service reliability to the consumers, System Up-gradation and to meet Standards of Performance of JERC.	
12	Installation of AMR & DLMS compliant energy meters at EHV sub-stations for Energy Audit	0.82
Scheme Details	Installation of AMR & DLMS compliant energy meters at EHV sub-stations for Energy Audit. The estimate is approved and DNIT is under process. Rationale: The scheme will make the energy audit as per direction of the Hon'ble Commission in various Tariff Orders.	

SCHEME WISE PROPOSED CAPITAL EXPENDITURE FOR THE CONTROL PERIOD

5.11 Since the above 66 KV schemes shall be implemented during the control period, the year wise break-up of the various 66 KV schemes during the control period is provided in the table below:

Table 42: Proposed Capital Expenditure for 66 KV Schemes for the Control Period

Sl. No.	66 kV Schemes	Original Project Cost (Rs. in Crores)	Proposed Expenditure (Rs. in Crores)		
			FY 2019-20	FY 2020-21	FY 2021-22
1	Prov. 66KV Transmission Line to upcoming 66KV G/S/Stn alongwith assosiate 66KV Line Bays at Raipure Kalan, CHD.	11.03	4.26	-	-
2	Providing 2x20MVA, 66/11KV Grid Sub-Station at Raipur Kalan.	9.74	3.90	-	-
3	Providing double circuit 66 KV overhead TL tussled monopoles from T off point 60 proposed 66/11 KV Grid substation village Sarangpur ,UT Chandigarh.	3.12	1.10	-	-
4	A) Prov. Construction of Double Circuit 66KV over head Transmission line on tubular monopoles from T-OFF Point to proposed 66KV G/S/Stn at Institutional Area in Village - Sarangpure, CHD B) Prov. Construction of 2 Nos. Line Bays at 66/11KV G/S/Stn, Village - Sarangpure, CHD	1.18	0.32	-	-
5	Turnkey execution of new 66KV 2x20 MVA Grid S/Stn. at institutional Area, Village- Sarangpur, UT, Chandigarh	9.89	3.96	-	-
6	Up gradation of T/F capacity 66/11KV Grid S/Stn. IT Park by replacing 2x12.5 MVA with 2x20MVA T/F and shifting & reinstallation 2x12.5 MVA at Civil Sectt. Sector-1 & Sector-12, Chd.	7.12	2.85	-	-
7	Up gradation of existing 33KV S/Stn. To 66KV by providing 1x30MVA, 66/11KV power T/F at Sector-34, chd.	7.22	2.89	-	-
8	Providing 66 kV Transmission line with underground cable from Sector-32 Grid Sub Station to Sector 34 Grid Sub Station	7.90	3.16	-	-

9	Revised Rough Cost Estimate for Supply, Delivery, Testing & Commissioning of 220V Volts 50 Amp full wave FCBC to replace the existing battery bank and battery charger at 66KV Grid Sub Station, Sector 39, Chandigarh	0.09	0.09	-	-
10	Providing 06 Nos., 66kV outgoing feeders from upcoming 220kV GIS Hallomajra, UT Chandigarh. a) 66kV Double Circuit (underground) to existing 66kV GSS Sector 52, UT Chandigarh each consisting of single core 4x630mm2 Aluminum conductor XLPE insulated cable (11.5x2 = 23KM Approx for each circuit) with further extended link of one 66kV circuit to 33kV GSS Sector 34, UT Chandigarh (4x4 = 16KM Approx.) i.e. going to be upgraded to 66KV GSS. b) 66kV Double Circuit (underground) to existing 66kV GSS Sector 47, UT Chandigarh each consisting of single core 4x630mm2 Aluminum conductor XLPE insulated cable (6.5x2 = 13KM Approx. for each circuit) c) 66kV Single Circuit (underground) for 66kV GSS I/A Phase-I, UT Chandigarh consisting of single core 4x630mm2 Aluminum conductor XLPE insulated cable (1KM Approx.) terminated at poultry farm chowk Chandigarh on existing 66KV overhead tower line circuit in between 66KV GSS I/A Ph-I & II, UT Chandigarh. d) 66kV Single Circuit (underground) for 66kV GSS I/A Phase-II, UT Chandigarh consisting of single core 4x630mm2 Aluminum conductor XLPE insulated cable (1KM Approx.) terminated at poultry farm chowk Chandigarh on existing 66KV overhead tower line circuit in between 66KV GSS I/A Ph-I & II, UT Chandigarh.	76.00	19.00	34.00	23.00

11	Replacement/ augmentation of 3 Nos. damaged 66/11KV, 10/12.5MVA Power Transformers with 20MVA Power Transformers at 66KV Grid Sub Station, Sector 1, BBMB and Industrial area Phase II, Chandigarh.	4.36	2.20	1.36	-
12	Replacement/augmentation of 01 No. damaged 66/11kV, 10/12.5MVA Power Transformers with 20 MVA Power Transformers at 66KV Grid Sub Station, Industrial Area, Phase-I, UT Chandigarh	1.38	1.00	0.38	-
13	a) Providing 1x30MVA 66/11KV additional Power TF At 66kv Grid Sub Station Sec-39 UT Chd. b) Replacement of 14 Nos. MOCB with SF6, Breakers at 66KV Grid Substation Sector-52 and Sector –12 UT Chandigarh	10.37	2.10	5.20	3.07
14	RCE for the replacement of obsolete and old 66 kV isolator, 66 kV SF-6 breaker, 11 kV VCB and allied items at 66 kV Grid Sub Station I/A Phase-I & Phase-II and 33 kV Grid Sub Station I/A Phase-I, UT Chandigarh.	4.99	-	3.20	1.79
15	Providing 2x20MVA, 66 / 11KV Gas Insulated Sub Station at Sector-26 UT Chandigarh along with 66 KV D/C line from I.T Grid Sub Station Kishangarh to 66KV Grid Sub Station Sector-26 UT Chd	27.29	-	16.37	10.92
16	Conversion of existing 33KV Sub Station Sector-18 to 66KV Sub Station Sector-18 by Providing GIS 2x20MVA, 66/11KV Power Transformer along with 66 kV associated 66 kV T/L with underground cable from 66 kV Sector-26 to 66 kV Sector 18	36.98	-	22.00	14.98
17	Providing Hot Spare 16/20MVA, 66/11KV Power Transformer	2.50	-	1.50	1.00

18	Conversion of 66 kV Single Circuit to Double Circuit T/L and U/G cable from 220 kV GSS Kishangarh to 66 kV Sub Station Sector-12 UT Chandigarh to double circuit T/L	7.37	-	4.42	2.95
	Total	**228.53**	**46.81**	**88.43**	**57.70**

5.12 In addition to the 66kV schemes, EWEDC is also undertaking 11kV works which are primarily intended for strengthening of the distribution network and shall be useful in improving the reliability and voltage profile of the distribution network for the end consumers. The proposed schemes (details of which are provided above) and capital expenditure to be undertaken over the control period is as below.

Table 43: Proposed Capital Expenditure for 11 KV & below Schemes for the Control Period

Sl. No.	11 KV Schemes	Original Project Cost (Rs. in Crores)	Proposed Expenditure (Rs. in Crores)		
			FY 2019-20	FY 2020-21	FY 2021-22
1	General Service Connection (GSC) and Industrial Service Conection (ISC) including replacement of Electromechanical meters to Static meters	11.26	3.14	3.28	3.42
2	Strengthening of Distribution Network by providing 11KV underground power distribution system.	8.91	2.82	3.34	1.63
3	Providing and Augumentation of the LT O/H ACSR conductors	0.55	0.34	0.15	-
4	Strengthening of Distribution Network by providing/augumentation of 11/0.400KV, 1000/315/200/100 KVA Distribution Transformers along with ACB.	8.82	4.95	1.62	1.14
5	Providing 11KV/LT Aerial Bunched Conductor	2.92	0.76	-	1.79

6	Providing improved metering system, special tools, testing equipments, vehicle,skylift, safety devices, office equipment etc.	2.00	1.28	0.47	-
7	Improvement and augumentation of 66/11 KV existing sub-station and 11KV Indoor sub-stations including HT/LT Panels, ACB/OCB, Battery bank, CT/PT, HT/ LT Shunt Capacitors etc. on the existing distribution transformers.	21.24	2.98	9.47	6.11
8	Miscleneous such as Renovation of houses in Electricity Colony, Unforseen Works etc.	6.07	2.00	1.80	1.50
9	Smart Grid Project Under Sub-Division No.5	25.20	12.00	8.36	-
10	Conversion of Existing Overhead HT/ LT Lines into underground Equipments of 11 kV I/D S/Stn. Including Stret Light System in Sector 8, UT, Chandigarh on Turnkey Basis.	18.14	9.00	4.14	-
11	The Smart Grid Project of whole Chandigarh is under approval by NSGM/MoP	256.00	-	10.00	20.00
12	Installation of AMR & DLMS compliant energy meters at EHV sub-stations for Energy Audit. The estimate is approved and DNIT is under process	0.82	-	0.82	-
	Total	**361.93**	**39.26**	**43.46**	**35.60**

CAPITALIZATION SCHEDULE

5.13 For 66kV new and ongoing schemes, EWEDC has proposed the capitalization considering the estimated date of commissioning of these schemes.

5.14 With respect to the 11kV schemes, 100% capitalization of the amount proposed in the concerned year for schemes such as General Service connections and industrial service connections, augmentation distribution transformers and LT OH conductors, installation of shunt capacitors and replacement of electro-mechanical meters has been considered.

5.15 Scheme-wise and year-wise proposed capitalization for the control period is summarized in the table below:

Table 44: Capitalization Schedule for the Control Period

Sl. No.	Particulars	Proposed Capitalization (Rs. in Crores)		
		FY 2019-20	FY 2020-21	FY 2021-22
	66 KV Ongoing Scheme			
1	Prov. 66KV Transmission Line to upcoming 66KV G/S/Stn alongwith assosiate 66KV Line Bays at Raipure Kalan, CHD.	11.03	-	-
2	Providing 2x20MVA, 66/11KV Grid Sub-Station at Raipur Kalan.	9.74	-	-
3	Providing double circuit 66 KV overhead TL tussled monopoles from T off point 60 proposed 66/11 KV Grid substation village Sarangpur ,UT Chandigarh.	3.12	-	-
4	A) Prov. Construction of Double Circuit 66KV over head Transmission line on tubular monopoles from T-OFF Point to proposed 66KV G/S/Stn at Institutional Area in Village - Sarangpure, CHD B) Prov. Construction of 2 Nos. Line Bays at 66/11KV G/S/Stn, Village - Sarangpure, CHD	1.18	-	-
5	Turnkey execution of new 66KV 2x20 MVA Grid S/Stn. at institutional Area, Village- Sarangpur, UT, Chandigarh	9.89	-	-
6	Up gradation of T/F capacity 66/11KV Grid S/Stn. IT Park by replacing 2x12.5 MVA with 2x20MVA T/F and shifting & reinstallation 2x12.5 MVA at Civil Sectt. Sector-1 & Sector-12, Chd.	7.12	-	-

7	Up gradation of existing 33KV S/Stn. To 66KV by providing 1x30MVA, 66/11KV power T/F at Sector-34, chd.	7.22	-	-
8	Providing 66 kV Transmission line with underground cable from Sector-32 Grid Sub Station to Sector 34 Grid Sub Station	7.90	-	-
	66 KV New Scheme			
9	Revised Rough Cost Estimate for Supply, Delivery, Testing & Commissioning of 220V Volts 50 Amp full wave FCBC to replace the existing battery bank and battery charger at 66KV Grid Sub Station, Sector 39, Chandigarh	0.09	-	-
10	Replacement/ augmentation of 3 Nos. damaged 66/11KV, 10/12.5MVA Power Transformers with 20MVA Power Transformers at 66KV Grid Sub Station, Sector 1, BBMB and Industrial area Phase II, Chandigarh.	-	4.36	-
11	Replacement/augmentation of 01 No. damaged 66/11kV, 10/12.5MVA Power Transformers with 20 MVA Power Transformers at 66KV Grid Sub Station, Industrial Area, Phase-I, UT Chandigarh	-	1.38	-
12	a) Providing 1x30MVA 66/11KV additional Power TF At 66kv Grid Sub Station Sec-39 UT Chd. b) Replacement of 14 Nos. MOCB with SF6, Breakers at 66KV Grid Substation Sector-52 and Sector –12 UT Chandigarh	-	-	10.37
13	RCE for the replacement of obsolete and old 66 kV isolator, 66 kV SF-6 breaker, 11 kV VCB and allied items at 66 kV Grid Sub Station I/A Phase-I & Phase-II and 33 kV Grid Sub Station I/A Phase-I, UT Chandigarh.	-	-	4.99
14	Providing Hot Spare 16/20MVA, 66/11KV Power Transformer	-	-	2.50
15	Conversion of 66 kV Single Circuit to Double Circuit T/L and U/G cable from 220 kV GSS Kishangarh to 66 kV Sub Station Sector-12 UT Chandigarh to double circuit T/L	-	-	7.37

	11 KV Ongoing & New Scheme			
16	General Service Connection (GSC) and Industrial Service Conection (ISC) including replacement of Electromechanical meters to Static meters	2.09	2.81	7.05
17	Strengthening of Distribution Network by providing 11KV underground power distribution system.	1.88	2.86	3.35
18	Providing and Augumentation of the LT O/H ACSR conductors	0.22	0.13	-
19	Strengthening of Distribution Network by providing/augumentation of 11/0.400KV, 1000/315/200/100 KVA Distribution Transformers along with ACB.	3.30	1.39	2.36
20	Providing 11KV/LT Aerial Bunched Conductor	0.51	-	3.69
21	Providing improved metering system, special tools, testing equipments, vehicle,skylift, safety devices, office equipment etc.	0.85	0.40	-
22	Improvement and augumentation of 66/11 KV existing sub-station and 11KV Indoor sub-stations including HT/LT Panels, ACB/OCB, Battery bank, CT/PT, HT/ LT Shunt Capacitors etc. on the existing distribution transformers.	1.98	8.11	12.61
23	Miscleneous such as Renovation of houses in Electricity Colony, Unforseen Works etc.	1.33	1.54	3.09
24	Smart Grid Project Under Sub-Division No.5	-	25.20	-
25	Conversion of Existing Overhead HT/ LT Lines into underground Equipments of 11 kV I/D S/Stn. Including Stret Light System in Sector 8, UT, Chandigarh on Turnkey Basis.	-	18.14	-
26	Installation of AMR & DLMS compliant energy meters at EHV sub-stations for Energy Audit. The estimate is approved and DNIT is under process	-	0.82	-
	Total	**69.45**	**67.14**	**57.38**

5.16 On the basis of the above, EWEDC has projected the planned capital expenditure and capitalization schedule over the control period in the table below

Table 45: Year Wise Overall Capital Expenditure and Capitalization (in Rs. Crores)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Capital Expenditure	86.07	131.89	93.30
Capitalization	69.45	67.14	57.38

5.17 The Schemes are planned as per the requirement & estimates of these Schemes are prepared as per the CPWD/Departmental norms. However, the DPR/estimates along with the cost benefit analysis for the schemes costing more than Rs. 10 Crores shall be submitted separately to the Hon'ble Commission for accord of approval. Further, the related documents of ongoing & new 66KV works has already been submitted to the Hon'ble Commission vide this office memo no. 2381 dated 16/10/2018.

5.18 The Hon'ble Commission may kindly approve the same as projected by the EWEDC for the control period of FY 2019-20 to FY 2021-22.

Chapter 6: ARR Components for the MYT control period of FY 2019-20 to FY 2021-22

6.1 The Joint Electricity Regulatory Commission has notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Multi Year Distribution Tariff) Regulations, 2018 (Hereinafter referred as "MYT Regulations 2018"). The regulations apply to all the distribution licensees in the state of Goa and Union Territories except Delhi i.e. Andaman & Nicobar island, Dadra & Nagar Haveli, Daman & Diu, Chandigarh, Lakshadweep and Puducherry. These Regulations are applicable for the Control Period FY 2019-20 to FY 2021-22.

6.2 EWEDC had filed the business plan for the period of FY 2019-20 to FY 2021-22 along with requisite details as provided in MYT Regulations 2018. Subsequently, the Hon'ble Commission had issued an order on business plan on 12th November, 2018.

6.3 EWEDC is hereby submitting the ARR for the MYT control period of FY 2019-20 to FY 2021-22 & Tariff Proposal for the FY 2019-20 based on the Business plan approved by the Hon'ble Commission and in accordance with the MYT Regulations, 2018. This chapter provides the details of the expenditure projected by EWEDC for the each of the year of the Control Period from FY 2019-20 to FY 2021-22.

Projections for Number of Consumers, Connected Load and Energy sales

6.4 Number of consumers, connected load & energy sales for the control period of FY 2019-20 to FY 2021-22 has been considered as approved by the Hon'ble Commission in the Business Plan Order dated 12th November,2018. The approved number of consumers, connected load & energy sales for the control period is provided in the table below:

Table 46: Projected Category wise Number of Consumers for the Control Period

S. No.	Categories	FY 2019-20	FY 2020-21	FY 2021-22
1	Domestic	200,095	203,657	207,282
2	Commercial	25,348	26,043	26,757
3	Large Supply	97	97	97
4	Medium Supply	1,382	1,422	1,464
5	Small Power	1,285	1,287	1,289
6	Agriculture	124	124	124
7	Public Lighting	1,371	1,479	1,595
8	Bulk Supply	742	814	893
9	Others Temporary Supply	386	386	386
10	**Total**	**230,830**	**235,309**	**239,887**

Table 47: Projected Category wise Connected Load for the Control Period (in Kwh)

S. No.	Categories	FY 2019-20	FY 2020-21	FY 2021-22
1	Domestic	938,552	970,275	1,003,070
2	Commercial	467,112	485,890	505,423
3	Large Supply	69,431	69,431	69,431
4	Medium Supply	77,008	79,441	81,951
5	Small Power	20,022	20,176	20,331
6	Agriculture	879	897	916
7	Public Lighting	7,368	7,689	8,023
8	Bulk Supply	42,573	42,799	43,026
9	Others Temporary Supply	2,191	2,191	2,191
10	**Total**	**1,625,136**	**1,678,789**	**1,734,362**

Table 48: Projected Category wise Energy Sales for the Control Period (in MUs)

S. No.	Categories	FY 2019-20	FY 2020-21	FY 2021-22
1	Domestic	787.86	817.41	848.06
2	Commercial	521.46	535.75	550.43
3	Large Supply	119.85	119.85	119.85
4	Medium Supply	128.35	133.11	138.05
5	Small Power	20.00	20.26	20.52
6	Agriculture	1.49	1.52	1.55
7	Public Lighting	17.73	17.73	17.73
8	Bulk Supply	84.15	85.99	87.86
9	Others Temporary Supply	4.40	4.40	4.40
10	**Total**	**1,685.30**	**1,736.02**	**1,788.45**

6.5 In view of the above submissions it is requested that the Hon'ble Commission may kindly consider & approve the same as projected above.

Energy Availability and Power Purchase Quantum

6.6 Since EWEDC does not have any generation capacity of its own, it relies entirely on the allocation of power from the Central Generating Stations like NTPC, NHPC, BBMB, NPCIL, SJVNL, APCPL etc. The current firm and unallocated power allocation from the various Central Generating Stations have been considered while projecting the power purchase from various generating stations. The energy availability during the control period has been considered as approved by the Hon'ble Commission in the Business Plan order. Apart from that the EWEDC has considered energy available to the utility during the control period from the Kishanganga HEP of NHPC based on the actual energy received during the 1st half of the FY 2018-19 & estimated availability during 2nd half of the financial year.

6.7 The Energy availability to EWEDC from various plants is considered on the below mentioned methodology

a. The current firm and unallocated power allocation from the various Central Generating Stations have been considered as per the recent revised allocation statement issued by Northern Regional Power Committee against the Ministry of Power letter No. NRPC/Comml/201/REA/2018/10199-10237 dated 04.09.2018. Current allocation from different plants to UT of Chandigarh has been considered for the availability to EWEDC for the MYT control Period of FY 2019-20 to FY 2021-22.

b. The generation units available from each plant are computed considering the average PLF of the plants in past three years/design energy.

c. The deficit in energy is proposed to be met through short term power.

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

a. 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.

b. 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.

c. NPCIL: The energy generated from the generating stations of NPCIL has been estimated by considering average PLF of 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.

d. SJVNL: The estimation of energy generated from the Naphtha 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.

e. 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 past three years.

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

6.9 Based on the above assumptions and methodology, the power availability to EWEDC from various generating stations for the control period is as summarized below:

Table 49: Energy Allocation from different plants for the Control Period

S. No.	Source	Name of Project	Type	Capacity	Total Avg Entitlement in %	Entitlement in MW
1	NTPC	Singrauli	Coal	2000	0.20	4.00
2		Rihand I	Coal	1000	1.00	10.00
3		Rihand II	Coal	1000	0.80	8.00
4		Rihand III	Coal	1000	0.55	5.50
5		Unchahar I	Coal	420	0.48	2.02
6		Unchahar II	Coal	420	0.71	2.98
7		Unchahar III	Coal	210	0.48	1.01
8		Unchahar IV	Coal	500	0.87	4.33
9		Anta	Gas	419	1.19	4.99
10		Auriya	Gas	663	0.75	4.97
11		Dadri	Gas	830	0.61	5.06
12		Kahalgaon II	Coal	1500	0.20	3.00
13		Dadri II	Coal	980	0.22	2.16
14		Koldam Hydro	Hydel	800	0.79	6.32
15	NHPC	Salal	Hydel	690	0.27	1.86
16		Tanakpur	Hydel	94	1.28	1.20
17		Chamera I	Hydel	540	3.90	21.06
18		Chamera II	Hydel	300	0.67	2.01
19		Uri	Hydel	480	0.62	2.98
20		Dhauliganga	Hydel	280	0.72	2.02
21		Dulhasti	Hydel	390	0.47	1.83
22		Sewa II	Hydel	120	0.83	1.00
23		URI II	Hydel	240	0.63	1.51
24		Chamara III	Hydel	231	0.60	1.39
25		Parbati-III	Hydel	520	0.60	3.12
26		K. Ganga	Hydel	330	1.79	5.91
27	APCPL	Jhajjar (Aravali)	Coal	1500	0.43	6.45
28	NPCIL	NAPP	Nuclear	440	1.14	5.02
29		RAPP (#3 and #4)	Nuclear	66	3.18	2.10
30		RAPP (#5 and #6)	Nuclear	440	0.68	2.99
31	SJVNL	NATHPA JHAKRI	Hydel	1500	0.53	7.95
32		Rampur	Hydel	137	0.79	1.08
33	BBMB	BBMB 3.5%	Hydel	1325	3.50	46.38
34		BBMB 1 LU	Hydel	1 LU per day		
35		BBMB 10 LU	Hydel	10 LU per day		
39		DEHAR	Hydel	990	3.50	34.65
40		PONG	Hydel	396	3.50	13.86
41	THDC	Koteshwar	Hydel	400	0.36	1.44
42		Tehri	Hydel	1000	0.60	6.00

6.10 Based on the above entitlements and reasonable assumptions, the energy availability to EWEDC from various generating stations during the FY 2019-20 to FY 2021-22 is as summarized below:

Table 50: Energy Available from different plants for the Control Period (in MUs)

S. No.	Source	Name of Project	FY 2019-20	FY 2020-21	FY 2021-22
1	NTPC	Singrauli	4.08	4.08	4.08
2		Rihand I	69.49	69.49	69.49
3		Rihand II	56.00	56.00	56.00
4		Rihand III	39.13	39.13	39.13
5		Unchahar I	12.70	12.70	12.70
6		Unchahar II	19.43	19.43	19.43
7		Unchahar III	6.61	6.61	6.61
8		Unchahar IV	-	-	-
9		Anta	23.64	23.64	23.64
10		Auriya	8.78	8.78	8.78
11		Dadri	40.82	40.82	40.82
12		Kahalgaon II	18.49	18.49	18.49
13		Dadri II	1.58	1.58	1.58
14		Koldam Hydro	54.40	54.40	54.40
15	NHPC	Salal	9.94	9.94	9.94
16		Tanakpur	5.74	5.74	5.74
17		Chamera I	100.71	100.71	100.71
18		Chamera II	50.87	50.87	50.87
19		Uri	18.94	18.94	18.94
20		Dhauliganga	26.20	26.20	26.20
21		Dulhasti	53.72	53.72	53.72
22		Sewa II	13.81	13.81	13.81
23		URI II	33.68	33.68	33.68
24		Chamara III	25.90	25.90	25.90
25		Parbati-III	17.44	17.44	17.44
26		K. Ganga	19.13	19.13	19.13
27	APCPL	Jhajjar (Aravali)	54.84	54.84	54.84
28	NPCIL	NAPP	82.47	82.47	82.47
29		RAPP (#3 and #4)	2.93	2.93	2.93
30		RAPP (#5 and #6)	105.35	105.35	105.35
31	SJVNL	NATHPA JHAKRI	129.19	129.19	129.19
32		Rampur	21.36	21.36	21.36
33	BBMB	BBMB 3.5%	290.14	290.14	290.14
34		BBMB 1 LU	41.11	41.11	41.11
35		BBMB 10 LU	10.84	10.84	10.84
39		DEHAR	-	-	-
40		PONG	-	-	-
41	THDC	Koteshwar	19.30	19.30	19.30
42		Tehri	179.37	179.37	179.37
43		**Total**	**1,668.13**	**1,668.13**	**1,668.13**

Power Purchase from Renewable Sources/RECs

6.11 Apart from the above allocations from conventional sources, EWEDC shall also procure power from roof-top solar power plants as covered under the power procurement from renewable energy segment and balance power shall be required to be procured from bilateral agreements. As per the MYT Regulations, 2010 read with Third Amendment Regulations, 2016, the Hon'ble Commission has specified Renewable Purchase Obligation (RPO) targets for all Distribution Licensees/ obligated entities for FY 2010-11 to FY 2021-22.

6.12 The RPO targets to be achieved by the EWEDC during the MYT control period of FY 2019-20 to FY 2021-22 as specified in the Regulations is as follows:

Table 51: RPO Target for the Control Period

FY	Solar RPO (%)	Non-Solar RPO (%)	Total RPO (%)
2019-20	4.70	6.80	11.50
2020-21	6.10	8.00	14.10
2021-22	8.00	9.00	17.00

6.13 EWEDC intends to meet the RPO as per the directions of the Hon'ble Commission for the FY 2019-20 to FY 2021-22. EWEDC has planned to meet the Solar RPO from the purchase of solar power within the UT of Chandigarh (both Net metering mode and Gross metering mode).

6.14 The summary of projected Solar and Non-Solar compliance by EWEDC for the FY 2019-20 to FY 2021-22 is summarized in the table below:

Table 52: Calculation of RPO for the Control Period

Particular	Formula	FY 2019-20	FY 2020-21	FY 2021-22
Energy Sales within UT (In MUs)	a	1,685.30	1,736.02	1,788.45
Hydro Power Purchase (In MUs)	b	1,121.79	1,121.79	1,121.79
Inter-State Loss	c	3.60%	3.60%	3.60%
Inter-State Loss (In MUs)	d=b*c	40.38	40.38	40.38
Intra-State Loss	e	13.05%	12.85%	12.65%
Intra-State Loss (In MUs)	f=e*(b-d)	141.12	138.96	136.80
Hydro Power Consumed (In MUs)	g=b-d-f	940.28	942.44	944.61
Conventional Power Consumed (In MUs)	**h=a-g**	**745.02**	**793.58**	**843.84**
RPO Targets (In %)		11.50	14.10	17.00
Solar (In %)	i	4.70	6.10	8.00
Non-Solar (In %)	j	6.80	8.00	9.00
RPO Targets (In MUs)		85.68	111.89	143.45
Solar Targets (In MUs)	(h*i)	35.02	48.41	67.51
Non-Solar Targets (In MUs)	(h*j)	50.66	63.49	75.95
RPO Compliance (Procurement & Own Generation) (In MUs)		29.23	34.23	39.23
Solar (In MUs)		29.23	34.23	39.23
Non-Solar (In MUs)		-	-	-
RPO Compliance (REC Purchase) (In MUs)		56.45	77.66	104.22
Solar (In MUs)		5.79	14.18	28.28
Non-Solar (In MUs)		50.66	63.49	75.95

6.15 EWEDC submits that Chandigarh does not have the required potential for non-solar generation due to geographical conditions. Further, solar is cleaner energy and as per the solar mission of the Government of India, thrust has been given on increasing the solar sources of power.

In view of the above, it is requested that, in absence of any Non-solar power plants within the UT of Chandigarh, the Hon'ble Commission may kindly allow EWEDC to meet the Non-solar RPO by utilising credits of solar RPO.

Table 53: Summary of Power Purchase for the Control Period (in MUs)

Particular	FY 2019-20	FY 2020-21	FY 2021-22
Long Term Power Purchase	1,668.13	1,668.13	1,668.13
Power Procurement Gross/Net Metering	10.74	12.58	16.88
Short Term Power	312.18	362.74	415.09
Total Power Purchase	**1,991.05**	**2,043.45**	**2,100.10**

Power Purchase Cost

6.16 It is submitted that CERC has issued new Tariff Orders 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.

6.17 Also, the actual power purchase cost from other generating sources is available for FY 2017-18 and six months for FY 2018-19. The assumptions considered for projection of power purchase cost from various generating station are detailed below:

a. The Fixed Cost for each plant is computed based upon the % allocation of the plant capacity to EWEDC and corresponding annual fixed charges approved for the generating stations by CERC.

b. The Energy Charges for thermal plants for the control period of FY 2019-20 to FY 2021-22 have been projected by escalating the actual per unit variable charges of the respective units for the FY 2018-19 @ 5% year over year.

c. In case of hydro plants, the variable charge has been computed based on the approved annual charges and design energy of the plant

d. Energy Charges for BBMB has 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%.

e. PGCIL Charges, NRLDC Charges, Reactive Energy charges are computed at an escalation of 5% y-o-y over actuals billed per unit in for FY 2018-19.

f. Shortfall in power after accounting for energy availability from all stations and towards RPO obligation has been projected to be met from short term sources. The rate of short-term power has been projected by escalating the average per unit cost for the FY 2018-19 by 5% year over year.

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

Table 54: Projected Power Purchase Cost for the Control Period (in Rs. Crores)

S. No.	Source	Name of Project	FY 2019-20	FY 2020-21	FY 2021-22
1	NTPC	Singrauli	0.81	0.85	0.89
2		Rihand I	14.20	14.91	15.65
3		Rihand II	11.01	11.56	12.14
4		Rihand III	10.44	10.96	11.51
5		Unchahar I	5.56	5.84	6.13
6		Unchahar II	7.98	8.38	8.80
7		Unchahar III	3.31	3.48	3.65
8		Unchahar IV	-	-	-
9		Anta	34.05	35.75	37.54
10		Auriya	12.91	13.56	14.24
11		Dadri	29.75	31.24	32.80
12		Kahalgaon II	6.55	6.87	7.22
13		Dadri II	0.31	0.33	0.34
14		Koldam Hydro	39.89	41.88	43.98
15	NHPC	Salal	1.61	1.69	1.78
16		Tanakpur	2.12	2.22	2.33
17		Chamera I	22.06	23.16	24.32
18		Chamera II	10.51	11.04	11.59
19		Uri	3.66	3.85	4.04
20		Dhauliganga	8.63	9.06	9.51
21		Dulhasti	30.68	32.22	33.83
22		Sewa II	6.87	7.21	7.57
23		URI II	15.18	15.94	16.74
24		Chamara III	11.95	12.55	13.18
25		Parbati-III	8.94	9.39	9.86
26		K. Ganga	6.66	6.99	7.34
27	APCPL	Jhajjar (Aravali)	44.34	46.56	48.88
28	NPCIL	NAPP	29.36	30.82	32.36
29		RAPP (#3 and #4)	1.05	1.10	1.15
30		RAPP (#5 and #6)	43.63	45.81	48.10
31	SJVNL	NATHPA JHAKRI	32.06	33.66	35.34
32		Rampur	7.64	8.02	8.43
33	BBMB	BBMB 3.5%	0.00	-	-
34		BBMB 1 LU	5.56	5.84	6.14
35		BBMB 10 LU	79.08	83.04	87.19
39		BBMB O&M Charges	21.28	22.35	23.47
40		ULDC etc.	0.14	0.14	0.15
41	THDC	Koteshwar	14.82	15.56	16.34
42		Tehri	91.51	96.09	100.89
43		PTC REC	6.99	9.62	18.58
44		UI/Deviation	87.71	107.01	128.58
45		Crest	8.57	10.53	14.85
46		Pvt.solar	1.04	1.28	1.80
47		**Total**	**780.42**	**838.36**	**909.22**

6.18 The other charges comprising of inter-state transmission charges, scheduling charges etc. are projected considering an increase of 5% y-o-y over the estimated cost for FY 2018-19. The projected charges for each head are as summarized in the table below:

Table 55: Transmissions and Other Charges projected for the Control Period (in Rs. Crores)

Particular	FY 2019-20	FY 2020-21	FY 2021-22
PGCIL Charges	44.14	46.35	48.67
NRLDC Charges	0.18	0.19	0.20
Reactive Energy Charges	-	-	-
Open Access charges	-	-	-
Total	**44.32**	**46.54**	**48.86**

6.19 Total cost projected for the MYT control period of FY 2019-20 to FY 2021-22 is as provided in table below. The Hon'ble Commission is requested to approve the same.

Table 56: Projected Power Purchase Cost for the Control Period (in Rs. Crores)

Particular	FY 2019-20	FY 2020-21	FY 2021-22
Total Power Purchase Cost	**824.74**	**884.90**	**958.09**

T&D Losses and Energy Requirement

6.20 The Hon'ble Commission in the Business Plan Order dated 12th November, 2018, has approved the T&D loss of 9.40%, 9.30% & 9.20% for the FY 2019-20, FY 2020-21 & FY 2021-22 respectively. While EWEDC is dedicated for reducing the intra-state T&D losses in the UT of Chandigarh, there are constraints in reducing the T&D loss further. It is submitted that while the sales have increased in the last three years, losses remained stagnant without much improvement due to majority of the increase in the sales in the LT category.

6.21 In addition to the issue of higher LT sales, another important factor is the absence of interconnection point within the UT boundary which has been also submitted to the Hon'ble Commission in its past submissions.

6.22 The energy input in EWEDC is currently being metered at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB) which has resulted in higher T&D losses for EWEDC. The EWEDC has to bear around 3% additional losses of interstate circuit due to not having any interstate point in its boundary. In this regard it is submitted that construction of a 220/66 kV substation at Hallo Majra is under progress by M/s PGCIL. This substation shall cater to the future load growth of Chandigarh resulting in lower losses due to commissioning of an interconnection point within the UT periphery.

6.23 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.

6.24 The trend of T&D losses over the period of last 5 years, shows that EWEDC has been able to reduce the T&D loss substantially year over year. However, further reduction within the present infrastructural conditions & constraints explained in above paras would be difficult. **The detailed submission on the constraints faced by EWEDC in further reduction of T&D loss from the current levels is made in Chapter 3 above.** Accordingly, EWEDC has proposed a T&D loss target of 13.05%, 12.85% & 12.65% for the FY 2019-20, FY 2020-21 & 2021-22 respectively.

6.25 In view of the above submissions, it is requested that the Hon'ble Commission may kindly consider & approve the T&D losses target for the FY 2019-20, FY 2020-21 & 2021-22 at 13.05%, 12.85% & 12.65% respectively.

6.26 For computation of energy requirement, EWEDC has estimated inter-state transmission losses based on the approved inter-state transmission losses of 3.60% in the Business Plan Order dated 12th November, 2018.

6.27 The projected energy balance for the control period of FY 2019-20, FY 2020-21 & 2021-22 is as given in the table below, the Hon'ble Commission is requested to approve the same.

Table 57: Energy Balance for the Control Period

Particular	FY 2019-20	FY 2020-21	FY 2021-22
Energy Procured	1,980.31	2,029.87	2,083.22
Less: Outside Sale - Trading	0.00	0.00	0.00
Energy Available	1,980.31	2,029.87	2,083.22
Inter-State Transmission Loss	3.60%	3.60%	3.60%
Transmission Loss (Mus)	71.29	73.08	75.00
Net Energy Available at UT Periphery	**1,909.02**	**1,956.79**	**2,008.22**
Power procured from Gross & NET Metering Mode (In MUs)	29.23	34.23	39.23
Total Energy Available	**1,938.25**	**1,991.02**	**2,047.45**
Actual Energy Sales (Mus)	1,685.30	1,736.02	1,788.45
T&D Loss (%)	13.05%	12.85%	12.65%
T&D Loss (in MUs)	252.94	255.97	259.00
Total Energy Required at UT Periphery (MUs)	**1,938.24**	**1,991.99**	**2,047.45**
Demand Supply (Gap) / Surplus	**0.00**	**0.00**	**0.00**

Operations and Maintenance Expenses

6.28 Operation & Maintenance Expenses consists of three elements viz Employee Expenses, A&G Expense and R&M Expense. Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses. Administrative expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits. Repairs and Maintenance Expenses go towards the day to day upkeep of the distribution network of the CED and form an integral part of the CED's efforts towards reliable and quality power supply as well as in the reduction of losses in the system. As per the MYT Regulations, 2018, O&M expenses shall be treated as controllable parameter and shall not be revised except those attributable to directions of the Commission.

6.29 The Regulation 60 of the MYT Regulations 2018 specifies that the Commission shall approve the O&M Expenses of the base year by taking to account the latest audited accounts, actual for the base year & any other factor considered appropriate by the Hon'ble Commission. Further, the Hon'ble Commission has specified the formulae for approval of O&M Expenses. EWEDC has projected the O&M Expenses in accordance with the above regulation.

Employee Expenses

6.30 The MYT Regulation provides that the employee cost shall be computed as per the formula specified in Regulation 60.4. The regulation provides the following formula for projection of Employee Expenses.

EMPn = (EMPn-1) x (1+Gn) x (CPIinflation)

Where:

EMPn – Employee expenses of the Distribution Licensee for the nth Year;

Gn is a growth factor for the nthYear. Value of Gn shall be determined by the Commission for each Year in the Multi Year Tariff Order for meeting the additional manpower requirement based on Licensee's filings, benchmarking, approved cost by the Commission in past and any other factor that the Commission feels appropriate:

CPIinflation – is the average increase in Consumer Price Index (CPI) for immediately preceding three (3)Years before the base Year;

6.31 The EWEDC has considered the above formula for projection of employee expenses for the control period. The audited employee cost for the FY 2017-18 has been taken as base. The growth factor (Gn) has been calculated on the basis projected growth in the number of employees year over year during the control period. The average increase in Consumer Price Index (CPI)has been calculated based on the increase in the Consumer Price Index (CPI)for the FY 2015-16, FY 2016-17 & FY 2017-18.

The Employee Expenses for the control period of FY 2019-20 to FY 2021-22 has been projected based on the above parameters. The projected employee cost for the control period is provided in the table below:

Table 58: Projected Employee Expenses for the control period (in Rs. Crores)

Particular	Unit	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Opening no. of employees	No.	1106	1309	1308	1301
Closing no. of employees	No.	1309	1308	1301	1314
Gn	In %	18%	0%	-1%	1%
Employee Cost of Previous Year	Rs. Cr.	68.82	84.94	88.51	91.80
Growth Factor (Gn)	In %	18%	0%	-1%	1%
CPI Inflation	In %	4.28%	4.28%	4.28%	4.28%
Projected Employee Cost	**Rs. Cr.**	**84.94**	**88.51**	**91.80**	**96.69**

A&G Expenses

6.32 The MYT Regulation provides that the A&G Expenses shall be computed as per the formula specified in Regulation 60.4. The regulation provides the following formula for projection of Employee Expenses.

A&Gn = (A&Gn-1) x (CPIinflation)

Where:

A&Gn – Administrative and General expenses of the Distribution Licensee for the nth Year;

CPIinflation – is the average increase in Consumer Price Index (CPI) for immediately preceding three (3)Years before the base Year;

6.33 The EWEDC has considered the above formula for projection of A&G expenses for the control period. The estimated A&G cost for the FY 2018-19 has been taken as base. The average increase in Consumer Price Index (CPI)has been calculated based on the increase in the Consumer Price Index (CPI) for the FY 2015-16, FY 2016-17 & FY 2017-18.

The A&G Expenses for the control period of FY 2019-20 to FY 2021-22 has been projected based on the above parameters. The projected A&G cost for the control period is provided in the table below:

Table 59: Projected A&G Expenses for the control period (in Rs. Crores)

Particular	Unit	FY 2019-20	FY 2020-21	FY 2021-22
A&G Expenses of Previous Year	Rs. Cr.	7.10	7.40	7.72
CPI Inflation	In %	4.28%	4.28%	4.28%
Projected A&G expenses	**Rs. Cr.**	**7.40**	**7.72**	**8.05**

R&M Expenses

6.34 The MYT Regulation provides that the R&M Expenses shall be computed as per the formula specified in Regulation 60.4. The regulation provides the following formula for projection of Employee Expenses.

R&Mn = K x GFAn-1 x (WPIinflation)

Where:

R&Mn – Repair and Maintenance expenses of the Distribution Licensee for the nth Year;

GFAn-1 – Gross Fixed Asset of the transmission Licensee for the n-1th Year;

'K' is a constant (expressed in %). Value of K for each Year of the Control Period shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission

WPIinflation – is the average increase in the Wholesale Price Index (WPI) for immediately preceding three (3) Years before the base Year;

6.35 The EWEDC has considered the above formula for projection of R&M expenses for the control period. The audited R&M expenses & GFA for the FY 2017-18 has been taken as base. Thereafter, 'K' factor as prescribed in the above regulations has been calculated as ratio of R&M & GFA for the FY 2017-18. The average increase in Wholesale Price Index (WPI) has been calculated based on the increase in the WPI for

the FY 2015-16, FY 2016-17 & FY 2017-18. The GFA for the purpose of the calculation of R&M has been arrived at by adding the projected addition in GFA in the respective year of the control period.

The R&M Expenses for the control period of FY 2019-20 to FY 2021-22 has been projected based on the above parameters. The projected R&M expenses for the control period is provided in the table below:

Table 60: Projected R&M Expenses for the control period (in Rs. Crores)

Particular	Unit	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Opening GFA	Rs. Cr.	437.38	453.33	522.78	589.92
Addition During the year	Rs. Cr.	15.95	69.45	67.14	57.38
Closing assets	Rs. Cr.	453.33	522.78	589.92	647.30
Average GFA	Rs. Cr.		488.06	556.35	618.61
K Factor	%	3.65%	3.65%	3.65%	3.65%
WPI Inflation	%		0.33%	0.33%	0.33%
Projected R&M Expenses	**Rs. Cr.**		**16.60**	**19.14**	**21.60**

6.36 The following table presents the projected Employee expenses, R&M expenses and A&G expenses to be incurred by EWEDC during the control period of FY 2019-20 to FY 2021-22.

Table 61: Projected O&M Expenses for the Control Period (in Rs. Crores)

Particular	FY 2019-20	FY 2020-21	FY 2021-22
Employee Expenses	88.51	91.80	96.69
R&M Expenses	16.60	19.14	21.60
A&G Expenses	7.40	7.72	8.05
Total O&M Expenses	**112.51**	**118.67**	**126.34**

6.37 The Hon'ble Commission is requested to approve the total O&M expenses as computed in the above table for the MYT control period.

GFA and Depreciation

6.38 EWEDC has considered the audited closing GFA of Rs. 437.38 Crores for the FY 2017-18 as opening GFA for the FY 2018-19 and considered the estimated additions of Rs. 15.95 Crores during the FY 2018-19 to arrive at the opening GFA of Rs. 453.33 Crores for the control period.

6.39 Thereafter, projected capitalisation for the FY 2019-20, FY 2020-21 & FY 2021-22 has been added for arriving at the closing GFA for the control period. The projected GFA for the control period is provided in the table below:

6.40 EWEDC requests the Hon'ble Commission to approve the Gross fixed assets in the table below:

Table 62: Projected Assets Addition for the Control Period (in Rs. Crores)

Particular	FY 2019-20	FY 2020-21	FY 2021-22
Opening GFA	453.33	522.78	589.92
Asset Capitalized	69.45	67.14	57.38
Closing GFA	**522.78**	**589.92**	**647.30**

6.41 Depreciation has been calculated on the basis of the opening GFA & proposed additions during the financial year at the rate prescribed in the MYT Regulations. The projected depreciation for the control period is provided in the table below:

Table 63: Projected Depreciation for the Control period (in Rs. Crores)

Particular	FY 2019-20	FY 2020-21	FY 2021-22
Average Assets	488.06	556.35	618.61
Rate of Depreciation	3.77%	3.77%	3.77%
Depreciation for the year	**18.40**	**20.97**	**23.32**

Interest on Loan

6.42 In line with the methodology adopted by EWEDC for consideration of GFA as detailed above, the opening normative loan has also been considered on the same lines. EWEDC has considered the 70% of GFA of Rs. 437.38 Crores as per the audited accounts for the FY 2017-18 reduced by the Accumulated Depreciation of Rs.262.03 Crores as on that date as opening normative loan for the FY 2018-19. Further, 70% of estimated additions of Rs. 15.95 Crores during the FY 2018-19 has been added to arrive at the opening normative loan of Rs. 38.51 Crores for the control period.

6.43 Repayment of the normative loan has been considered equivalent to the depreciation for the respective years in line with the MYT Regulations, 2018.

6.44 The interest at the SBI PLR rate of 13.45% as on April 1st, 2018 has been applied on the average normative debt in order to project the interest on normative loans for the control period. The Hon'ble Commission is requested to approve the interest on normative loans as computed in the table below:

Table 64: Projected Interest on Loan for the control period (in Rs. Crores)

Particular	FY 2019-20	FY 2020-21	FY 2021-22
Opening Normative Loan	38.51	68.72	94.75
Add:Normative Loan during the year (70% of proposed capitalization)	48.62	47.00	40.17
Less: Normative Repayment	18.40	20.97	23.32
Closing Normative Loan	68.72	94.75	111.59
Average Normative Loan	53.62	81.74	103.17
Rate of Interest	13.45%	13.45%	13.45%
Interest on Normative Loan	**7.21**	**10.99**	**13.88**

Interest on Working Capital

6.45 As per Clause 63 of JERC MYT Regulations, 2018 the working capital of a licensee shall consist of

a. Receivable of two months of billing

b. O&M Expenses of one month

c. Maintenance Spares at 40% of repair and maintenance expenses for one month

d. Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt

6.46 The SBI 1 Year MCLR as on 1st April, 2018 plus 200 basis points i,e. 10.15% has been considered for computation of interest on working capital. The projected working capital requirement and interest computed as per the regulations is summarized in the table below:

Table 65: Projected Interest on working Capital for the Control Period (in Rs. Crores)

Particular	FY 2019-20	FY 2020-21	FY 2021-22
Two months receivables	145.82	150.05	154.43
Add: One Month O&M Expenses	9.38	9.89	10.53
Add: 40% of repair and maintenance expenses for one month	0.55	0.64	0.72
Less: Consumer Security Deposit excl. BG/FDR	206.96	214.96	222.96
Total Working after deduction of Security Deposit	**0.00**	**0.00**	**0.00**
SBAR Rate (%)	10.15%	10.15%	10.15%
Interest on Working Capital	**0.00**	**0.00**	**0.00**

Interest on Consumer Security Deposit

6.47 Opening consumer security deposit for the FY 2018-19 has been considered based on the actual closing for FY 2017-18 and an addition of Rs. 8.00 Crores has been projected during FY 2018-19 and each of the financial year of the control period. The interest rate as approved by the Hon'ble Commission in the Tariff order Dt. 28th March, 2018 has been considered for calculation of interest on security deposit for the control period. Accordingly, the opening, closing balance and estimated addition during the control period and claim of interest on security deposit is given in the table below, EWEDC requests the Hon'ble Commission to approve the same.

Table 66: Projected Interest on Consumer Security Deposit for the Control Period (in Rs. Crores)

Particular	FY 2019-20	FY 2020-21	FY 2021-22
Opening Consumer Security Deposit	198.96	206.96	214.96
Net Addition During the year	8.00	8.00	8.00
Closing Consumer Security Deposit	206.96	214.96	222.96
Average Deposit	202.96	210.96	218.96
Bank Rate	6.25%	6.25%	6.25%
Interest on Consumer Security Deposit	**12.68**	**13.18**	**13.68**

Return on Equity

6.48 Regulation 27.3 of MYT Regulations, 2018 provides for Return on Equity (RoE) as follows:

"The return on equity for the Retail Supply Business shall be allowed on the equity capital determined in accordance with Regulation 26 for the assets put to use, at the rate of sixteen (16) per cent per annum."

6.49 In line with the methodology adopted by EWEDC for calculation of normative loan as detailed above, the opening equity has also been considered on the same lines. EWEDC has considered the 30% of GFA of Rs. 437.38 Crores as per the audited accounts for the FY 2017-18 as opening equity for the FY 2018-19. Further, 30% of estimated additions of Rs. 15.95 Crores during the FY 2018-19 has been considered to arrive at the opening normative equity of Rs. 136 Crores for the control period. Thereafter, 30% of projected additions during each year of the control period has been considered for arriving at the closing equity for the respective years. Rate of return on equity has been considered at 16% as per proviso 27.3 of the MYT regulations 2018. The proposed RoE for the control period is as below:

Table 67: Projected Return on Equity for the Control Period (in Rs. Crores)

Particular	FY 2019-20	FY 2020-21	FY 2021-22
Opening Normative Equity	136.00	156.83	176.98
Addition During the year	20.84	20.14	17.21
Closing Normative Equity	156.83	176.98	194.19
Average Normative Equity	146.42	166.91	185.58
Return on Equity@16%	23.43	26.70	29.69

Provision for Bad and Doubtful Debt

6.50 In accordance with JERC MYT Regulations, 2018, the generating company/licensee gets the receivables audited, allow actual provision for bad debts up to 1% of receivables in the revenue requirement of the licensee.

6.51 Accordingly, EWEDC has not proposed any provision for bad and doubtful debts for the control period. EWEDC shall claim the same at the time of true-up when the audited figures are available.

Non-Tariff Income

6.52 The projected Non-tariff Income for the control period as shown in the below table:

Table 68: Projected Non-Tariff Income for the Control Period (in Rs. Crores)

Particular	FY 2019-20	FY 2020-21	FY 2021-22
Non-Tariff Income	**40.69**	**41.09**	**41.51**

Aggregate Revenue Requirement for the control period

6.53 Based on the above discussion, the projection for Aggregate Revenue Requirement for the control period is as given in the table below:

Table 69: Projected Aggregate Revenue Requirement for the Control Period (in Rs. Crores)

S. No.	Particular	FY 2019-20	FY 2020-21	FY 2021-22
1	Cost of power purchase for full year	824.74	884.90	958.09
2	Employee costs	88.51	91.80	96.69
3	Administration and general expenses	7.40	7.72	8.05
4	R&M expenses	16.60	19.14	21.60
5	Depreciation	18.40	20.97	23.32
6	Interest and finance charges	7.21	10.99	13.88
7	Interest on working capital	-	-	-
8	Interest on Security Deposit	12.68	13.18	13.68
9	Return on NFA /Equity	23.43	26.70	29.69
10	Provision for Bad Debt	-	-	-
11	**Total Revenue Requirement**	**998.97**	**1,075.42**	**1,165.00**
12	Less: Non-Tariff Income	40.69	41.09	41.51
13	**Net Revenue Requirement**	**958.29**	**1,034.33**	**1,123.49**

Regulatory Surcharge Billed during the year

6.54 EWEDC has projected a total of Rs. 43.74 Crores as Regulatory Surcharge from the consumers for the FY 2019-20. In the Tariff Order dated 28th March, 2018, the Hon'ble Commission approved the Regulatory Surcharge @ 5% of revenue billed for the FY 2018-19 onwards. The same method has been considered for projecting the Regulatory Surcharge for the FY 2019-20.

Revenue based on Existing Tariff

6.55 Based on the projection of sale and the existing tariff approved by the Hon'ble Commission as per the Tariff Order dated 28th March, 2018, the projected revenue for the FY 2019-20 is summarized in the table below:

Table 70: Projections for Revenue on Existing Tariff for FY 2019-20 (in Rs. Crores)

S. No.	Category/Slab of Consumers	Projected
A	Domestic	327.55
B	Commercial	315.81
C	Large Supply	76.59
D	Medium Supply	78.81
E	Small Power	10.32
F	Agriculture	0.43
G	Public Lighting	10.37
H	Bulk Supply	51.45
I	Others Temporary Supply	3.56
	Total	**874.89**

Revenue Surplus/Gap for FY 2019-20

6.56 Based on the projected ARR and revenue for FY 2019-20, the expected revenue gap is summarized in table below:

Table 71: Proposed Revenue Gap on Existing Tariff for FY 2019-20 (in Rs. Crores)

S. No.	Particulars	FY 2019-20
1	Net Revenue Requirement	958.29
2	Revenue from retail sales at Existing Tariff	874.89
3	Regulatory Surcharge	43.74
4	**Revenue Surplus/(Gap) for the Year**	**(39.65)**

6.57 **The above revenue gap of Rs. 39.65 Crores is for the FY 2019-20 only and does not include any revenue surplus/gap for true-up of FY 2017-18 and APR for FY 2018-19. The proposed treatment for coverage of the consolidated revenue gap along with carrying cost is detailed in the subsequent Chapter.**

Chapter 7: Treatment of Surplus/Gap and proposal for revised Tariff

7.1 The Hon'ble Commission in its Tariff Order dated 28th March, 2018 approved the Closing Gap of Rs. 94.49 Crores at the end of the FY 2016-17 including carrying/holding cost of Rs. 14.24 Crores.

7.2 In addition, the Hon'ble Commission approved the cumulative gap for the FY 2010-11 to FY 2013-14 of Rs. 208.38 Crores & recovery of the same in the form of Regulatory Surcharge of 5.00%. The regulatory surcharge & details of recovery of same is provided in the table below:

Table 72: Recovery of Regulatory surcharge (in Rs. Crores)

S. No.	Particular	FY 2017-18	FY 2018-19	FY 2019-20
		Actual	Estimated	Projected
1	Opening/Approved Cumulative Surplus/(Gap) for the FY 2010-11 to FY 2013-14	(208.17)	(208.05)	(165.53)
2	Revenue on existing tariff	845.25	850.31	874.89
3	Regulatory Surcharge Recovered @ 5%	0.12	42.52	43.74
4	**Surplus/(Gap) carry forward to next year for recovery (1-3)**	(208.05)	(165.53)	(121.79)

7.3 Based on the truing-up of FY 2017-18, APR of FY 2018-19 and projected ARR of FY 2019-20, the revenue gap/surplus for each year is computed as below:

Table 73: Proposed Revenue Gap/Surplus for FY 2017-18 to FY 2019-20 (in Rs. Crores)

S. No.	Particular	FY 2017-18	FY 2018-19	FY 2019-20
		Actual	Estimated	Projected
1	Net Revenue Requirement	770.72	853.15	958.29
2	Revenue on existing tariff	845.25	850.31	874.89
3	FPPCA Charged	189.44	21.80	-
4	Regulatory Surcharge	0.12	42.52	43.74
5	**Surplus/(Gap) for the year**	**264.09**	**61.48**	**(39.65)**

7.4 As per the regulation 11.5 of MYT Regulation, 2018, the SBI 1 Year MCLR as on 1st April, 2018 plus 100 basis points i.e. 9.15% has been considered for computation of carrying/holding cost. EWEDC has followed the same method to calculate the carrying/holding cost on average surplus/gap during the financial year.

7.5 In accordance with regulations and considering the yearly revenue *surplus/gap p*resented in the preceding table for the period FY 2017-18 to FY 2019-20 and the carried forward Gap, the table below presents the consolidated revenue gap along with carrying cost for the period.

Table 74: Proposed Revenue Surplus inclusive of Carrying Cost (in Rs. Crores)

Particular	FY 2017-18	FY 2018-19	FY 2019-20
Opening Surplus/(Gap)	(94.49)	172.91	208.56
Add: Surplus/(Gap) during the year	264.09	61.48	(39.65)
Less: Regulatory Surcharge Recovered @ 5%	0.12	42.52	43.74
Add: Amortization of Regulatory Asset	0.00	0.00	0.00
Closing Surplus/(Gap)	169.48	191.87	125.17
Average Surplus/(Gap)	37.49	182.39	166.87
Interest Rate	9.15%	9.15%	9.15%
Carrying/Holding Cost	3.43	16.69	15.27
Closing Surplus/(Gap) after adjusting Carrying Cost	**172.91**	**208.56**	**140.44**
Cumulative Surplus/(Gap) for the FY 2010-11 to FY 2013-14			(208.17)
Projected Cummulative Regulatory Surcharge Recovered upto FY 2019-20			86.38
Total Surplus/(Gap)			**18.65**

7.6 In view of the above submission, EWEDC humbly requests the Hon'ble Commission to approve **the total surplus for the period FY 2017-18 to FY 2019-20 amounting to Rs. 18.65 Crores**.

7.7 It is submitted that there is a surplus at existing tariff for the FY 2019-20, accordingly, EWEDC has not proposed any revision in retail tariff for various categories for the FY 2019-20.

7.8 The table below presents the existing and proposed tariff for various categories.

Table 75: Existing and Proposed Tariff

Tariff Category	EXISTING TARIFF		PROPOSED TARIFF	
	Variable Cost (Rs. /kWh)	Fixed Cost (Rs./kW/ Month)	Variable Cost (Rs. /kWh)	Fixed Cost (Rs./kW/ Month)
Domestic				
0-150 kWh	2.75	10	2.75	10
151-400 kWh	4.80	10	4.80	10
Above 400 kWh	5.20	10	5.20	10
Commercial				
0-150 kWh	5.00	20	5.00	20
151-400 kWh	5.30	100	5.30	100
Above 400 kWh	5.60	100	5.60	100
Industrial				
Large Supply	5.00	200	5.00	200
Medium Supply	4.70	200	4.70	200
Small Power	4.80	30	4.80	30
Agriculture	2.90	-	2.90	-
Public Lighting - Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained/outsourced to an external Agency	5.35	100	5.35	100
Public Lighting - Advertisement/ Neon sign boards & bill boards (apart from advertisement boards installed on commercial establishments and charged under commercial tariff)	7.10	100	7.10	100
Bulk Supply	4.90	200	4.90	200
Others Temporary Supply	8.10	-	8.10	-

7.9 The Revenue from tariff at the projected energy sales for the FY 2019-20 is provided in the table below.

Table 76: Revenue from Proposed Tariff (in Rs. Crores)

S. No.	Category / Slab of Consumers	Projected
A	Domestic	327.55
B	Commercial	315.81
C	Large Supply	76.59
D	Medium Supply	78.81
E	Small Power	10.32
F	Agriculture	0.43
G	Public Lighting	10.37
H	Bulk Supply	51.45
I	Others Temporary Supply	3.56
	Total	**874.89**

7.10 The cumulative Revenue Surplus based on the proposed tariff is detailed in the table below.

Table 77: Revised Revenue Gap based on Proposed Tariff upto FY 2019-20 (in Rs. Crores)

Particular	FY 2019-20
ARR for FY 2019-20	958.29
Revenue at Existing Tariff	874.89
Regulatotry Surcharge Recovered	43.74
Surplus/ (Gap) for the year	(39.65)
Add: Surplus/ (Gap) carried forward	43.03
Add: Amortization of Regulatory Asset	-
Total Surplus/ (Gap)	3.38
Additional Revenue from Proposed Tariff	-
Carrying/Holding Cost	15.27
Surplus/(Gap) to Carry Forward	**18.65**

7.11 In view of the above submissions, it can be seen that the tariff structure proposed by EWEDC for the FY 2019-20 will help it meet the ARR for the FY 2019-20 & previous gap.

7.12 **In light of the above submission the EWEDC requests the Hon'ble Commission to approve the tariff proposals.**

Chapter 8: Introduction of New Tariff Category

8.1 *Tariff for Electric Vehicle Charging Stations/ Charging infrastructure/ Battery Swap*

From a background perspective, the transport sector is the largest user of oil and second largest source of CO2 emissions world-wide. Indian transportation sector accounts for one-third of the total crude oil consumed in the country, where 80% is being consumed by road transportation alone. It also accounts for around 11% of total CO2 emissions from fuel combustion.

The National Electric Mobility Mission Plan 2020, notified by the Department of Heavy Industry, Ministry of Heavy Industries and Public Enterprises, Government of India seeks to enhance national energy security, mitigate adverse environmental impacts from road transport vehicles a boost domestic manufacturing capability for Electric Vehicle (EVs). It is envisaged that EVs are expected to play a significant role in India's transition to a low-carbon eco-system.

As per estimates, based on Total Cost of ownership (TCO), commercial fleet of cars (taxes) could possibly be among the first adopters of EVs on a large scale followed by private vehicles. Electricity Wing is of the view that the activity of usage of power for Charging Infrastructure/ Battery swap should be recognized as an NRS activity and tariff notified by JERC. The character of supply shall be applicable as per NRS category.

Consumption range	Fixed charge (Rs. per KW per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
0-150 kWh	*	Rs. 20 for Single Phase & Rs. 100 for Three Phase	*	5.00
151-400 kWh	*		*	5.30
Above 400 KWh	*		*	5.60

Licensee will provide supply to Electric Vehicle Charging Stations/Charging Infrastructure/Battery Swap as per the above schedule at locations as approved by Chandigarh Administration.

Chapter 9: Proposed Tariff Schedule

9.1 This chapter elucidates the proposed fixed and energy charges for FY 2019-20 along with the applicability.

1. Domestic Supply (DS)

APPLICABILITY

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

a) Residential premise.
b) Government and Govt. aided/ recognized education institutions, viz schools, colleges, universities, hostels, canteens, and residential quarters/ hostels attached to the educational institutions.
c) Supply to hostels and /or residential quarter attached with the private educational institutions where separately metered.
d) Government and public sports institutions/Gymnasium halls etc. banks and PCO exclusively for the use of educational institutions.
e) 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.
f) Housing colonies and multi storied flats/buildings as defined in Electricity Supply Code Regulations notified by the JERC.
g) Dispensary / Hospitals / Public Libraries / School / College / Working Women"s Hostel / run or approved by the Chandigarh Administration.
h) Recognized Center/ societies for welfare of blind, deaf and dumb, spastic children, physically handicapped persons, mentally retarded persons, as approved by the Chandigarh Administration.
i) Orphanage/ Cheshire Home/ Old age homes/ Charitable homes/ Nari Niketan/ Juvenile Home run by charitable institutions approved under section 80 (G) of the income tax Act/ approved by Chandigarh Administration.
j) Voluntary Organization/ charitable institutions (non-profit making) running shelter houses for care and protection of the stray animals / Gaushalas approved under section 80 (G) of the income tax Act/ approved by Chandigarh Administration.
k) Shelter Homes (including Night Shelters) run or approved by Chandigarh Administration.
l) Electric crematoriums. / Burial Grounds
m) The Charitable Organizations viz. Schools, Hospitals, Dispensary, Education and research Institute and Hostel attached to such Institutions registered with the Income Tax authorities under Section 80G, or 80 GGA, or 35 AC **or 12AA.** The individual organization shall apply in writing to the Electricity Department along with any of the above certificate for getting considered for the tariff in the Domestic Category. The Halls or Gardens/ Lawns or any portion of the premises listed under Para (m) above are let out for consideration or used for Commercial activities at any time shall be Charged at Commercial Rate of Electricity Tariff.
n) Administrative Training Institutes/ Correctional Institutes/ Training Centres exclusively run/ managed by UT /State/ Central Govt. to undertake research, consultancy/ training & allied activities to improve management efficiency.

NOTES:

i. Hostels shall be considered as one unit and billed under domestic supply tariff without compounding.

ii. Private education institutions not recognized by the Chandigarh Administration shall be billed under Non Domestic Tariff.

iii. STD/PCO, shops attached to Religious Institutions will be billed under Non- Domestic Tariff.

iv. In case a room or a part of residential house is 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.

v. 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.

vi. 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.

vii. Where a portion of the premises is used for mixed load purposes the connection shall billed for the purpose for which the tariff is higher.

i.e. Incase of usage for commercial activities the same shall be treated as „Domestic Mis-use Commercial" and tariff as per NRS category shall be applicable. This shall continue till the mis use is corrected.

CHARACTER OF SERVICE

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 given on single phase 230 volts and above 5 KW up to 99 KW supply shall be given on three phase 400 volts. For load 100 KW and above, supply shall be given 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 low voltage side of the transformer instead of 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.

TARIFF

Consumption range	Fixed charge (Rs. per KW per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed (All Load)	Existing	Proposed
0-150 kWh	10	10	2.75	2.75
151-400 kWh			4.80	4.80
Above 400 KWh			5.20	5.20

Demand Surcharge for exceeding the contract/ sanctioned demand for LT Consumers

Contract demand/ sanctioned load 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 the consumer in a month exceeds the contract demand/ sanctioned load, such excess shall be charged at an additional rate of Rs 750 per kVA.

Power factor surcharge / incentive: -

Consumers with load 100 KW or more and getting supply at 11 KV or higher voltage shall be required to maintain a monthly average power factor of 0.90 (lagging). Consumers would install capacitors of adequate capacity to achieve prescribed power factor. The consumers whose monthly average power factor falls below 0.90 will be levied a power factor surcharge @ 1% of the bill amount for each 0.01 fall in power factor below 0.90. The surcharge will be @ 2% of the bill amount for each 0.01 fall in power factor below 0.80.

Consumers with monthly average power factor exceeding 0.95 will be allowed a rebate @ 0.5% on the bill amount for each 0.1 rise in power factor above 0.95. The bill amount will mean the consumption charges including demand charges, if any, in a month. If the average power factor falls below 0.80 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer"s service connection without prejudice for the levy of the surcharge.

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

If for any installation, the average power factor is less than 70%, the supply may be disconnected after due notice of 15 days, without prejudice to the right of the licensee to levy demand/minimum charges as applicable during the period of disconnection.

2. Non Residential Supply (NRS)

APPLICABILITY

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 as defined below:

a. Hostels (other than those run/aided institutions of Chandigarh Administration)
c. Private educational institutes viz schools, colleges, universities not recognized by Chandigarh administration
d. Coaching institutes and research institutes (Other than those recognized by the Chandigarh Administration)
e. Auditoriums, Hospitals, clinics, dispensaries, nursing homes / diagnostic centres (other than those run by the Chandigarh Administration)

f. Railways (other than traction)
g. Hotels, restaurants, guest houses, boarding / lodging houses, marriage houses
h. Cinemas
i. Banks
j. Petrol pumps.
k. Government / Public Sector offices and undertakings
l. Public halls, auditoriums, exhibitions, theatres, circus, cinemas etc.
m. All other establishments, i.e., shops, chemists, tailors, washing, dyeing etc. which do not come under the Factories Act.
n. Cattle farms, fisheries, piggeries, poultry farms, floriculture, horticulture, plant nursery Farm houses being used for commercial activity.
o. Ice-cream parlors, bars, coffee houses etc.
p. 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 complex 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.

CHARACTER OF SERVICE

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 given on single phase 230 volts and above 5 KW & less than 100 KW, supply shall be given on 3 phase 400 volts. For loads 100 kW or above, supply shall be given on HT. In case of consumers where metering is done on low voltage side of the transformer instead of 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.

TARIFF

Consumption range	Fixed charge (Rs. per KW per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
0-150 kWh	*	*	5.00	5.00
151-400 kWh	*	*	5.30	5.30
Above 400 KWh	*	*	5.60	5.60

***Proposed according to connected Load and not Consumption**

Connected Load	Fixed charge (Rs. per KW per Month)	
	Existing	Proposed
0-20 KW	20	20
Above 20 KW	100	100

Demand Surcharge for exceeding the contract/ sanctioned demand

Contract demand/sanctioned load 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 the consumer in a month exceeds the contract demand/ sanctioned load, such excess shall be charged at an additional rate of Rs. 750/- per kVA.

Power factor surcharge / incentive

Consumers with load exceeding 100 KW and getting supply at 11 KV or higher voltage shall be required to maintain a monthly average power factor of 0.90 (lagging). Consumers would install capacitors of adequate capacity to achieve prescribed power factor. The consumers whose monthly average power factor falls below 0.90 will be levied a power factor surcharge @ 1% of the bill amount for each 0.01 fall in power factor below 0.90. The surcharge will be @ 2% of the bill amount for each 0.01 fall in power factor below 0.80.

Consumers with monthly average power factor exceeding 0.95 will be allowed a rebate @ 0.5% on the bill amount for each 0.1 rise in power factor above 0.95. The bill amount will mean the consumption charges including demand charges, if any, in a month. If the average power factor falls below 0.80 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.

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

If for any installation, the average power factor is less than 70%, the supply may be disconnected after due notice of 15 days, without prejudice to the right of the licensee to levy demand/minimum charges as applicable during the period of disconnection.

3. Large Industrial Power Supply (LS)

APPLICABILITY

The schedule shall apply for consumers having industrial connected load of 100 kW and above. Their contract demand shall not be less than 100 kVA.
No consumers shall increase his connected load without prior approval of the department. The consumer availing supply at HT 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. (Govt. Tube-wells meant for water supply are covered under this Industrial Tariff)

CHARACTER OF SERVICE

AC, 50 Cycles, 3 phase 11 kV supply for loads above 100 kW

Supply above 5000 kW or 5555 kVA shall be given at 66kV 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.

NOTE

i. The above tariff covers supply at 11 kV. Surcharge at 20% on the tariff shall be levied for all the existing consumers which are being given supply at 400 volts.
ii. Surcharge at 17.5% on the tariff shall be levied for all the arc furnace consumers which are being given supply at 11 kV. This surcharge at 17.5% shall also be levied 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 levied.
iv. In case of HT consumers (11kV and above) where maximum demand and energy consumption is recorded on lower voltage side of consumer transformer instead of high voltage side, maximum demand and energy consumption for billing purpose should be computed by adding 3% extra on account of transformation/cables losses. However this agreement shall in no case continue for more than three months and meter shall be installed on the HT side of the transformer within the said period including such existing connection.
v. For new connections, all metering will be on HT side only.

TARIFF

Consumption range	Fixed charge (Rs. per KW per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	200	200	5.00	5.00

POINT OF SUPPLY

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

DEMAND SURCHARGE

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.

Power factor surcharge / incentive

Consumers with load exceeding 100 KW and getting supply at 11 KV or higher voltage shall be required to maintain a monthly average power factor of 0.90 (lagging). Consumers would install capacitors of adequate capacity to achieve prescribed power factor. The consumers whose monthly average power factor falls below 0.90 will be levied a power factor surcharge @ 1% of the bill amount for each 0.01 fall in power factor below 0.90. The surcharge will be @ 2% of the bill amount for each 0.01 fall in power factor below 0.80.

Consumers with monthly average power factor exceeding 0.95 will be allowed a rebate @ 0.5% on the bill amount for each 0.1 rise in power factor above 0.95. The bill amount will mean the consumption charges including demand charges, if any, in a month. If the average power factor falls below 0.80 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer"s service connection without prejudice for the levy of the surcharge.

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

If for any installation, the average power factor is less than 70%, the supply may be disconnected after due notice of 15 days, without prejudice to the right of the licensee to levy demand/minimum charges as applicable during the period of disconnection

4. Medium Industrial Power Supply (MS)

APPLICABILITY

This tariff schedule shall apply to all industrial power supply consumers having connected load ranging from 21 kW to 99 kW. (Govt. Tube-wells meant for water supply are covered under this Industrial Tariff)

CHARACTER OF SERVICE

AC,50 cycles ,3 phase, 400volts

TARIFF

Consumption range	Fixed charge (Rs. per KW per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	200	200	4.70	4.70

POINT OF SUPPLY

The above mentioned tariff is based on the supply being given through a single delivery and

metering point and at a single voltage.

5. Small Industrial Power Supply (SP)

APPLICABILITY

This schedule apply to small power industries with connected load not exceeding 20 KW (26BHP) in Urban and rural areas. (Govt. Tube wells meant for water supply are covered under this Industrial Tariff)

CHARACTER OF SERVICE

AC, 50 cycles, single phase 230 volts, or 3 phase, 400 volts.

TARIFF

Consumption range	Fixed charge		Energy charge	
	(Rs. per KW per Month)		(Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	30	30	4.80	4.80

POINT OF SUPPLY

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

6. Agricultural Pumping Supply (AP)

APPLICABILITY

This schedule shall apply to all consumers for use of electrical energy for irrigation pumping load up to 20 kW (26 BHP). Supply for loads above 26 BHP/20 KW shall be charged in accordance with relevant industrial tariff.

CHARACTER OF SERVICE

AC, 50 Cycles, three phase, 400 volts, Single Phase at 230 volts.

TARIFF

Consumption range	Fixed charge		Energy charge	
	(Rs. per KW per Month)		(Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	-	-	2.90	2.90

NOTE

a) 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 JE concerned, who shall verify the same at the time of verification of test reports before release of connection.

b) Supply for agriculture/Irrigation pump set, at one point, may also be given to a registered co-operative society or to a group of farmers recognized by the competent authority.

c) 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 appropriate charges.

POINT OF SUPPLY

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

7. Public Lighting (PL)

APPLICABILITY

This tariff schedule shall apply for use of Public Lighting system including signalling 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, signage, passenger information system installed on bus queue shelter/ bus stand etc., (apart from the advertisement boards installed on commercial establishment & charged under commercial tariff).

CHARACTER OF SERVICE

AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts.

TARIFF

Consumption range	Consumption Slab	Fixed charge Rs. per KW per month		Energy charge Rs./kWh	
		Existing	Proposed	Existing	Proposed
Public Lightning system - Public lighting system managed by Municipal Corporation, Panchayat and Street lights maintained/ outsourced to an external agency	All Units	100	100	5.35	5.35
Advertisement /Neon sign boards - Advertisement boards, bill boards, sign boards, passenger information system installed on bus queue shelter/ bus stand (apart from advertisement boards installed on the commercial establishments & charged under commercial tariff)	All Units	100	100	7.10	7.10

8. Bulk Supply (BS)

APPLICABILITY

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.

CHARACTER OF SERVICE

AC, 50 cycles, three phase, 400 volts or 11 kV or higher voltage at the option of the department. Loads 100 kW or above shall be released on HT/EHT only.

TARIFF

Consumption range	Fixed charge (Rs. per KW per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	200	200	4.90	4.90

9. Temporary Supply

APPLICABILITY

Available to any person requiring power supply for a purpose temporary in nature for period up to three months, which may be extended up to a maximum period of two years after completion of formalities

CHARACTER OF SERVICE

AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts.

TARIFF

Consumption range	Fixed charge (Rs. per KW per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	0	0	8.10	8.10

10. Service Characters of Supply for Load Above 5000 KW or 5555 kVA

Supply to any category of consumers above 5000 KW or 5555 kVA shall be given at voltage

level of 66KV and above only.

General Conditions for LT & HT Supply

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

General Terms and Conditions

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. Contracted demand shall be minimum of 60% of the connected load/ sanctioned load.

7) The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 85% of contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal 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 connections 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

The monthly average power factor shall mean the ratio expressed as percentage of total kWh to total kVAh supplied during the month. The ratio shall be rounded up to two figures.

(a)The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 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 0.01 in power factor.

(b) In case the monthly average power factor of the consumer is more than 95% (0.95 lagging), a power factor incentive @ 0.5% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging)

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

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

9) 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.

10) 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. Amount less than 50 paisa shall be ignored and amount of 50 paisa or more shall be rounded off to next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only upto the month of permanent disconnection.

11) However, the Department shall have the right to disconnect the supply after giving 15 days" notice as per provision of the Act & Supply Code Regulation, if the consumer fails to pay the energy bill presented to him by the due date.

12) 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) shall be given. Those consumers having arrears shall not be entitled for such rebate.

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.
Note: - Either Advance payment or prompt payment rebate shall be applicable.

14) The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with 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.

15) The values of the „K" factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in the Tariff Order approved by JERC.

16) Surcharge for Low Power Factor/Non-Installation of Required rated LT Shunt Capacitors

a. Consumer using LT installation with welding transformers and induction meters of 3HP and above and other low power factor consuming appliances shall arrange to install low tension shunt capacitors of required rating and shall maintain these capacitors in good working condition. No service connection shall be released without installation of shunt capacitor(S) of required rating. In case the shunt capacitor(S) are found to be missing or inoperative or damaged, 15 day notice shall be issued to the consumer by the licensee for rectification of the defect and setting right the same. In case the defective capacitor(S) are not replaced/rectified within 15 days of given notice, a surcharge of 20% on the billed energy charges shall be levied till defective capacitor(S) are replaced/rectified to the satisfaction of the licensee.

b. Consumers in whose L.T connections the meter provided by the licensee have 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.

S. No.	Power Factor range	Surcharge
1	90% and above	NIL
2	Below 90% and up to 85%	1% of billed energy charges of that month for every 1% fall in power factor from 90%
3	Below 85% and up to 80%	1.5% of billed energy charges of that month for energy 1% fall in P.F from 85%
4	Below 80% and up to 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.

17) 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 so as to ensure power factor of not less than 90% at his cost across the terminals of his motor(s)

c) A linked switch with fuse(s) or a circuit breaker for consumer 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 HV side of the transformer.

18) Taxes & Duties

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

19) 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 the Normal rate of energy charges
Off-peak load period	**10:00 p.m to 6:00 a.m.**	Normal Rate	90% of the 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.

20) LT Surcharge: - Surcharge at 20% on the tariff shall be levied for all the existing consumers which are being given supply at 400 volts whose connections are due to be released on HT/EHT supply.

Miscellaneous & General Charges

Sr. No.	Description	Proposed
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	SP, MS and street lighting supply.	Rs 250/-
iv	LS and bulk supply	Rs 500/-
v	AP 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, 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/-
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/-

Sr. No.	Description	Proposed
vi	Potential fuses	900/-
	Note: If M&T and ME seals are found to be broken/tempered 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	SP, MS and street lighting supply.	Rs 500/-
iv	LS and bulk supply	Rs 1000/-
v	AP 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	MS/BS loads upto 100 kW	Rs 500/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
iv	LS/BS (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	
	Domestic & NRS	Rs 5/- per card
	SP and AP	Rs 10/- per card

Sr. No.	Description	Proposed
	MS	Rs 25/- per card
	LS	Rs 45/- per card
iii	Replacement of Passbook in case it is lost by AP Consumer	Rs 60/-
iv	Replacement of identification card missing on the premises of AP Consumer	Rs 25/-
v	Temporary	Rs 60/- per card
H	**Meter Rentals**	
a	(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/-
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	**Supply of duplicate copies of electricity bills**	
i	Domestic consumers	Rs 5/-
ii	Non-Domestic consumers	Rs 10/-
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/-
K	**Review of electricity bills**	
a	(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 60 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.	
L	**Testing and calibration including sealing of energy meter owned/supplied by the consumer**	

Sr. No.	Description	Proposed
i	Single Phase	Rs 100/-
ii	Poly phase whole current meter	Rs 500/-
iii	Poly phase meters with CTs	Rs 1200/-
iv	HT and EHT metering equipment	Rs 3500/-
M	**Checking of the capacitors at the request of the consumer**	
a	Consumer receiving supply at	
i	230/440 V	Rs 250/- per visit
ii	Above 400 V and up to 11 KV	Rs 500/- per visit
N	**Rates for Security Deposit for new/extension in load only. (Rs/kW or kVA)**	
	Domestic Supply	200/-
	Non-residential supply	500/-
	Large Supply	1500/-
	Medium Supply	500/-
i	Small Supply	300/-
	Bulk Supply	800/-
	Public Lighting	750/-
	Agriculture Power	120/-
	Others- Temporary Supply	2000/-
O	**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/-
ii	Three Phase Meter	Rs 1550/-
iii	LT CT operated Solid State Meter. (Without CTs)	Rs.3000/-
iv	LT CTs	
a	a) Upto 50/5A	Rs.1,580/-
b	b) Above 50/5 A	Rs. 600/-
c	Solid State HT TPT metering equipment (without CT/PT unit)	Rs.20,000/-
d	H.T.C.T./P.T. Unit	Rs.40,470/-
Q	Special Meter reading charges in case of change in occupancy/ vacation of premises for domestic consumers	Rs. 50/-
R	Line Mtc. and lamp renewal charges for Public Lighting where the initial installation of complete street light fittings and lamps and their subsequent replacement shall be carried out at the Board/Licensee's cost, the line maintenance and lamp renewal charges shall be as under:-	
	A.1 **Ordinary lamps**:	
	(i) Lamps up to 150 watts :	Rs.16/- per lamp per month
	(ii) Lamps above 150 watts :	Special quotation
	A.2 **Mercury Vapour lamps**:	
	(i) Lamps of 80 watts :	Rs.49/- per lamp per month
	(ii) Lamps of 125 watts :	Rs.53/- per lamp per month
	(iii) Lamps of 250 watts :	Rs.90/- per lamp per month

Sr. No.	Description	Proposed
	(iv) Lamps of 400 watts :	Rs.101/- per lamp per month
	A.3 **Fluorescent tubes:**	
	(i) Single 2 ft 20 watts :	Rs.26/- per lamp per month
	(ii) Single 4 ft 40 watts :	Rs.43/- per lamp per month
	(iii) Double 2 ft 20 watts :	Rs.43/- per lamp per month
	(iv) Double 4 ft 40 watts :	Rs.68/- per lamp per month
	A.4 **Where the initial installation of complete street light fittings and lamps as well as their subsequent replacement shall be done at the cost of Street Lighting consumer i.e. fittings and lamps to be supplied by the consumer, the line maintenance and lamp renewal charges shall be as under:**	
	(i) CFL / LED Lamps :	Rs.11/- per lamp per month
	(ii) Fluorescent tube/Sodium/Mercury vapour lamp :	Rs.13/- per lamp per month
S	Demand Notice Extension Fee (for each period of 3 months)	
	a. DS & NRS	Rs.50/-
	b. AP	Rs.500/-
	c. SP	Rs.200/-
	d. MS/LS/BS	Rs.2500/-
	Note: Demand notice shall be valid for 3 month initially with an extended/ grace period of further 3 months. After the expiry of grace / extended period of 3 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	

Schedule of Service Connection Charges and Service Rentals

Service connection charges are provided in schedule of general and service connection charges are to be recovered from all prospective consumers and existing consumers seeking extension in load. Schedule of service connection charges as prevalent is given under

A. SERVICE CONNECTION CHARGES FOR DOMESTIC AND COMMERCIAL SUPPLY

S. No.	Particular	Category	Rs.
1	Single Phase Fixed Per kW Charges		
a.	Up to 1 kW	Domestic	250
		NRS	250
b.	Above 1 kW and up to 3 kW	Domestic	300
		NRS	300
c.	Above 3 kW and 5 kW	Domestic	500
		NRS	750
2	Three Phase Fixed Per kW Charges		
a.	Above 5 kW	Domestic	750
		NRS	1000

Variable Charges

No variable charges are to be levied up to 75 meters. Beyond 75 meters for all loads variable charges at Rs 125 per meter length of service line shall 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 under the preceding clause or to pay monthly service rentals at 1.6 paisa per rupee of the estimated cost of the service line excluding the cost of 30.48 meters.

i. Members of Schedule Castes.

ii. The connection meant for religious and charitable institutions run by recognized/registered associations or societies registered with Register of Societies.

b. All such prospective and existing consumer 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 1-11-2002, if applicable already shall continue

B. SERVICE CONNECTION CHARGES FOR INDUSTRIAL, BULK SUPPLY and PUBLIC LIGHTING

For New Connections:

Load	Service Connection Charge
For All Loads	Rs. 750 / kW

Service connection charges under Para i) shall be applicable for loads 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, applicant shall be required to pay 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 non-refundable). However, no component of 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 the total load upto and including 1 MW	To be charged @750/- per KW for for extension part only. However charges for service line in excess of 100 meters shall be charged at 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.
ii. Extension in load brining total load above 1 MW	Rs 750/- per KW (chargeable for extension part only) or actual cost, whichever is higher.
iii. 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 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 independent feeder laid at the cost of the consumer. The cost of line/bay (33/66/132/220kV) paid by the consumer 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 in respect of clubbing cases, applicable rates to different connections as existing 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 shall be taken into account.

d. The per kW, service charges for extension in load shall be as contained in Para 2 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 as per kW basis as applicable to the category in which total connected load after extension falls and shall be recoverable for extension 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 as "Contract Demand Charges" as under:

S. No.	Particular	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	

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 SERVICES CONNECTION CHARGES FOR EXTENTION 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, consumer is entitled to avail within five years extension in load up to 100% of the original line for which the line had been erected

provided that line so erected is capable of taking the load i.e. original load and extended load up to 100% of original load. If, however, line already erected is unable to take 100% extension of load, extension in load shall be limited to capacity of the line. In such an event, consumer is not required to pay service connection charges for the extension in load, provided the cost of line already provided by him is more than 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 on 11kV:

Extension in load to the original consumer shall be allowed (within the contract demand for which line was originally erected for him) at the cost of the board, even if augmentation/erection of new lines is 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) wants 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 line so that sufficient margin in capacity is available to cater to the additional requirement of the original consumer.

c. Provisions of the preceding paras of this regulation shall not be applicable where as a result of extension in load the supply voltage level of the consumer charges or when the consumer changes the site of the premises.

D. RECOVERY 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 total length of service line including ne 11 kV line, LT line (new/augmented) and service cable is up to 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 service line is more than 1 km (out of which LT line/Service cable route length should not exceed 500 meters),applicant under this category shall be required to pay cost of 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.

Chapter 10: Compliance of Directives

10.1 This chapter illustrate the compliance report on the directives issued by the Commission in previous Tariff Orders

Sl. No.	Directive	Directives Issued by Commission	Reply
1.	Management Information System	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.	The M/s NIELIT is a billing agency of Electricity Department Chandigarh for all category of electricity consumers who supplies various MIS reports. The MIS reports are further forwarded to the Hon'ble commission in the prescribed formats on regular basis. However, a proposal is already forwarded to NIC for online generation of MIS.
2.	Metering /replacement of Non-Functional or defective/ 11KV Meters	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.	The technical sanctioned for installation of DLMS meters at all node points of 66KV & 11 KV for energy audit purpose, has already been accorded vide memo No-9963 dt-10/09/18 and DNIT is under progress. The DT Metering will be started after successful implementation of feeder metering. However, on pilot basis, 126 DT meters are installed in the Industrial Area for energy audit which is being done manually. The energy audit report can be submitted to the commission after installation of DLMS meters on 66KV and 11 KV feeders.
3.	Energy Audit	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.	
4.	Demand Side Management and Energy Conservation	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.	TOD metering cannot be started without data centre and at present electricity Department Chandigarh has no such data centre as no R-APDRP was implemented in Chandigarh. The smart meter has an additional features of TOD metering and work for installation of 30,000 smart meters and its allied infrastructure under the area of SDO-5 has already been allotted to M/s REC as deposit work. The M/s REC has further awarded the work of AMI and SCADA through

			tendering. However, the DPR of Smart Grid of whole Chandigarh for approximate of Rs 241.00 Crores has already approved by the empowered committee, MOP, Govt. of India. The MOP has already been requested for administrative approval and expenditure sanction by the SFC of MOP being the competent authority.
5.	Manpower Deployment	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.	The CE-cum-Spl. Secy. has directed vide memo No-4494 dt-08/06/18 to inform the commission that the case is already under consideration with the higher authorities.
6.	Segregation of T&D losses and loss reduction trajectory	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.	The RFP for appointment of consultant for Segregation of T&D losses and loss reduction trajectory was submitted to Chief Engineer–cum-Spl.-Secy (Engg.) vide memo No-2123 dt-03/10/17 for accord of principle approval. However Chief Engineer–cum-Spl.-Secy (Engg.) vide memo No-5040 dt-04/07/18 has intimated that the consultant will be appointed after allotment of work for installation of audit meters.
7.	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.	The assets created through own funds are considered for preparation of tariff petition.
8.	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	The Electricity Department Chandigarh is an integrated utility and deemed distribution licensee as per Electricity Act-2003. It is further mentioned that Asst. Power controller (APC) is working

		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.	under the supervision of Power Controller-cum-Executive Engineer Electy OP Divn No-2. APC is scheduling the power on day ahead basis and accordingly purchasing & selling power in the power exchange on day to day basis. Further, the procedure of Long-term open Access is already forwarded to Hon'ble commission vide this office memo No-1932 dt-13/08/18. However as per the direction of Hon'ble commission, the co-ordination committee has been constituted and STU & SLDC are designated to deal the open access cases. The detailed procedure of Open Access has prepared by co-ordination committee and forwarded to CEUT-Cum-Spl-Secy. for further approval . The detailed procedure of Open Access will be forwarded to the Hon'ble commission after approval from competent authority of Chandigarh Administration.
9.	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.	The relevant training of respective staff is being conducted by the Electricity Department Chandigarh from time to time for safety and improving the efficiency. A training of 49 ALMs has already been conducted by HVPN Power training Institute (HPTI) Panchkula Haryana and a certificate is also issued to all trainee. However, the matter has been taken up with the PSPCL and HVPNL for training of supervisory staff of Electricity Wing as per CEA regulations, vide this office memo No-1652 & 1654 dt-05/07/2018 respectively. The response is still awaited. Further, a safety code book has already been published by this office and issued to concerned line Man/Asst. Line man for strict compliance. Moreover, to ensure awareness for compliance of safety norms and standards by all the field staff, a DNIT is being prepared for seeking proposal from private agencies to organize a comprehensive training programme on safety measures

			along with disaster management for all the technical employees. However, an estimate for Safety Audits through independent professional agencies is under preparation. The action is also being taken up to file a petition before Hon'ble JERC to seek approval to introduce a group accidental insurance policy for self-indemnification of line/substation staff to cover the risk in case of fatal and non-fatal accidents while performing official duties.
10.	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.	In this connection it is submitted that RFP/ tender for augmentation of 66 kV Grids worth Rs 80.64 Crores has been called. However, RFP/ tender to allot the work to PSUs could not be allotted yet as matter is under consideration with Finance Department, U.T., Chandigarh. As soon as the works are allotted to PSU, the capitalization will increase resulting improving the service quality to all consumers.
11.	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 30thNovember 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	The M/s. RSA & Co. is already appointed as consultant for preparation of ARR therefore the petition of FY-2019-20 will be filled within the time schedule as prescribed in the MYT petition. EDC has requested to AG (UT) to allow us to get the audit of accounts carried out from AG empanelled CAs. As, it usually takes $3^{1/2}$ month in AG office, which is beyond the control of EDC. However the AG(UT) vide memo No-779 dt-30/06/18 has mentioned being Govt. Department , its accounts are audited and certified under Section-19(1) of Controller

		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.	and Auditor General's (Duties, Power and conditions of Service) Act,1971 and asper section-13 of this Act, CAG is mandated to be sole auditor to audit all the trading, manufacturing ,profit and loss accounts & balance sheets kept any department of the Union or of a state. Further, efforts are being made to adopt/implement the scientific method to project the demand, power purchase quantum while scheduling and purchasing for which an estimate proposal is under preparation.