PETITION FOR TRUE-UP OF FY 2015-16, ANNUAL PERFORMANCE REVIEW OF FY 2016-17 AND AGGREGATE REVENUE REQUIREMENT (ARR) & TARIFF PROPOSAL FOR FY 2017-18 of CHANDIGARH ELECTRICITY DEPARTMENT

Joint Electricity Regulatory Commission, Gurgaon

ELECTRICITY DEPARTMENT, UT OF CHANDIGARH

BEFORE THE HON'BLE JOINT ELECTRICITY REGULATORY COMMISSION

Filing No:
Case No:

IN THE MATTER OF :	Petition For True-Up Of FY 2015-16, Annual Performance Review Of FY 2016-17 And Aggregate Revenue Requirement (ARR) & Tariff Proposal For FY 2017-18 of Chandigarh Electricity Department
AND IN THE MATTER OF:	Chandigarh Electricity Department 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 ANNUAL PERFORMANCE REVIEW AND TARIFF PETITION OF CHANDIGARH ELECTRICITY DEPARTMENT FOR FY 2017-18

The applicant respectfully submits hereunder:

1) The Petitioner, the Chandigarh Electricity Department (CED) 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, CED 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) CED has submitted its petition for determination of Annual Revenue Requirement and tariff proposal for FY 2017-18 on the basis of the principles outlined in the MYT Tariff Regulations 2014 notified by the Hon'ble Commission.

4) This petition includes the True-Up Petition for FY 2015-16, Review Petition for FY 2016-17 and ARR & Tariff Petition for FY 2017-18.

5) CED is submitting the true up for the FY-2015-16 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 AGUT has started the audit of CED accounts for FY-2015-16. The audited accounts by AG UT shall be submitted shortly.

6) CED 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 CED as may be required by the Hon'ble Commission during its processing.

7) For seeking extension of time to file above petition , CED had already filed the petition vide memo No-2854 Dt-22/12/16 . Accordingly , the commission has granted the extension of time up to 15th jan-2017 vide letter No-1031 Dt-10/01/17.

Prayers to the Commission

CED respectfully prays that the Hon'ble Commission may

a. Condone the delay in filing the petition by CED and Admit this Petition.

b. Examine the proposal submitted by the Petitioner for a favorable dispensation as detailed in the enclosed proposal;
c. Consider the submissions and allow the True-Up 2015-16, revised estimate for FY 2016-17 and approve Aggregate Revenue Requirement and Retail Tariff for CED for FY 2017-18;
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 2017-18 for making it applicable from April 1, 2017 onwards;
f. Approve the terms and conditions of Tariff Schedule and various other matters as and the proposed changes therein;
g. Approve a separate category for Single Point Supply (SPS) consumers
h. Approve the Miscellaneous and General Charges as proposed;
i. Condone any inadvertent omissions/ errors/ shortcomings and permit CED 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;

Chandigarh Electricity Department

Petitioner

Place: Chandigarh
Date:

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Chapter 1: Introduction and Background

Electricity Department of UT, Administration of 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 Chandigarh Electricity Department 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 four Executive Engineers.

1.3 The Electricity Department of UT Administration of Chandigarh 'hereinafter called CED', 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 Chandigarh Electricity Department (CED) has been allowed to function as an integrated distribution licensee of Union Territory of Chandigarh. The Chandigarh Electricity Department 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 fulfillment of the requisite conditions and payment of charges. CED 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. However as per the directives of Hon'ble Commission CED has moved to accounting system based on commercial principle. CED has already prepared and submitted audited annual accounts prepared on commercial principle for FY11-12 to FY14-15 along with the MYT Petition for FY 2016-17 to FY 2018-19 for truing-up of the respective years. Also CED has prepared Fixed Asset Register for the asset addition post 2005 period. It is submitted that efforts are being made by CED for preparation of Fixed Asset Register for the remaining period prior to 2005. A tender has already been floated in this regard for appointment of a chartered accountant firm.

Regulatory Process

1.5 CED 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 CED filed its second Petition for tariff determination of FY 2012-13. In the petition, CED 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 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 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 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 Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Multi Year Distribution Tariff) Regulations, 2014, hereinafter referred to as "MYT Regulations".

1.10 As per the Regulations, 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 Chandigarh Electricity Department had filed a revised Business Plan for the Control Period (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 December 28, 2015. In the Order for Business Plan, the Hon’ble Commission had directed the CED for submission of MYT Petition for the Control Period FY17 to FY19 within 30 days from issuance of the Order for Business Plan.

1.12 As per the directives of the Hon’ble Commission, CED filed tariff petition for approval of Annual Revenue Requirement for MYT Control period FY17 to FY19 and determination of retail tariff for FY17 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. In line with the MYT Regulations 2014, Chandigarh Electricity Department has filed this petition comprising of True-up of FY15-16, performance review of FY16-17 and revised ARR and retail tariff proposal for FY17-18.

Chapter 2: True up of FY 2015-16

2.1 CED had filed a petition for review of FY 2013-14 and ARR for FY 2014-15 and ARR for MYT Control Period from FY 2015-16 to FY 2017-18 before the Hon'ble Commission on 4th March 2015 under Regulation 12.1 of the MYT Regulation 2014.

2.2 However, the Hon'ble Commission had decided to postpone the Control Period by a year. Accordingly, the ARR and tariff for FY 2015-16 was approved under the JERC (Terms and Condition for determination of Tariff) Regulations, 2009 in its order dated 10th April 2015.Subsequently, a review of ARR for FY 2015-16 was undertaken by the Hon'ble Commission in the MYT Order dated 28th April 2016.

2.3 The annual accounts for FY 2015-16 has already been prepared and the truing-up for FY 2015-16 has been prepared based on these accounts. The Hon'ble Commission is requested to kindly consider the same for truing-up of FY 2015-16. The audited accounts of FY 2015-16 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 2015-16

2.4 The total energy sales for FY 2015-16 stands at 1491.32 MUs based on actuals as against 1510 MUs approved earlier by the Commission during the review of FY 2015-16 vide Tariff Order dated 28th April 2016.

2.5 The tables below summarize the approved and actual energy sales for CED for FY 2015-16:

Table 1: Approved and Actual Sales for FY 2015-16 (MUs)

S. No.	Categories	Approved in T.O. dated 10th April 2015	Approved in Review Petition T.O. 28th April 2016	Actual
1.	Domestic	732.44	667	658.50
2.	Commercial	493.55	485.00	463.34
3.	Large Supply	101.66	120.00	131.84
4.	Medium Supply	97.9	103.75	110.94
5.	Small Power	18.97	20.52	19.01
6.	Agriculture	1.63	1.61	1.49
7.	Public Lighting	20.49	20.36	22.50
8.	Bulk Supply	83.42	84.61	77.19
9.	Others Temporary Supply	5.69	7.15	6.52

S. No.	Categories	Approved in T.O. dated 10th April 2015	Approved in Review Petition T.O. 28th April 2016	Actual
	Grand Total	**1555.75**	**1510.00**	**1491.32**

Power Purchase Quantum and Cost

2.6 CED meets its requirement from allocations from central generating stations NTPC, NHPC, NPCIL and other generating stations such as BBMB, SJVNL, THDC and bilateral agreement and banking arrangements. The allocation from CGS consists of a fixed share of allocation for a year, and a variable share of allocation from the unallocated quota, the quantum of which keeps on changing during the year. Since the allocation of power from various sources is inadequate, the CED is required to procure power from short –term sources i.e. power exchange, other trading sources and also for meeting the peak demand.

2.7 The table below shows the summary of actual Power Purchase from various sources along with their costs for FY 2015-16 including Transmission Charges, UI charges and purchase from short term sources i.e. power exchange, UI, etc.

Table 2: Power Purchase cost for FY 2015-16

Source	Review Petition T.O. 28th April 2016 (Approved)	Actual
NTPC Stations	142.07	165.23
NHPC Stations	66.87	70.02
NPCIL	31.72	34.91
SJVNL	21.40	21.24
BBMB	251.53	260.31
THDC	61.00	56.90
CREST	0.91	1.52
Pvt. Solar		0.01
Bilateral/Power Exchange	9.19	13.06
UI (Overdrawl)	0.41	28.51
REC (Solar & Non-Solar)	10.61	8.18
Others (PGCIL, Reactive Power, NRLDC)	58.84	30.23
LC Charges		0.692
Grand Total	**654.55**	**690.81**

2.8 As against the Commission approved total power purchase cost of Rs 654.55 Crores for the FY 2015-16, CED has incurred actual power purchase cost of Rs 690.81 Crores. The higher cost is primarily on account of higher rate of power from various sources. The petitioner requests the Hon'ble Commission to approve the total power purchase cost of Rs 690.81 Crores against power purchase for FY 2015-16.

2.9 The Hon'ble Commission had notified amendment to the JERC (Procurement of Renewable Energy) Regulations, 2010 on 19th February 2014. As per the amendment issued, the Petitioner has to purchase 3.55% of total energy purchase from renewable sources for FY 2015-16 including 0.85% for Solar and 2.70% for Non-Solar.

2.10 CED has also been able to meet its RPO requirement for FY 2015-16 through REC purchase (solar and non-solar). Besides the REC purchase, CED has also purchased energy from solar plants under gross metering and net metering, details of which are as below:

Table 3: RPO Requirement (Solar and Non-Solar) as per actual sales for FY 15-16

		Target		Actual	
Particulars	**RPO %**	**Sales**	**Units (in MUs)**	**Units (in MUs)**	**Cost (in Rs. Cr.)**
Solar	0.85%	1,493.46	12.68	13.05	4.90
Non-Solar	2.70%	1,493.46	40.27	43.80	6.69
Total	**3.55%**		**53.02**	**56.85**	**11.59**

Table 4: Sources of Solar Power Procurement against the Solar RPO FY 15-16

Particulars	2015-16 (in MUs)
Power procured from NET Metering Mode (In MUs)	1.36
Power procured from Gross Metering Mode (In MUs)	0.02
Break-up of Solar RPO	
Total Solar Generation from plants under NET Metering (in MUs)	3.45
Solar REC purchase	9.60
Total Solar RPO Met	**13.05**

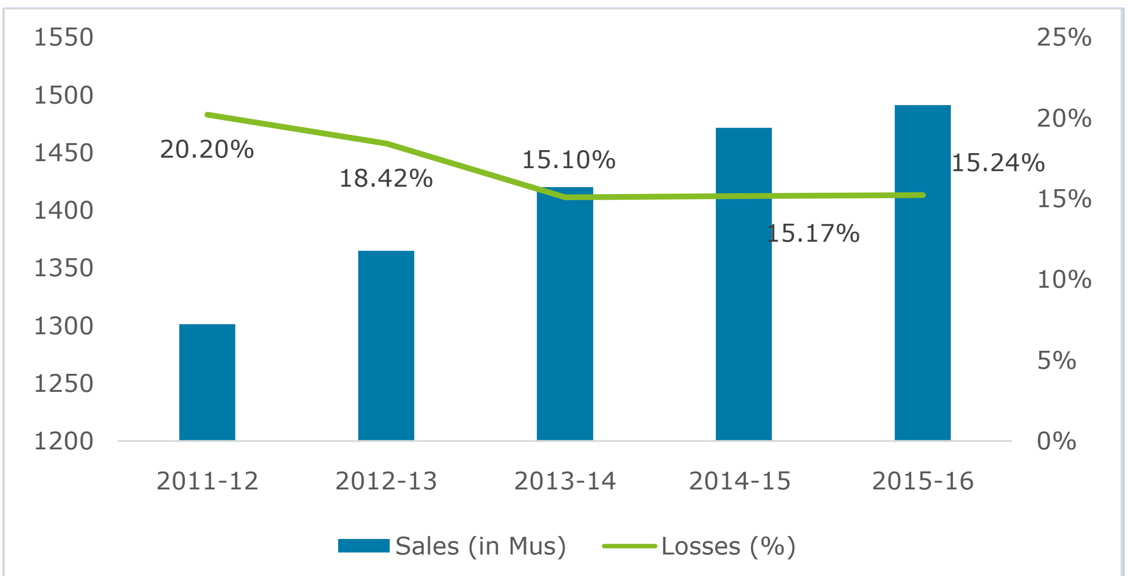
Intra-State Transmission and Distribution (T&D) Loss

2.11 Considering actual sales of 1,491.32 MUs as above, the actual T&D works out to be 15.24% as against a loss level of 13.75% approved by Commission for FY 2015-16 vide Tariff Order dated 28th April 2016. The computation of T&D loss for FY 2015-16 is provided in table below:

Table 5: Energy Balance for FY 2015-16

Energy Available	
Units Procured	1,818.91
Net Energy Available at UT Periphery (as per REA)	**1,758.12**
Power Available within UT	
Power planned to be procured from NET Metering Mode (In MU's)	1.36
Power planned to procure from Gross Metering Mode (In MU's)	0.02
Total Energy Available	**1,759.50**
Actual Energy Sales (Mus)	**1,491.32**
T&D Loss (Mus)	268.17
T&D Loss (%)	**15.24%**

2.12 CED submits to the Hon'ble Commission that while the losses during initial years did reduce from 20.20% in FY 2011-12 to 15.10% in FY 2013-14, the T&D loss level have been range bound over the last three years as can be observed from the below graph:



2.13 One of the primary reasons of stagnation in losses in spite of an increase in overall sales is that maximum increase in sales have happened in the domestic category resulting in a higher proportion of the overall sales from 40% in FY11-12 to 44% in FY15-16 as compared to industrial consumers where the sales have remained stagnant leading to a reduction in overall share.

2.14 It is submitted to the Hon'ble Commission that while the distribution area of CED is small, the scope for addition of HT consumers is limited or negligible. As a result the sales to such categories is generally restricted leading to stagnation of T&D losses.

With over 80% of the sales to LT consumers, CED feels that the T&D loss in the UT of Chandigarh shall be possible after implementation of its various schemes under IPDS and Smart Grid projects which are currently being undertaken by the CED.

2.15 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.

2.16 The energy input in CED is currently being metered at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB) which has resulted in higher T&D losses for CED. The CED has to bear the additional losses of interstate circuit due to not having any interstate point in its boundary. The CED has taken up the issue with CEA and PGCIL and expect the early resolution of the matter. A 220/66 kV substation has already been proposed at Hallo Majra, Chandigarh for which necessary land has already been allotted to PGCIL. This substation shall cater to the maximum load of Chandigarh resulting in lower losses due to absence of an interconnection point within the UT periphery.

2.17 Hon'ble Commission in its MYT Order had also undertaken truing-up of FY 2014-15 and had computed T&D loss of 12.81% based on the sales of 1512.54 Mus contained in the audited accounts for FY 2014-15. In this regard, it is submitted that there was an inadvertent error with respect to the sales recorded in the audited accounts of FY 2014-15 and CED has already written to CAG for rectification of the error. The correct sales figure for FY 2014-15 is 1471 Mus which would lead to a loss level of 15.17% for FY 2014-15. In view of the restatement of actual T&D loss of FY 2014-15 due to correction in sales figure, it is submitted that the T&D loss target approved for FY 2015-16 as well as for MYT Control Period is unrealistic and the Hon'ble Commission is requested to restate the loss targets.

2.18 In view of the above submissions, the Hon'ble Commission is requested to kindly approve the actual distribution losses for FY 2015-16 as any disallowances would have a substantial financial impact on the CED.

Operation and Maintenance Expenses

2.19 The summary of approved and actual Employees' Expenses, R&M expense and A&G expense as incurred by the CED in FY 15-16 is as below:

Table 6: Employees' Expenses for FY 2015-16 (in Rs Crores)

O & M Expense	Revised Approved (T.O. 28.04.2016)	Actual
Employees' Expenses	63.13	61.80
R & M Expense	13.87	10.01
A & G Expense	3.59	4.39
Total O&M charges	**80.59**	**76.20**

2.20 The actual employee and R&M expenses for FY 2015-16 are lower than that approved by Commission as part of review of FY 2015-16. However, the actual A&G expense claimed by the petitioner for the FY 2015-16 are slightly higher than the approved figures. CED submits that post initiation of commercial accounting practice recently, all expenses are being booked in the respective heads as a result the basis for projections (i.e. increase over past year actuals) shall not be completely appropriate for approval of O&M parameters and therefore requests the Hon'ble Commission to approve the O&M expense as per actual.

2.21 The petitioner requests the Hon'ble Commission to approve the same on actual basis as the total O&M expense of Rs. 76.20 Crore for FY 2015-16 are lower than the approved O&M expense of Rs. 80.59 Crore for FY 2015-16.

GFA and Depreciation

2.22 It is submitted that the Hon'ble Commission in the MYT Order dated 26th April 2016 had not considered the GFA as per the audited books of account of CED for FY 2014-15 as the Fixed Asset Register was prepared based on the assets created and verified post 2005 and a nominal value was considered against assets created prior to 2005. While CED is undertaking all efforts for preparation of FAR for assets created prior to 2005, in the current truing-up petition, the opening GFA approved by the Commission in the MYT Order dated 26th April 2016 has been considered and actual addition during FY 2015-16 as per the annual accounts have been considered. The petitioner submits that the CED has already floated a tender inviting consultancy firms for preparation of Fixed Asset Register for the period prior to year 2005 and request the Hon'ble Commission to approve the same as and when they are prepared.

2.23 The table below presents the approved and actual asset details for the FY 2015-16. The Hon'ble Commission is requested to approve the same :-

Table 7: Asset Addition for FY 2015-16 (Rs Crores)

Particulars	Approved in T.O. dated 10th April 2015	Revised Approved (T.O. 28.04.2016)	Actual
Asset Addition during FY 2015-16	9.96	9.96	12.29

2.24 The table below presents the approved and actual depreciation during the FY 2015-16:

Table 8: Depreciation for FY 2015-16 (Rs Crores)

Particulars	Approved (T.O. 10th April 2015)	Revised Approved (T.O. 28th April 2016)	Actual
Depreciation for the year	3.73	12.86	14.65

2.25 CED humbly requests the Hon'ble Commission to approve the depreciation based on actuals as recorded in the provisional accounts.

Interest on Loan

2.26 For the purpose of determination of opening normative loan for FY 2015-16, the approved closing normative loan for FY14-15 in the MYT Order dated 26th April 2016 has been considered as opening normative loan for FY15-16. 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 at 10% of the opening normative loan similar to the methodology considered by the Commission for FY 2015-16. An interest rate of 14.75% as on April 1st, 2015 which is the SBI PLR rate has been applied on the average normative debt in order to estimate the normative interest cost for FY 2015-16.

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

Table 9: Interest on Normative Capital Loan for FY 2015-16 (Rs Crores)

Particulars	Approved in T.O. dated 10th April 2015	Revised Approved (T.O. 28th April 2016)	Actual
Opening Normative Loan	44.00	38.42	38.42
Add: Normative Loan during the year	6.97	6.97	8.6
Less: Normative Repayment	3.73	3.84	3.84
Closing Normative Loan	47.24	41.55	43.18

Particulars	Approved in T.O. dated 10th April 2015	Revised Approved (T.O. 28th April 2016)	Actual
Average Normative Loan	45.62	39.98	40.80
Rate of Interest (@SBAR rate)	14.75%	14.75%	14.75%
Interest on Normative Loan including bank charges	**6.73**	**5.90**	**6.02**

Interest on Consumer Security Deposit

2.28 As per the provision of Regulation 25 (4) of Tariff Regulations 2009 & 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 2015-16 and claim of interest on security deposit is given in the table below:

Table 10: Interest on Consumer Security Deposit for FY 2015-16 in (Rs Crores)

Particulars	Approved in T.O. dated 10th April 2015	Approved in Review Petition T.O. 28th April 2016	Actual
Opening Consumer Security Deposit	35.55	133.84	133.84
Net Addition During the year	3.00	5.00	2.83
Less: Deposit Refunded	-	-	-
Closing Consumer Security Deposit	38.55	138.84	136.67
Interest on Consumer Security Deposit	**3.15**	**11.59**	**8.31**

Interest on Working Capital

2.29 Interest on working capital has been computed as per Clause 29 of JERC (Terms and Conditions for determination of Tariff Regulations), 2009. 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.

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

Table 11: Interest on Working Capital for FY 2015-16 (Rs Crores)

Particulars	Approved in T.O. dated 10th April 2015	Revised Approved (T.O. 28th April 2016)	Actual
Fuel cost for 2 months	-	-	-

Power Purchase Cost of 1 month	53.93	54.78	57.57
Employee Cost for 1 months	5.04	5.26	6.35
A&G Expense for 1 month	0.23	0.30	
R&M Expense for 1 month	0.89	1.13	
Total Working Capital	**60.08**	**61.47**	**63.82**
Less: Closing Security Deposit	(37.05)	(138.84)	(136.67)
Total Working Capital after Deduction of Security Deposit	23.03	-	-
Interest Rate	14.75%	14.75%	14.75%
Interest on Working Capital	**3.4**	**-**	**-**

Provision for Bad and Doubtful Debt

2.31 In accordance with Clause 28 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 allow a provision for bad debts up to 1% of receivables in the revenue requirement of the licensee. In view of the outstanding dues of Rs. 36.16 Crore from permanently disconnected consumers, CED has proposed the provision for bad and doubtful debts on 1% of the receivables for FY 2015-16. Accordingly, CED has estimated the provision of bad debt as Rs. 7.79 Crores for FY 2015-16.

Return on Equity

2.32 Provision of Regulation 23 (2) and Regulation 24 of Tariff Regulations 2009 provides for entitlement for Returns on Capital Base/ Net Fixed Assets by utility / licensee which have not been unbundled i.e. integrated utility. The CED has computed the Return on Capital on the opening assets and accumulated depreciation as approved by the Hon’ble Commission in its MYT Order dated 28th April 2016.

2.33 Reasonable return equal to 3% of Net fixed assets after deduction of accumulated depreciation is considered for claim of Return of equity as computed in the table given below.

Table 12: Return on Net Fixed Assets for FY 2015-16 (Rs Crores)

Particulars	Approved in T.O. dated 10th April 2015	Approved in Review Petition T.O. 28th April 2016	Actual
Gross block at beginning of the Year	65.64	230.30	230.30
Less accumulated depreciation	8.98	82.46	82.46
Net fixed assets at beginning of the year	56.66	147.83	147.84
Reasonable Return at 3% of NFA	1.70	4.44	4.44

Non- tariff Income

2.34 The table below presents the approved and actual non-tariff income for FY 2015-16 as given in the table below:-

Table 13: Non-Tariff Income for FY 2015-16 (Rs Crores)

Particulars	Approved in T.O. dated 10th April 2015	Approved in Review Petition T.O. 28th April 2016	Actual
Non-Tariff Income	17.82	23.32	21.92

Revenue from Sale of UI Power

2.35 As per the provisional accounts, CED has received Rs. 7.58 Crores during FY 2015-16 towards sale of UI power which has been reduced in the ARR for FY 2015-16.

Revenue on Current Tariff

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

Table 14: Revenue on Current Tariff for FY 2015-16 (Rs Crores)

Particulars	Revised Approved (T.O 28th April 2016)	Actual
Domestic	235.86	230.10
Commercial	245.71	240.58
Large Supply	62.99	69.84
Medium Supply	52.86	56.43
Small Power	9.26	8.43
Agriculture	0.37	0.28
Public Lighting	9.30	10.13
Bulk Supply	41.81	36.54
Others Temporary Supply	4.79	4.26
Total	**662.95**	**656.59**

FPPCA Billed during the year

2.37 CED has additionally billed a total of Rs.3.47 crores as FPPCA from the consumers during FY 2015-16. Total FPPPCA billed for FY 2015-16 is given in the table below:-

Table 15: FPPCA billed for FY 2015-16 (Rs Crores)

Particulars	Approved in T.O. 28th April 2016	Actual

Particulars	Approved in T.O. 28th April 2016	Actual
Total	1.45	3.47

Aggregate Revenue Requirement and Deficit for FY 2015-16

2.38 The Aggregate Revenue Requirement and deficit for the FY 2015-16 is as given in the table below:

Table 16: Aggregate Revenue Requirement and Deficit for True-Up of FY 2015-16 (Rs Crores)

S No	Particulars	Approved in T.O dated 10th April 2015	Revised Approved in T.O. 28th April 2016	Actual
1.	Cost of power purchase for full year	647.12	654.55	690.81
2.	Employee costs	60.45	63.13	61.80
3.	Administration and general expenses	2.73	3.59	4.39
4.	R&M expenses	11.32	13.87	10.01
5.	Depreciation	3.73	12.86	14.65
6.	Interest and finance charges	6.73	5.71	6.02
7.	Interest on working capital	3.40	-	-
8.	Return on NFA /Equity	1.70	4.44	4.44
9.	Provision for Bad Debt	-	-	7.79
10.	Interest on Security Deposit	3.15	11.59	8.31
11.	**Total Revenue Requirement**	**740.33**	**769.74**	**808.22**
12.	Less: Non-Tariff Income	17.82	23.32	21.92
13.	Less: Revenue from Sale through UI	-	3.93	7.58
14.	**Net Revenue Requirement**	**722.51**	**742.50**	**778.71**
15.	Revenue from retail sales at Existing Tariff	744.63	664.40	656.59
16.	FPPPCA billed during the year			3.47
17.	**Revenue Surplus/(Gap) for the Year**	**22.12**	**(78.10)**	**(118.66)**
18.	Gap approved as part of Regulatory Asset (in MYT Order dated 28.04.16)			78.10
19.	**Net Surplus/(Gap) carried forward**			**(40.56)**

2.39 Based on the actual ARR and Revenue for FY 2015-16 based on the provisional accounts, it is observed that there is a revenue gap of Rs. 118.66 Crore of which Rs. 78.10 Crore was approved as part of the MYT Order by the Hon'ble Commission and considered in the regulatory asset created. Therefore, CED requests the Hon'ble Commission to approve the additional revenue gap of Rs. 40.56 for FY 15-16 as presented above and carry forward the same for recovery along with FY 2017-18 tariff.

Chapter 3: Review of ARR for FY 2016-17

3.1 The Joint Electricity Regulatory Commission had notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (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 i.e. Andaman & Nicobar island, Dadra & Nagar Haveli, Daman & Diu, Chandigarh, Lakshadweep and Puducherry. 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.

3.2 CED had filed a revised business plan for the period 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 FY 2016-17 to FY 2018-19 as per the MYT Regulations 2014.

3.3 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'.

3.4 The petitioner is hereby filing annual performance review for FY 2016-17 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.

3.5 Additionally, CED 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."

3.6 Therefore, CED has raised the issues covered under its review petition dated 16.06.2016 at the relevant places in the current and subsequent chapters for the consideration of the Hon'ble Commission.

Energy sales and Connected Load

3.7 The sales for FY 2016-17 has been estimated based upon the trend followed by various categories during the past few years and actual sales during first six months of FY 2016-17. While the sales increase during FY 2015-16 has been low, the actual six months sales during FY 2016-17 has been higher than the FY 2015-16 sales during the same period. The approved and estimated sales for full year and actual sales for six months of FY 2016-17 is given in the table below:-

Table 17: Energy sales for FY 2016-17 (MUs)

S No	Categories	Approved as per T.O. dated 28th April 2016	Actual 6 months	Estimated for whole year
1.	Domestic	760.27	383.55	691.42
2.	Commercial	490.82	260.73	481.87
3.	Large Supply	117.00	65.24	138.43
4.	Medium Supply	21.00	61.72	114.29
5.	Small Power	104.72	10.64	19.01
6.	Agriculture	1.87	0.75	1.52
7.	Public Lighting	25.67	9.99	22.68
8.	Bulk Supply	89.06	48.15	77.19
9.	Others Temporary Supply	7.00	3.01	6.52
	Grand Total	**1617.41**	**843.76**	**1552.93**

3.8 The revised estimate of sales for FY 2016-17 is lower than that approved by the Commission in the MYT Order primarily on account of lower actual sales during FY 2015-16 as against the approved resulting in revision in the base year sales.

Intra-state T&D Losses

3.9 As per the MYT Order dated 28th April 2016, the T&D loss as approved by the Commission for FY 2016-17 is 13.25% as against CED's submission of 14.00%. While CED is dedicated for reducing the intra-state T&D losses in the UT of Chandigarh, it requests the Hon'ble Commission to consider actual T&D loss of FY

2015-16 as the base for considering reasonable loss reduction target during the Control Period. As discussed in the previous chapter, CED had highlighted that while the sales have increased in the last three years, losses have remained stagnant without much improvement due to majority of the increase in the sales in the LT category.

3.10 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."

3.11 CED in this regard submits that the various technical and technological improvement proposed under IPDS and other schemes shall be useful in bringing about the desired reduction in loss levels. Since these schemes are currently under implementation, CED requests the Hon'ble Commission to revise the T&D loss level for FY 2016-17 to 14.00% in line with its submission in the Business Plan and MYT Petition.

3.12 In the business plan as well as MYT Petition, CED had also pointed out the following issue due to which it had to bear additional inter-state losses which were not getting accounted:

"Further, CED reiterates and submits before the Hon'ble Commission that actual distribution losses for UT of Chandigarh are much lower considering interstate point inside the limits of UT of Chandigarh. The energy input in CED is currently being metered at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB) which has resulted in higher T&D losses for CED. The CED has to bear the additional losses of interstate circuit due to not having any interstate point in its boundary. The CED has taken up the issue with CEA and PGCIL and expect the early resolution of the matter."

3.13 Accordingly, CED had estimated the T&D losses of 14% for FY 2016-17 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 Further, Hon'ble Commission in its MYT Order had also undertaken truing-up of FY 2014-15 and had computed T&D loss of 12.81% based on the sales of 1512.54 Mus contained in the audited accounts for FY 2014-15 and accordingly decided to keep the T&D loss trajectory as per the business plan. In this regard, it is submitted that there was an inadvertent error with respect to the sales recorded in the audited accounts of FY 2014-15 and CED has already written to CAG for rectification of the error. The correct sales figure for FY 2014-15 is 1471 Mus which would lead to a loss level of 15.17% for FY 2014-15. In view of the restatement of actual T&D loss of FY 2014-15 due to correction in sales figure, it is submitted that the T&D loss target approved for MYT Control Period is unrealistic and the Hon'ble Commission is requested to restate the loss targets.

Energy Requirement

3.15 For computation of energy requirement, CED has estimated inter-state transmission losses based up on the 52 weeks (30th March 2015-27th March 2016) moving average of regional transmission losses of approximately 3.77%.

3.16 The revised energy balance for FY 2016-17 is as given in the table below, the Hon'ble Commission is requested to approve the same :-

Table 18: Energy Balance for FY 2016-17

Energy Available	
Units Procured	1,789.99
Inter-State Transmission Loss	3.77%
Transmission Loss (Mus)	67.48
Net Energy Available at UT Periphery	**1,722.50**
Power Available within UT	
Power planned to be procured from NET Metering Mode (In MU's)	1.53
Power planned to procure from Gross Metering Mode (In MU's)	0.09
Total Energy Available	**1,724.12**
Actual Energy Sales (Mus)	1,552.93
T&D Loss (%)	14.00%
T&D Loss (in MUs)	252.80
Total Energy Required at UT Periphery (MUs)	**1805.73**
Demand Supply (Gap) / Surplus	**(81.61)**

Power Purchase Quantum and Cost

3.17 The Petitioner submits that it procures power from various sources such as:

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

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

3.18 For the purpose of review of FY 2016-17 power purchase quantum, CED 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/OPR/103/02/2016/9795-9818 dated 21.10.2016.

3.19 Shortfall in power from allocations, if any, based on the estimated sales and losses for FY 2016-17 has been considered to be procured from short term sources i.e. power exchange, other trading sources.

3.20 The actual six months power purchase quantum and cost is given in the table below.

Table 19: Actual 6 months Power Purchase cost for FY 2016-17 (Rs Crores)

Particulars	Units (in MUs)	Actual Cost (in Rs. Cr.)
NTPC	239.88	78.19
NHPC	162.51	44.99
APCL	14.50	8.51
NPCIL	59.87	18.35
SJVNL	59.56	14.56
BBMB	360.39	95.66
THDC	95.17	46.26
Bilateral	45.70	1.11
CREST	0.765	0.52
Pvt. Solar	0.05	0.04
PGCIL Charges	-	16.06
NRLDC Charges	-	0.10
Reactive Energy	-	0.02
REC Cost	-	4.47
Short-Term Purchase	119.94	26.17
Grand Total	**1158.33**	**355.01**

3.21 CED is also required to procure power from renewable sources for meeting the RPO as per the renewable regulations. Based on the revised sales for FY 2016-17, applicable RPO and actual renewable power / REC procured during first six months of FY 2016-17, the balance RPO compliance during the six months have been computed. The table below presents the actual Non- Solar and Solar RPO compliance for the first six months of FY 16-17.

Table 20: RPO Requirement (Solar and Non-Solar) and REC purchase (first 6 months) for FY 16-17

	Target			Actual (6 months)	
	RPO %	Revised Sales	Units (in MUs)	Units (in MUs)	Cost (Rs. Cr.)
Solar	1.15%	1,552.93	17.86	5.76	1.86
Non-Solar	2.80%	1,552.93	43.48	20.50	3.13
Total	**3.95%**		**61.34**	**26.26**	**4.99**

Table 21: Breakup of quantum purchased under net metering and gross metering and projection for next 6 months (Solar and Non-Solar) for FY 16-17

Category	Actual (Apr-Sep 2016)		Projected (Oct 2016 – Mar 2017)		Total FY 2016-17 (Estimated)	
	Units (in MUs)	Cost (in Rs. Cr.)	Units (in MUs)	Cost (in Rs. Cr.)	Units (in MUs)	Cost (in Rs. Cr.)
CREST	1.96	0.52	1.96	0.52	3.92	1.04
Pvt Solar	0.05	0.04	0.05	0.04	0.09	0.07
Solar REC	3.80	1.34	10.05	3.55	13.85	4.89
Non-Solar REC	20.50	3.13	22.98	3.51	43.48	6.64
Total					**61.34**	**12.65**

3.22 The power purchase cost for FY 2016-17 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 CED and corresponding annual fixed charges approved for the generating stations as per their recent tariff orders for the control period (FY 2014-19) approved by CERC. For generating plants where tariff orders are still pending, fixed charges from FY 2013-14 as per the CERC Order have been considered and an escalation of 5% has 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 2016-17.

c. In case of BBMB the average rate of power as per the recent invoice 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.

3.23 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 22: Estimated Power Purchase Quantum and Cost for FY 2016-17

Particulars	Energy in MUs	Gross Total (Rs. Cr.)
NTPC	460.69	156.37
NHPC	216.68	70.88
APCL	29.00	17.39
NPCIL	119.74	36.15
SJVNL	79.41	21.95
BBMB	637.64	205.32
THDC	126.89	75.22
UI/Power Exchange	201.54	58.81
Crest	1.53	1.04
Pvt. Solar	0.09	0.07
REC Cost	-	11.53
Other Charges		
PGCIL Charges	-	32.12
NRLDC Charges	-	0.20
Reactive Energy	-	0.04
Open Access Charges	-	1.11
Grand Total	**1,873.21**	**688.20**

3.24 While the Commission had approved a total power purchase cost of Rs 728.70 Crores for FY 2016-17, the estimated power purchase cost is lower primarily on account of revision of power procurement from BBMB plant where the average rate has reduced due to revision in per unit rate.

Operations and Maintenance Expenses

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

3.26 Accordingly, CED has considered employee and A&G expense for FY 2016-17 as approved by the Hon'ble Commission in the MYT Order dated 28th April 2016.

However, in case of R&M expense, CED had brought to the notice of the Hon'ble Commission regarding the unreasonable approval of R&M expense on account of computation of 'K' factor which was not in line with the approve GFA by the Commission for the past years. This had already been highlighted by CED in the review petition of the MYT Order.

3.27 It is submitted that the Commission has considered GFA as per Fixed Asset Register and has not approved entire GFA as recorded in annual accounts during the past years. However, the Commission has considered K Factor as 2.6% for the MYT period as approved in Business Plan (based on the total assets of CED) which has resulted in low R&M expenses approved for MYT period. While R&M expenses approved for FY 13-14, FY 14-15 and FY 15-16 are Rs 10.79 Cr, Rs 13.6 Cr and Rs 13.87 Cr, respectively, the same stands at Rs 6.70 Cr, Rs 8.64 Cr and Rs 10.51 Cr respectively for MYT period FY 2016-17 to FY 2018-19 and are considerably lower than previous years.

Based on the approved GFA by the Hon'ble Commission, the revised K factor has been computed as below:

Table 23: Calculation for estimating K Factor

Particulars	FY12	FY13	FY14	FY15
Opening GFA approved	170.21	174.09	176.17	213.71
R&M Approved	9.23	8.21	10.79	13.60
R&M as % of GFA	5.4%	4.7%	6.1%	6.4%
Average of last 3 years	**5.73%**			

3.28 The Hon'ble Commission is therefore requested to rectify the inconsistency with respect to computation of K factor and approve the revised K factor computed as per the table above. CED has computed the revised R&M expense for FY 2016-17 based on the revised K factor of 5.73% as below:

Table 24: Approved and Estimated R&M Expenses for FY 2016-17

Particular		2015-16	2016-17
		Actual	Projected
Opening Assets as approved in MYT Order	Rs. Cr.	230.30	242.59
Addition During the year	Rs. Cr.	12.29	48.13
Closing assets	Rs. Cr.	242.59	290.72
Average GFA	Rs. Cr.		266.65
K Factor	%		5.73%
Inflation Index as approved in MYT Order	%		7.33%
Revised R&M Expense	**Rs. Cr.**		**14.93**

3.29 In its earlier petition, CED had requested the Hon'ble Commission for recording of expenses towards entitled quantum of concessional power to the employees of CED as part of employee cost for appropriate recording of expenditure in the accounts of CED. In the review petition to MYT Order dated 28th April 2016, CED had submitted detailed justification along with similar approach being followed in the State of Punjab and later approved by the Punjab Electricity Regulatory Commission post the decision of Hon'ble APTEL in this regard. The same is reproduced below for the reference of the Hon'ble Commission:

"In this regard, it is intimated that Ministry of Home Affairs (GOI) vide letter U-14035/4/96-CHD dated 10.6.1999 has decided in consultation with Ministry of Finance, Deptt of Expenditure that the employees working in the Electricity Operation Circle of Chandigarh Administration who were in receipt of PSEB pay scales before 31.12.1985 shall be placed in the PSEB pattern of pay scales from the Central pattern of pay scales to PSEB pattern of pay scales.

It is pertinent to mention that the same practice is being followed by the PSPCL (erstwhile PSEB) and the expense related to electricity concession is included in their CHART OF ACCOUNTS under ACCOUNT HEAD 75.7 "STAFF WELFARE EXPENSES" (copy attached as Annexure-E). Audited accounts of PSPCL for FY 2011-12 as submitted to Hon'ble PSERC (copy attached as Annexure-F) clearly shows that an amount of Rs39,80,41, 032/- on account of "Staff Welfare Expenses" is the part of their Gross Employee Cost of Rs 38,09,08,90,698/- and PSPCL had filed Gross Employee Cost of Rs 38,09,08,90,698/- (or Net Employee Cost of Rs 3700.67 Cr) in its true up petition for FY 2011-12 in the ARR petition for FY 2014-15 (copy attached as Annexure-G).

Further, with regard to the employees cost, Hon'ble APTEL vide its judgement dated 11.9.14 in appeal no. 174/ 2012 and its subsequent judgement dated 30.3.2015 in review petition 6/2015 pertaining to the employee cost had held (paragraph 11 of the judgement dated 30.3.15) as under:-

"This Appellate Tribunal while dealing with the issue of Wholesale Price Index, framed the said issue and discussed the same at length and then decided the said issue. This Appellate Tribunal in its previous judgment also considered the Regulations and the Wholesale Price Index and held that actual costs need to be considered. We after considering the previous judgment and discussion on the said

issue at length in our judgment dated 11.09.2014 in the said Appeal No. 174 of 2012, after referring to the decision of the State Commission on the Wholesale Price Index, directed that the actual amount spent, subject to prudence check, is to be considered. We do not find any error apparent on the face of our judgment dated 8 11.09.2014 warranting us to review our aforesaid judgment. For a moment, if we accept the contention of the Review Petitioner/State Commission that the finding in para no. 40.1. of our judgment dated 11.09.2014 is to be deleted, then it would result in the Issue No. (ii) framed being rendered without any finding and would also result in the previous decisions also being overruled/reversed. While disposing of the Issue Nos. (i) & (ii) in our judgment in Appeal No. 174 of 2012, we expressed our view in para nos. 17 & 18 of our judgment which we have already quoted above".

In view the above judgement of Hon'ble APTEL, Hon'ble PSERC had allowed the total employee cost of Rs 3700.67 Cr for FY 2011-12 in its tariff order for FY 2014-15 (copy attached as Annexure-H).

UT Chandigarh being a part of erstwhile State of Punjab follows rules and procedures as set out by the PSPCL (erstwhile PSEB). CED is providing electricity concession to its employees on the pattern of PSPCL as per its circular no. 19/2011 dated 7.1.2011 (copy attached as Annexure-I) duly adopted by Finance Department UT Chandigarh vide letter no. 27/ 1/58-UTFII(12)-2011/4242 dated 31.5.2011 received through CE UT office memo no. 5475 dated 10.6.2011(copy attached as Annexure-J) . Therefore, the provision of providing electricity concession is the part of the practice being followed by PSPCL (erstwhile PSEB). CED is not providing overtime and its employees work days and nights (sometime more than 16 Hrs) to maintain the continuity of supply in all inclement weather (storm, rain, peak hot and cold weather conditions).

It is pertinent to mention here that PSPCL has stopped electricity concession to their employees who have joined after 01.01.2011 and the same has been adopted by CED and no employee of CED is being given electricity concession who has joined after 01.01.2011.

The electricity concession provided to its employees (who joined before 01.01.2011) by CED is capped based on pay grade (100, 125 and 155 Units) and provided to the employees from the perspective of employee perquisites. As on 31.3.2016, 967 employees are working against 1491 posts as per Manpower Study. Therefore, existing welfare benefits need not be curtailed at the disadvantage of the employees.

Electricity is the most dangerous and highly risk prone profession. The provision of electricity concession directly pertains to the welfare benefits and serve as a motivation tool to its employees.

In view of the above submission, CED request the Hon'ble Commission to approve the same as part of employee cost.

It is worth to mention here that UT Powermen Union Chandigarh has called a One day strike on 16th June 2016 and stoppage of electricity concession to CED employees is one of the point in their agenda (copy attached as Annexure-K)

Keeping in view the above mentioned orders of MoHA, APTEL and Hon'ble PSERC & to maintain Industrial peace, electricity concession to the employees of CED be allowed under total employee expenses."

3.30 Based on the judgement of Hon'ble APTEL, PSERC had approved the actual employee cost as recorded in the books of accounts of PSPCL which included the cost of electricity concession entitled to the employees of the utility.

3.31 Therefore, in line with the submission in the review petition, CED requests the Hon'ble Commission to approve the cost of electricity concession as part of employee cost for FY 2016-17 as per PSPCL circulars and methodology (kindly refer point 22 under General Conditions for LT & HT Supply). The projected cost based on estimated units computes to Rs. 0.58 Crore which has been added to the approved employee cost of FY 2016-17.

3.32 The actual O&M expense for first six months of FY 2016-17 under the three heads Employee expense, R&M expense and A&G expense are summarized in table below:

Table 25: Actual O&M Expense for six months of FY 2016-17 (Rs. Crore)

Particulars	Approved	Actual FY 2016-17 (Apr-Sep)
Employee Expense	65.35	33.25
R&M Expense	6.70	7.37
A&G Expense	6.16	2.28
Total O&M Expenses	**78.21**	**42.92**

3.33 Based on the actual six months information of various heads under O&M expense, it is clearly observed that the approved amount of Rs. 6.70 Crore under the R&M expense head is very less as compared to the actual expense of Rs. 7.37 Crore which has already been incurred by CED during the first six months of FY 2016-17. The same has already been highlighted in the previous paragraphs and the Hon'ble Commission is requested to kindly revise the approval for R&M expense based on CED's proposal.

3.34 The following table presents the estimated and approved Employees' Expenses, R&M expenses and A&G expense to be incurred by the CED in FY 2016-17.

Table 26: Approved and Estimated O&M Expenses for FY 2016-17 (Rs Crores)

Particulars	Approved	Estimated
Employee Expense	65.35	65.93
R&M Expense	6.70	14.93
A&G Expense	6.16	6.16
Total O&M Expenses	**78.21**	**87.02**

3.35 The Hon'ble Commission is requested to approve the total O&M expense as computed in the table above after approving the revised R&M as per the details provided.

Capital Expenditure and Capitalization

3.36 The Hon'ble Commission had approved a capital expenditure of Rs.37.09 crores for CED for FY 2016-17. CED plans to meet the approved capital expenditure during the remaining six months. The details of capital expenditure and capitalization is as below:

Table 27: Capital Expenditure and Capitalization for first 6 months of FY 2016-17 (Rs Crores)

Particulars	Approved	Actual 2016-17 (Apr-Sep)
Capital Expenditure	37.09	8.39
Capitalization	48.13	5.18

GFA and Depreciation

3.37 As also discussed in the previous Chapter, CED has considered the approved GFA by the Hon'ble Commission in absence of the FAR for assets prior to 2005 and has initiated work on preparation of FAR for assets created prior to 2005. Therefore, the opening assets approved by the Hon'ble Commission for FY 2015-16 have been considered while the actual addition of Rs. 12.29 Crore for FY 2015-16 has been considered for arriving at the opening assets of FY 2016-17.

3.38 For FY 2016-17, approved capitalization as per the MYT Order has been considered and any variation shall be submitted at the time of truing-up for the year.

3.39 CED requests the Hon'ble Commission to approve the fixed assets in the table below:

Table 28: Approved and Estimated Assets Addition for FY 2016-17 (Rs Crores)

Particulars	FY 2015-16 (Actual)	FY 2016-17 (Projected)
Opening GFA (Approved as per T.O. dated 28th April 2016)	230.30	242.59
Asset Capitalized	12.29	48.13
Closing GFA	242.59	290.72

3.40 The petitioner submits that it has initiated activities with respect to the preparation of Fixed Asset Register for the period prior to year 2005 and request the Hon'ble Commission to approve the same as and when they are prepared.

3.41 Average depreciation rate of 5.45% as approved by the Hon'ble Commission for FY 2016-17 has been considered for arriving at the revised depreciation for FY 2016-17. The approved and revised depreciation for FY 2016-17 as computed below:

Table 29: Approved and Estimated Depreciation for FY 2016-17 (Rs Crores)

Particulars	Approved	Estimated
Opening Assets at the Beginning of the year	240.26	242.59
Addition of assets during the year	48.13	48.13
Gross Fixed assets at the end of the year	288.39	290.72
Average Assets	264.32	266.65
Average Rate of Depreciation	5.45%	5.45%
Depreciation for the year	**14.40**	**14.53**

Interest on Loan

3.42 In line with the methodology adopted by CED for consideration of GFA as approved by the Hon'ble Commission in the MYT Order, the opening normative loan has also been considered on the same lines. The opening normative loan as approved by the Commission for FY 2015-16 has been considered and normative loan with respect to the actual assets capitalized and repayment of 10% of opening assets was considered to arrive at the opening normative loan for FY 2016-17.

3.43 For FY 2016-17 CED has considered the approved GFA addition as per the MYT Order and therefore 70% of the same has been considered towards normative debt.

Repayment of the normative loan during FY 2016-17 has been considered equivalent to the depreciation in line with the MYT Regulations.

3.44 The interest at the SBI PLR rate of 14.05% as on April 1st, 2016 has been applied on the average normative debt in order to project the interest on normative loans for FY 2016-17. The Hon'ble Commission is requested to approve the interest on normative loans as computed in the table below:-

Table 30: Approved and Estimated Interest on Normative Loan for FY 2016-17 (Rs Crores)

Particulars	Approved	Estimated
Opening Normative Loan	41.55	43.18
Add: Normative Loan during the year	33.69	33.69
Less: Normative Repayment	14.40	14.53
Closing Normative Loan	60.84	62.34
Average Normative Loan	51.19	52.76
Rate of Interest (@SBAR rate)	14.05%	14.05%
Interest on Normative Loan including bank charges	**7.19**	**7.41**

Interest on Working Capital

3.45 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

3.46 The SBI advance rate as on 1st April 2016 is considered for computation of interest on working capital. The revised working capital requirement and interest computed as per the regulations is summarized in table below:

Table 31: Interest on Working Capital for FY 2016-17 (Rs Crores)

Particulars	Approved	Estimated
Two months receivables	137.94	134.48
Inventory based on Annual Requirement for previous year	0.34	0.34
Less: Power Purchase Cost of 1 month	(60.72)	(57.35)
Less: Consumer Security Deposit excl. BG/FDR	(143.84)	(141.67)
Total Working after deduction of Security Deposit	**NIL**	**NIL**

Particulars	Approved	Estimated
SBAR Rate (%)	9.30%	9.30%
Interest on Working Capital	-	-

Interest on Consumer Security Deposit

3.47 In accordance with Clause 47(4) of Electricity Act 2003, the distribution licenses is required to pay interest on security deposit collected from the consumers, equivalent to the bank rate as approved by the Commission. Opening consumer security deposit has been considered based on the actual closing for FY 2015-16 and an addition of Rs. 5 Crore has been projected during FY 2016-17. The opening closing balance and estimated addition during the FY 2016-17 and claim of interest on security deposit is given in the table below, CED requests the Commission to approve the same.

Table 32: Interest on Consumer Security Deposit for FY 2016-17 (Rs Crores)

Particulars	Approved (as per T.O. dated 28th April 2016	Estimated
Opening Consumer Security Deposit	138.84	136.67
Net Addition During the year	5.00	5.00
Closing Consumer Security Deposit	143.84	141.67
Average Deposit	141.34	139.17
Bank Rate	7.75%	7.75%
Interest on Consumer Security Deposit	**10.95**	**10.79**

Return on Equity

3.48 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."

3.49 Opening equity for FY 2016-17 has been computed based on the approved opening equity for FY 2015-16 and additional 30% of the actual addition of GFA during FY 2015-16. Since the assets approved in the MYT Order were as per the FAR, the

Hon'ble Commission is requested to approve and consider any updation in FAR with respect to assets prior to 2005. Rate of return on equity is considered 16% post tax as per proviso 27 of the MYT regulations 2014. The proposed RoE for FY 2016-17 is as below:

Table 33: Approved and Estimated Return on Equity for FY 2016-17 (Rs Crores)

Particulars	Approved	Estimated
Opening equity	72.08	72.78
Addition in Equity	14.44	14.44
Closing Equity	86.52	87.22
Average Equity Amount	79.30	80.00
Reasonable return @ 16%	**12.69**	**12.80**

Provision for Bad and Doubtful Debt

3.50 In accordance with Clause 28 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 the Commission, after the generating company / licensee gets the receivables audited, allow a provision for bad debts up to 1% of receivables in the revenue requirement of the licensee.

3.51 Accordingly, CED has proposed the provision for bad and doubtful debts on 1% of the estimated receivables for FY 2016-17. The CED has estimated the provision of bad debt as Rs 8.11 crores for FY 2016-17.

Non- tariff Income

3.52 Non-tariff income estimated for FY 2016-17 has been considered based on the actual NTI for six months of FY 2016-17 which is provided in the table below:-

Table 34: Approved and estimated Non-Tariff Income for FY 2016-17 (Rs Crores)

Particulars	Approved	Actual FY 2016-17 (Apr-Sep)	Estimated
Non-Tariff Income	24.48	8.82	17.63

Revenue on Current Tariff

3.53 The revised estimation of revenue based on the estimated sales and approved tariff for FY 2016-17 is provided in the table below:

Table 35: Approved and Estimated Revenue on Existing Tariff for FY 2016-17 (Rs Crores)

S. No.	Category / Slab of Consumers	Approved	Estimated
A	Domestic	305.54	278.42
B	Commercial	296.26	294.37
C	Large Supply	75.06	84.8
D	Medium Supply	19.79	67.8
E	Small Power	55.97	10.5
F	Agriculture	0.54	0.4
G	Public Lighting	14.48	12.9
H	Bulk Supply	54.40	46.6
I	Others Temporary Supply	5.67	5.3
	Total	**827.72**	**801.17**

FPPCA Billed during the year

3.54 CED has additionally billed a total of Rs.69.80 Crore as FPPCA from the consumers during the first six months of FY 2016-17. The same has been considered towards revenue gap for FY 2016-17.

Estimated Aggregate Revenue Requirement and Deficit for Review of FY 2016-17

3.55 Based on the revised ARR and revenue projection, the revenue gap for FY 2016-17 shall be as below:

Table 36: Estimated Aggregate Revenue Requirement and deficit for the FY 2016-17 (Rs Crores)

S No	Particulars	Approved	Estimated
1.	Cost of power purchase for full year	728.70	688.20
2.	Employee costs	65.35	65.93
3.	R&M Expense	6.70	14.93
4.	Administration and general expenses	6.16	6.16
5.	Depreciation	14.40	14.53
6.	Interest and finance charges	7.19	7.41
7.	Interest on working capital	-	-
8.	Return on Equity	12.69	12.80
9.	Provision for Bad Debt	-	8.11
10.	Interest on Consumer Security Deposit	10.95	10.79
11.	**Total Revenue Requirement**	**852.15**	**828.86**
12.	Less: Non-Tariff Income	24.48	17.63
13.	**Net Revenue Requirement (11-12-13-14)**	**827.66**	**811.23**
14.	Revenue from retail sales at Existing Tariff	827.72	801.17

S No	Particulars	Approved	Estimated
15.	FPPCA	-	69.80
16.	**Revenue Surplus/ (Gap) for the Year**	**0.06**	**59.74**

3.56 The revenue surplus determined for the FY 16-17 amounts to Rs 59.74 Cr and Hon'ble Commission is requested to approve the same. This revenue surplus/ gap has been carried forward to FY 2017-18 for recovery in the tariff.

Chapter 4: Approval of the various ARR Components for FY 2017-18

4.1 The Hon'ble Commission in the MYT Order dated 28th April 2016 had approved ARR for the Control Period FY 2016-17 to FY 2018-19 as per the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014 (MYT Regulations 2014).

4.2 Regulation 8 of the MYT Regulations 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'.

4.3 The petitioner is hereby filing annual performance review for FY 2016-17 along with the review of ARR for FY 2017-18 based on the changes in uncontrollable parameters i.e. sales, power purchase, etc. as per the MYT framework and request the Hon'ble Commission to consider the revision in the ARR based on the actual of FY 2015-16 and 6 months actual for FY 2016-17. The section below covers each parameter in detail along with justification for revision:

Revised Projections for Number of Consumers, Connected Load and Energy sales

4.4 The connected load and number of consumers projections have also been revised considering the actual FY 2015-16 figures and past three / five year growth have been applied as appropriate. The details of the revised number of consumers and connected load is provided in tables below:

Table 37: Category wise Number of Consumers considered for FY17-18 (MUs)

S. No	Categories	FY 16 (Actual)	CAGR Used	FY 17 (Estimated)	FY 18 (Projected)
1.	Domestic	1,88,375	*3.0%*	1,93,967	1,99,724
2.	Commercial	22,661	*2.5%*	23,228	23,808
3.	Large Supply	103	*0.0%*	103	103
4.	Medium Supply	1,255	*4.0%*	1,305	1,357

S. No	Categories	FY 16 (Actual)	CAGR Used	FY 17 (Estimated)	FY 18 (Projected)
5.	Small Power	1,269	*0.0%*	1,269	1,269
6.	Agriculture	120	*0.0%*	120	120
7.	Public Lighting	978	*5.0%*	1,027	1,078
8.	Bulk Supply	667	*5.0%*	700	735
9.	Others Temporary Supply	573	*0.0%*	573	573
10.	**Total**	**2,16,001**		**2,22,292**	**2,28,768**

Table 38: Category wise Connected Load considered for FY17-18 (MUs)

S. No	Categories	FY 16 (Actual)	CAGR Used	FY 17 (Estimated)	FY 18 (Projected)
1.	Domestic	8,18,172	*3.0%*	8,42,717	8,67,998
2.	Commercial	4,00,437	*5.0%*	4,20,458	4,41,481
3.	Large Supply	71,904	*1.0%*	72,623	73,349
4.	Medium Supply	70,162	*5.5%*	73,996	78,039
5.	Small Power	19,364	*1.0%*	19,558	19,753
6.	Agriculture	737	*1.4%*	747	757
7.	Public Lighting	6,243	*3.8%*	6,480	6,726
8.	Bulk Supply	41,916	*1.0%*	42,335	42,759
9.	Others Temporary Supply	3,250	*0.0%*	3,250	3,250
10.	**Total**	**14,32,184**		**14,82,164**	**15,34,113**

4.5 Sales projections across consumer categories for FY 2017-18 has been arrived based on the historic sales data in the respective categories including the actual sales for FY 2015-16 and six months actuals for FY 2016-17. The last five year sales in each category is as below:

Table 39: Category wise Energy Sales over last 5 years (MUs)

S. No	Categories	FY11	FY12	FY13	FY14	FY15
1.	Domestic	518	525.79	586.54	608.24	655.38
2.	Commercial	398	417.36	397.54	446.18	460.21
3.	Large Supply	140	128.72	137.5	123.94	117.20
4.	Medium Supply	89	103.71	103.84	104.53	103.58
5.	Small Power	21	22.02	20.11	20.36	20.50
6.	Agriculture	2	1.27	1.4	1.46	1.67
7.	Public Lighting	17	17.45	21.98	21.20	21.67
8.	Bulk Supply	73	74.67	87.34	86.56	83.49
9.	Others Temporary Supply	27	10.5	8.79	7.68	7.97
10.	**Total**	**1285**	**1301.48**	**1365.04**	**1420.16**	**1471.66**

4.6 The one year, three year and five year CAGR with respect to each category has been reviewed for arriving at the appropriate growth rates to be applied on the actual sales of FY 2015-16 for each category of consumer. The table below provides the CAGR for different years and the growth considered for projecting sales for FY 2017-18.

Table 40: Category wise Energy Sales for FY17-18 (MUs)

S. No	Categories	CAGR 5 years	CAGR 3 years	CAGR 1 year	CAGR used
1.	Domestic	*4.9%*	*3.9%*	*0.5%*	*5.0%*
2.	Commercial	*3.1%*	*5.2%*	*0.7%*	*4.0%*
3.	Large Supply	*-1.2%*	*-1.4%*	*12.5%*	*5.0%*
4.	Medium Supply	*4.5%*	*2.2%*	*7.1%*	*3.0%*
5.	Small Power	*-2.0%*	*-1.9%*	*-7.3%*	*0.0%*
6.	Agriculture	*-5.7%*	*2.1%*	*-10.9%*	*2.1%*
7.	Public Lighting	*5.8%*	*0.8%*	*3.8%*	*0.8%*
8.	Bulk Supply	*1.1%*	*-4.0%*	*-7.5%*	*0.0%*
9.	Others Temporary Supply	*-24.7%*	*-9.5%*	*-18.1%*	*0.0%*
10.	**Total**				

4.7 Based on the above methodology, the approved and revised sales for FY 2017-18 is summarized in the table below:

Table 41: Category wise Sales considered for FY17-18 (MU's)

S. No	Categories	Approved	Projected
1.	Domestic	818.46	726.00
2.	Commercial	507.00	501.15
3.	Large Supply	117.00	145.35
4.	Medium Supply	21.00	117.74
5.	Small Power	104.82	19.01
6.	Agriculture	2.02	1.55
7.	Public Lighting	27.74	22.85
8.	Bulk Supply	92.26	77.19
9.	Others Temporary Supply	7.00	6.52
10.	**Total**	**1697.30**	**1617.36**

Energy Availability and Power Purchase Quantum

4.8 Since Chandigarh Electricity Department does not have any generation capacity of its own, it relies entirely on the allocation of power from the Central Generating Stations including NTPC, NHPC, BBMB, NJPC, 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.

4.9 The Energy availability to CED 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 Northern Regional Power Committee against the Ministry of Power letter No. NRPC/OPR/103/02/2016/9795-9818 dated 21.10.2016. Current allocation from different plants to U.T. of Chandigarh has been considered for the availability to CED for FY 2017-18.

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.

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

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

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 3.5% 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. Estimation of unit generation from Pong and Dehar power plant has been done on the same line.

f. THDC: The unit generation from the Koteshawar 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.

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

4.12 Based on the above assumptions and methodology, the power availability to CED from various generating stations during FY 2017-18 is as summarized below:

Table 42: Energy Available from different plants for FY 2017-18

S. No	Source	Name of Project	Type	Capacity	Total Avg Entitlement in %	Entitlement in MW
1	NTPC	Anta	Gas	419.33	1.96	8.22
2		Auraiya	Gas	663.00	1.28	8.49
3		Dadri GPP	Gas	829.78	0.97	8.05
4		Dadri II TPP	Coal	980.00	0.29	2.84
5		Kahalgaon II	Coal	1,500.00	0.20	3.00
6		Rihand I	Coal	1,000.00	1.27	12.70
7		Rihand II	Coal	1,000.00	1.09	10.90
8		Rihand III	Coal	1,000.00	0.88	8.75
9		Singrauli	Coal	2,000.00	0.27	5.40
10		Unchahar I	Coal	420.00	0.58	2.44
11		Unchahar II	Coal	420.00	1.04	4.37
12		Unchahar III	Coal	210.00	0.80	1.68
13		Jhajjar (Aravali)	Coal	1,500.00	0.39	5.85
14		Koldam	Hydel	800	1.15	9.20
15	NHPC	Chamera I	Hydel	540.00	3.90	21.06

S. No	Source	Name of Project	Type	Capacity	Total Avg Entitlement in %	Entitlement in MW
16		Chamera II	Hydel	300.00	1.59	4.77
17		Chamera III	Hydel	120.00	1.37	3.17
18		Dhauliganga	Hydel	290.00	1.49	4.17
19		Dulhasti	Hydel	390.00	1.24	4.84
20		Parbathi III	Hydel	520.00	1.37	7.12
21		Salal	Hydel	690.00	0.27	1.86
22		Sewa II	Hydel	120.00	1.60	1.92
23		Tanakpur	Hydel	94.00	1.28	1.20
24		Uri-I	Hydel	480.00	0.62	2.98
25		Uri II	Hydel	240.00	0.63	1.52
26	NPCIL	NAPP	Nuclear	440.00	1.88	8.27
27		RAPP (#3 and #4)	Nuclear	440.00	0.66	2.92
28		RAPP(#5 and #6)	Nuclear	440.00	1.45	6.38
29	SJVNL	NATHPA JHAKRI	Hydel	1,500.00	1.04	15.60
		RAMPUR	Hydel	412.00	0.47	40.00
31	BBMB	BBMB 3.5 %	Hydel	4,900.00	3.500	171.50
32		BBMB 1 LU	Hydel	-	-	1 LU per day
33		BBMB 10 LU	Hydel	-	-	10 LU per day
34		PONG	Hydel	396.00	3.500	12.60
35		DEHAR	Hydel	990.00	3.500	34.65
36	THDC	Koteshwar	Hydel	400.00	0.87	2.80
37		Tehri	Hydel	1,000.00	5.11	9.40

4.13 Based on the above entitlements and reasonable assumptions, the power availability to CED from various generating stations during the FY 2017-18 is as summarized below:

Table 43: Energy Available from different plants for FY 2017-18 (in MUs)

S. No	Name of Project	Approved as per T.O. dated 28th April 2016	Projection
	NTPC Stations		
1	Anta	32.51	17.91
2	Auraiya	25.41	20.55
3	Dadri GPP	31.8	28.01
4	Dadri II TPP	12.98	17.37
5	Kahalgaon II	17.47	18.15
6	Rihand I	80.2	83.68

S. No	Name of Project	Approved as per T.O. dated 28th April 2016	Projection
7	Rihand II	68.16	71.82
8	Rihand III	50.47	57.65
9	Singrauli	26.09	39.22
10	Unchahar I	16.19	15.85
11	Unchahar II	27	28.43
12	Unchahar III	10.17	10.93
13	Jhajjar (Aravali)	14.9	21.59
14	Koldam	24.96	34.78
	NHPC Stations		
15	Chamera I	97.44	64.14
16	Chamera II	18.72	23.56
17	Chamera III	9.91	15.01
18	Dhauliganga	17.18	16.70
19	Dulhasti	20.99	23.36
20	Parbathi III	7.33	9.49
21	Salal	8.92	8.24
22	Sewa II	7.19	8.43
23	Tanakpur	5.76	5.73
24	Uri-I	17.47	15.85
25	Uri II	7.52	7.03
	NPCIL Stations		
26	NAPP	37.32	51.14
27	RAPP (#3 and #4)	19.56	20.01
28	RAPP(#5 and #6)	35.13	43.78
	Others		
29	NATHPA JHAKRI	61.81	73.59
30	RAMPUR (ADDITIONAL)	4.08	9.32
31	BBMB 3.5 %	195.86	168.66
32	BBMB 1 LU	36.5	36.50
33	BBMB 10 LU	365	365.00
34	PONG	59.25	45.07
35	DEHAR	111.87	90.06
36	Koteshwar	7.88	10.69
37	Tehri	174.99	156.48

S. No	Name of Project	Approved as per T.O. dated 28th April 2016	Projection
	Annual Total	**1765.99**	**1733.81**

Power Purchase from Renewable Sources /RECs

4.14 Apart from the above allocations from conventional sources, CED 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 and First Amendment Regulations 2014, the Hon'ble Commission under Regulation 1 of JERC (Procurement of Renewable Energy) Regulations has specified Renewable Purchase Obligation (RPOs) targets for all Distribution Licensees/ obligated entities for FY 2010-11 to FY 2021-22.

4.15 The RPO targets for the control period to be achieved by the CED during FY 2017-18 as specified in the Regulations is as follows:

Table 44: CED RPO Obligation for FY 2017-18

FY	Solar RPO (%)	Non-Solar RPO (%)
2017-18	1.50	2.80

4.16 The Chandigarh Electricity Department submits that it intends to meet the RPO as per the directions of the Hon'ble Commission in the MYT Control period as well. CED has planned to meet the Solar RPO partially from the purchase of solar power within the UT of Chandigarh (both Net metering mode and Gross metering mode) while the balance solar obligation is proposed to be met through purchase of Renewable Energy Certificates (REC's).

4.17 The summary of projected Solar and Non-Solar compliance by CED for FY 2017-18 is summarized in the table below:

Table 45: Units to be purchased under RPO for FY 2017-18

Solar Obligation	Projection	
	Units (in MUs)	Cost (Rs. Cr.)
Solar RPO (In %)	1.50%	
Projected Sales	1617.36	
Total Power to be Procured to meet Solar Obligation (In MU)	**24.26**	**9.54**
Breakup of Sources for Solar RPO Compliance		

Solar Obligation	**Projection**	
	Units (in MUs)	**Cost (Rs. Cr.)**
Power planned to be procured from NET Metering Mode (In MW)	8	
Power planned to be procured from NET Metering Mode (In MU's)	11.21	3.92
Power planned to procure from Gross Metering Mode (In MW)	5	
Power planned to procure from Gross Metering Mode (In MU's)	7.01	3.51
RPO to be met with REC (In MU's)	6.04	2.11
Non Solar Obligation	**2017-18**	
Non Solar RPO (In %)	2.80%	
Projected Sales (In MU's)	1617.36	
Total Power to be Procured to meet Non Solar Obligation (In MU's)	**45.29**	**6.79**
Total RPO (Solar and Non-Solar)	69.55	16.34

4.18 Further, CED submits that in absence of any non-solar power plants within the UT of Chandigarh, the Non-Solar RPO compliance shall be done by purchase of non-solar REC's. CED has currently considered procurement of power from gross and net metering similar to that approved in the MYT Order. In case of any shortfall in the same, the balance solar RPO shall be met by way of purchase of REC certificates.

Table 46: Summary of Power Purchase for FY 2017-18 (MUs)

Particulars	**Approved as per T.O. dated 28th April 2016**	**Projection**
Long Term Power Purchase	1765.99	1733.8
Power Procurement (Net Metering)	11.21	11.21
Power Procurement (Gross Metering)	7.01	7.01
Short Term Power	236.91	188.53
Total Power Purchase	**2021.12**	**1940.56**

Power Purchase cost

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

4.20 Also, the actual power purchase cost from other generating sources is available for FY 2015-16 and six months for 2016-17. 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 CED and corresponding annual fixed charges approved for the generating stations as per their recent tariff orders for the control period (FY 2014-19) approved by CERC. For generating plants where tariff orders are still pending, fixed charges from FY 2013-14 have been considered along with one time escalation of 5%.

b. The Energy Charges for thermal plant are computed by escalating the variable charges for FY 2016-17 by 5% and multiplying it with the number of available units for the year.

c. In case of hydro plants the variable charge has been computed based on the revised 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 LU apart from the annual fixed charges and operation and maintenance charges towards the allocation of 3.5%.

e. PGCIL Charges, NRLDC Charges, Reactive Energy charges are computed at an escalation of 10% y-o-y over actuals billed per unit in FY 2016-17 in view of the recent tariff orders issued by the CERC.

f. Shortfall in power after accounting for energy availability from all stations and towards RPO obligation has been considered to be met from short term sources. The rate of short term power has been considered at Rs. 4.00 per unit.

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

Table 47: Projected Power Purchase Cost for FY 2017-18 (Rs Crores)

Plant	Units (in MUs)	Projected Cost (in Rs. Cr.)	Per Unit Cost (Rs./unit)
NTPC Stations			
Anta	17.91	9.14	5.11
Auraiya	20.55	10.73	5.22
Dadri GPP	28.01	11.55	4.12
Dadri II TPP	17.37	8.97	5.16
Kahalgaon II	18.15	6.85	3.77
Rihand I	83.68	20.69	2.47
Rihand II	71.82	18.58	2.59
Rihand III	57.65	18.87	3.27
Singrauli	39.22	8.07	2.06
Unchahar I	15.85	6.19	3.90
Unchahar II	28.43	11.13	3.92
Unchahar III	10.93	4.87	4.46

Plant	Units (in MUs)	Projected Cost (in Rs. Cr.)	Per Unit Cost (Rs./unit)
Koldam	34.78	21.72	6.25
NHPC Stations			
Chamera I	64.14	13.38	2.09
Chamera II	23.56	4.39	1.86
Chamera III	15.01	6.00	4.00
Dhauliganga	16.70	4.75	2.84
Dulhasti	23.36	12.24	5.24
Parbathi III	9.49	5.88	6.20
Salal	8.24	0.90	1.10
Sewa II	8.43	3.37	4.00
Tanakpur	5.73	1.69	2.95
Uri-I	15.85	2.41	1.52
Uri II	7.03	3.15	4.49
APCL	21.59	13.95	6.46
NPCIL			
NAPP	51.14	12.72	2.49
RAPP (#3 and #4)	20.01	5.76	2.88
RAPP(#5 and #6)	43.78	15.67	3.58
SJVNL			
Nathpa Jhakri	73.59	19.13	2.60
Rampur	9.32	2.71	2.90
BBMB	705.29	225.58	3.20
THDC			
Koteshwar	10.69	3.99	3.73
Tehri	156.48	88.28	5.64
Other Sources			
Power Procurement (Net Metering)	11.21	3.92	-
Power Procurement (Gross Metering)	7.01	3.51	-
Short Term Procurement (Bilateral / Exchange /UI)	188.53	75.41	-
Cost of REC certificates		8.91	-
Grand Total	**1940.57**	**695.06**	

4.21 The Other charges comprising of inter-state transmission charges, scheduling charges, etc are projected considering an increase of 10% y-o-y over the estimated cost for FY 2016-17. The projected charges for each head are as summarized in the table below:

Table 48: Transmissions and Other Charges projected for FY 2017-18 (Rs. Crore)

Particulars	Approved	Revised Proposed

Particulars	Approved	Revised Proposed
PGCIL Charges	90.23	35.33
NRLDC Charges	0.3	0.22
Reactive Energy Charges	0.12	0.05
Open Access charges	-	1.22
Total	**90.65**	**36.81**

4.22 Total cost projected for FY 2017-18 with respect to approved power purchase cost in the MYT Order is as provided in table below. The Hon'ble Commission is requested to approve the same.

Table 49: Projected Power Purchase Cost for FY 2017-18 (Rs. Crore)

Particulars	Approved	Revised Proposed
Total Power Purchase Cost	**760.16**	**731.87**

T&D Losses and Energy Requirement

4.23 The T&D loss as approved by the Commission for FY 2017-18 is 12.75% as per the MYT Order dated 28th April 2016 as against CED's submission of 13.75%. While CED is dedicated for reducing the intra-state T&D losses in the UT of Chandigarh, it requests the Hon'ble Commission to consider actual T&D loss of FY 2015-16 as the base for considering reasonable loss reduction target during the Control Period.

4.24 As discussed in the previous chapters with respect to the T&D loss, CED had highlighted that while the sales have increased in the last three years, losses have remained stagnant without much improvement due to majority of the increase in the sales in the LT category.

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."

4.25 CED in this regard submits that the various technical and technological improvement proposed under IPDS and other schemes shall be useful in bringing about the desired reduction in loss levels. Since these schemes are currently under implementation, CED requests the Hon'ble Commission to revise the T&D loss level for FY 2017-18 to 13.75% in line with its submission in the Business Plan and MYT Petition.

4.26 In the business plan as well as MYT Petition, CED had also pointed out the following issue due to which it had to bear additional inter-state losses which were not getting accounted:

"Further, CED reiterates and submits before the Hon'ble Commission that actual distribution losses for UT of Chandigarh are much lower considering interstate point inside the limits of UT of Chandigarh. The energy input in CED is currently being metered at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB) which has resulted in higher T&D losses for CED. The CED has to bear the additional losses of interstate circuit due to not having any interstate point in its boundary. The CED has taken up the issue with CEA and PGCIL and expect the early resolution of the matter."

4.27 Further, Hon'ble Commission in its MYT Order had also undertaken truing-up of FY 2014-15 and had computed T&D loss of 12.81% based on the sales of 1512.54 Mus contained in the audited accounts for FY 2014-15 and accordingly decided to keep the T&D loss trajectory as per the business plan. In this regard, it is submitted that there was an inadvertent error with respect to the sales recorded in the audited accounts of FY 2014-15 and CED has already written to CAG for rectification of the error. The correct sales figure for FY 2014-15 is 1471 Mus which would lead to a loss level of 15.17% for FY 2014-15. In view of the restatement of actual T&D loss of FY 2014-15 due to correction in sales figure, it is submitted that the T&D loss target approved for MYT Control Period is unrealistic and the Hon'ble Commission is requested to restate the loss targets.

4.28 Accordingly, CED had estimated the T&D losses of 13.75% for FY 2017-18 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. The Hon'ble Commission is requested to approve 13.75% intra-state T&D loss for determination of ARR.

Table 50: Target/Projected Distribution Losses for FY17-18

Categories	FY 2017-18
Distribution Losses	**13.75%**

4.29 The Transmission losses in the interstate circuit is considered at 3.77% based up on the recent 52 weeks (30th March 2015-27th March 2016) moving average of regional losses. Based on the losses and sales projected above the Energy Balance is depicted in the table below. The Hon'ble Commission is requested to approve the same.

Table 51: Energy Balance for FY 2017-18

Particulars	**Approved as per T.O. dated 28th April 2016**	**Projection**
Energy Sales	**1,697.30**	**1,617.36**
Loss %	12.75%	13.75%
Loss (MUs)	248.03	257.84
Total Energy Required at UT Periphery	**1,945.33**	**1,875.19**
Energy Available		
Units Procured	**1,765.99**	**1,733.81**
Transmission Loss (%)	3.75%	3.77%
Transmission Loss (MUs)	66.22	65.37
Net Energy Available at UT Periphery	**1,699.77**	**1,668.44**
Power Available within UT		
Power planned to be procured from NET Metering Mode (In MU's)	11.21	11.21
Power planned to procure from Gross Metering Mode (In MU's)	7.01	7.01
Total Energy Available	**1,717.99**	**1,686.66**
Demand Supply (Gap) / Surplus	**(236.91)**	**(188.53)**

Operations and Maintenance Expenses

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

4.31 Accordingly, CED has considered employee and A&G expense for FY 2017-18 as approved by the Hon'ble Commission in the MYT Order dated 28th April 2016.

4.32 For determination of employee expense for the Control Period, the Commission has approved norms based on number of personnel per 1000 consumer and number of personnel per substation based on the actual employee data for the period FY 2012-13 to FY 2014-15 which has resulted in stringent norms as CED is highly understaffed while the consumer base is increasing. Further, due to retirement of employees each year and inadequate manpower to fill the vacant positions have led to further deterioration in these ratio.

4.33 The manpower issue has also been recognized by the Hon’ble Commission and a direction in this regard was given for undertaking manpower study. Post the report of the consultant on the manpower study, the Hon'ble Commission had approved recruitment of manpower by CED vide its order dated 29.12.2014. Also in the MYT Order dated 28th April 2016, the Commission has directed CED to carry out recruitment as per approved manpower study.

4.34 In view of the above, the addition of manpower shall result in higher employee cost as compared to the approved employee cost once the recruitments are undertaken by CED during FY 2017-18. Therefore, CED requests the Hon'ble Commission to consider the impact of employees addition during the Control Period at the time of true-up and revise the norms keeping in view the higher employee strength as a result of recruitment. CED also requests the Hon'ble Commission not to consider any loss on account of increased employee cost due to addition of employee and approve the employee cost based on actual.

4.35 Additionally, with respect to the entitlement of concessional power to the CED employees as detailed in the previous chapter, CED requests the Hon'ble Commission to approve the cost of concessional power as part of employee cost for FY 2017-18. The projected cost based on estimated units computes to Rs. 0.58 Crore which has been added to the approved employee cost of FY 2017-18.

4.36 With respect to the R&M expense, CED had brought to the notice of the Hon'ble Commission regarding the unreasonable approval of R&M expense on account of computation of 'K' factor which was not in line with the approve GFA by the Commission for the past years. This had already been highlighted by CED in the review petition of the MYT Order.

4.37 It is submitted that the Commission has considered GFA as per Fixed Asset Register and has not approved entire GFA as recorded in annual accounts during the past years. However, the Commission has considered K Factor as 2.6% for the MYT period as approved in Business Plan which has resulted in low R&M expenses approved for MYT period. While R&M expenses approved for FY 13-14, FY 14-15 and FY 15-16 are Rs 10.79 Cr, Rs 13.6 Cr and Rs 13.87 Cr, respectively, the same stands at Rs 6.70 Cr, Rs 8.64 Cr and Rs 10.51 Cr respectively for MYT period and are considerably lower than previous years.

4.38 Based on the approved GFA by the Hon'ble Commission, the revised K factor has been computed as below:

Table 52: Calculation for estimating K Factor

Particulars	FY12	FY13	FY14	FY15
Opening GFA approved	170.21	174.09	176.17	213.71
R&M Approved	9.23	8.21	10.79	13.60
R&M as % of GFA	5.4%	4.7%	6.1%	6.4%
Average of last 3 years	**5.73%**			

4.39 The Hon'ble Commission is therefore requested to rectify the inconsistency with respect to computation of K factor and approve the revised K factor computed as per the table above. CED has computed the revised R&M expense for FY 2017-18 based on the revised K factor of 5.73% as below:

Table 53: Approved and Estimated R&M Expenses for FY17-18 (Rs. Crores)

Particulars		Approved (as per T.O. dated 28th April 2016)	Projection
Opening Assets as approved in MYT Order	Rs. Cr.	288.39	290.72
Addition During the year	Rs. Cr.	38.52	38.52
Closing assets	Rs. Cr.	326.91	329.24
Average GFA	Rs. Cr.	307.65	309.98
K Factor	%	2.6%	5.73%
Inflation Index as approved in MYT Order	%	7.33%	7.33%
Revised R&M Expense	**Rs. Cr.**	**8.64**	**19.21**

4.40 The following table presents the estimated and approved Employees' Expenses, R&M expense and A&G expense to be incurred by the CED in FY 2017-18.

Table 54: Approved and Estimated O&M Expenses for FY17-18 (Rs Crores)

Particulars	Approved (as per T.O. dated 28th April 2016	Projection
Employee Expense	69.67	70.25
R&M Expense	8.64	19.21
A&G Expense	6.61	6.61
Total O&M Expenses	**84.92**	**96.04**

4.41 The Hon'ble Commission is requested to approve the total O&M expense as computed in the table above after approving the revised R&M as per the details provided.

GFA and Depreciation

4.42 As highlighted in the previous section, the Gross Fixed Assets have been considered in line with the Commission approved numbers in the MYT Order. This has been done in absence of the FAR for assets prior to 2005 and CED has already issued a tender for selection of consultant for preparation of FAR for assets created prior to 2005. Therefore, the opening assets approved by the Hon'ble Commission for FY 2015-16 have been considered while the actual addition of Rs. 12.29 Crore for FY 2015-16 has been considered for arriving at the opening assets of FY 2016-17.

4.43 For the years FY 2016-17 and FY 2017-18, CED has retained the capital expenditure and capitalization approved as per the MYT Order and any variation shall be submitted at the time of truing-up for the year.

4.44 CED requests the Hon'ble Commission to approve the opening and closing fixed assets in the table below:

Table 55: Approved and Estimated Assets Addition for FY 2017-18 (Rs Crores)

Particulars	Approved	Revised Proposed
Opening GFA (Approved as per T.O. dated 28th April 2016)	288.39	290.72
Asset Capitalized	38.52	38.52
Closing GFA	326.91	329.24

4.45 The petitioner submits that it has initiated activities with respect to the preparation of Fixed Asset Register for the period prior to year 2005 and request the Hon'ble Commission to approve the same as and when they are prepared.

4.46 Average depreciation rate of 5.42% as approved by the Hon'ble Commission for FY 2017-18 has been considered for arriving at the revised depreciation for FY 2017-18. The approved and revised depreciation for FY 2017-18 as computed below:

Table 56: Projected Depreciation for FY 2017-18 (Rs Crores)

Particulars	Approved	Revised Proposed
Average Assets	307.65	309.98
Rate of Depreciation	5.42%	5.42%
Depreciation for the year	**16.69**	**16.80**

Interest on Loan

4.47 In line with the methodology adopted by CED for consideration of GFA as approved by the Hon'ble Commission in the MYT Order, the opening normative loan has also been considered on the same lines. The opening normative loan as approved by the Commission for FY 2015-16 has been considered and normative loan with respect to the actual assets capitalized and repayment of 10% of opening assets was considered to arrive at the opening normative loan for FY 2016-17.

4.48 For FY 2016-17 and FY 2017-18, CED has considered the approved GFA addition as per the MYT Order and therefore 70% of the respective year capitalization has been considered towards normative debt. Repayment of the normative loan during FY 2016-17 and FY 2017-18 has been considered equivalent to the depreciation in line with the MYT Regulations 2014.

4.49 The interest at the SBI PLR rate of 14.05% as on April 1st, 2016 has been applied on the average normative debt in order to project the interest on normative loans for FY 2017-18. The Hon'ble Commission is requested to approve the interest on normative loans as computed in the table below:-

Table 57: Projected Interest on Loan for FY 2017-18 (Rs. Crore)

Particulars	Approved	Revised Proposed
Opening Normative Loan	60.84	62.34
Add:Normative Loan during the year (70% of proposed capitalization)	26.96	26.96
Less: Normative Repayment	16.69	16.80
Closing Normative Loan	71.12	72.50
Average Normative Loan	65.98	67.42
Rate of Interest	14.05%	14.05%
Interest on Normative Loan including bank charges	**9.27**	**9.47**

Interest on Working Capital

4.50 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

4.51 The SBI advance rate as on 1st April 2016 is considered for computation of interest on working capital. The revised working capital requirement and interest computed as per the regulations is summarized in table below:

Table 58: Projected Interest on working Capital Period for FY 2017-18 (Rs Crores)

Particulars	Approved	Revised Proposed
Two months receivables	145.24	145.22
Inventory based on Annual Requirement for previous year	0.34	0.34
Less: Power Purchase Cost of 1 month	(63.35)	(60.99)
Less: Consumer Security Deposit excl. BG/FDR	(148.84)	(146.67)
Total Working after deduction of Security Deposit	**NIL**	**NIL**
SBAR Rate (%)	9.30%	9.30%
Interest on Working Capital	**-**	**-**

Interest on Consumer Security Deposit

4.52 Opening consumer security deposit has been considered based on the actual closing for FY 2015-16 and an addition of Rs. 5 Crore has been projected during FY 2016-17 and 2017-18. The opening closing balance and estimated addition during the FY 2017-18 and claim of interest on security deposit is given in the table below, CED requests the Commission to approve the same.

Table 59: Projected Interest on Consumer Security Deposit for FY 2017-18 (Rs Crores)

Particulars	Approved	Revised Proposed
Opening Consumer Security Deposit	143.84	141.67
Net Addition During the year	5.00	5.00
Closing Consumer Security Deposit	148.84	146.67
Average Deposit	146.34	144.17
Bank Rate	7.75%	7.75%
Interest on Consumer Security Deposit	**11.34**	**11.17**

Return on Equity

4.53 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."

4.54 Opening equity for FY 2017-18 has been considered based on the opening and closing equity determined in the previous chapter. Rate of return on equity is considered 16% post tax as per proviso 27 of the MYT regulations 2014. The proposed RoE for the FY 2017-18 is as below:

Table 60: Projected Return on Equity for FY 2017-18 (Rs Crores)

Particulars	Approved	Revised Proposed
Opening Normative Equity	86.52	87.22
Addition During the year	11.56	11.56
Closing Normative Equity	98.07	98.77
Average Normative Equity	92.29	92.99
Return on Equity@16%	**14.77**	**14.88**

Provision for Bad and Doubtful Debt

4.55 Clause 32 of JERC MYT Regulations, 2014 provides for allowance of bad and doubtful debts upto 1% of the receivable. In view of the past provisioning requirement for bad and doubtful debtors, CED has proposed 1% of the estimated ARR towards bad and doubtful debtors. The CED has estimated the provision of bad debt as Rs 8.71 crores for FY 2016-17.

Non- tariff Income

4.56 Non-tariff income projected for FY 2017-18 has been considered similar to the estimated NTI for FY 2016-17. Projected non-tariff income for FY 2017-18 as below:

Table 61: Projected Non-Tariff Income for FY 2017-18 (Rs Crores)

Particulars	Approved	Revised Proposed
Non-Tariff Income	**25.71**	**17.63**

Aggregate Revenue Requirement and Deficit for Review of FY 2017-18

4.57 Based on the above discussion, the revised projection for Aggregate Revenue Requirement for FY 2017-18 is as given in the table below :-

Table 62: Projected Aggregate Revenue Requirement for FY 2017-18 (Rs Crores)

S. No	Particulars	Approved	Revised Proposed
1.	Cost of power purchase for full year	760.16	731.87
2.	Employee costs	69.67	70.25
3.	Administration and general expenses	6.61	6.61
4.	R&M expenses	8.64	19.21
5.	Depreciation	16.69	16.80
6.	Interest and finance charges	9.27	9.47
7.	Interest on working capital	-	-
8.	Interest on Security Deposit	11.34	11.17
9.	Return on NFA /Equity	14.77	14.88
10.	Provision for Bad Debt	-	8.71
11.	**Total Revenue Requirement**	**897.14**	**888.98**
12.	Less: Non-Tariff Income	25.71	17.63
13.	**Net Revenue Requirement**	**871.43**	**871.35**

Revenue based on Existing Tariff

4.58 Based on the revised projection of sale and the existing tariff approved by the Commission as per the MYT Order dated 28th April 2016, the estimated revenue for FY 2017-18 is summarized in table below:

Table 63: Revised Projections for Revenue on Existing Tariff for FY17-18 (Rs Crores)

S. No.	Category / Slab of Consumers	Projected
A	Domestic	292.14
B	Commercial	306.61
C	Large Supply	88.73
D	Medium Supply	70.01
E	Small Power	10.55
F	Agriculture	0.45
G	Public Lighting	13.03
H	Bulk Supply	46.69
I	Others Temporary Supply	5.28
	Total	**833.49**

Revenue Surplus/ Gap for FY 2017-18

4.59 Based on the revised ARR and revenue for FY 2017-18, the expected revenue gap is summarized in table below:

Table 64: Proposed Revenue Gap on Existing Tariff for FY 2017-18 (Rs. Crore)

S. No.	Particulars	FY 2017-18
1.	Net Revenue Requirement	871.35
2.	Revenue from retail sales at Existing Tariff	833.49
3.	**Revenue Surplus / (Gap) for the Year**	**(37.85)**

4.60 The above revenue gap is for FY 2017-18 only and does not include any revenue surplus/ gap for true-up of FY 2015-16 and APR for FY 2016-17. The proposed treatment for coverage of the consolidated revenue gap along with carrying cost is detailed in the subsequent Chapter.

Chapter 5: Treatment of Gap and proposal for revised Tariff

5.1 The Hon'ble Commission in its MYT Order dated 28th April 2016 and undertaken truing-up for the period FY 2011-12 to FY 2014-15 along with review of FY 2015-16. Based on the prudence check the Hon'ble Commission had approved the following:

a. Approach the Government for providing budgetary support to meet the approved revenue gap of Rs 208.17 Crores for FY 2011-12 and FY 2013-14
b. Creation of Regulatory asset of Rs. 265.04 Cr. to be liquidated from FY 2017-18 onwards

5.2 With regard to the revenue gap of Rs. 208.17 Cr. for FY 2011-12 and FY 2013-14, it is submitted that, even though the CED is government owned department, CED has been operating under the provisions of the various Regulations laid down by Hon'ble Commission including the Tariff Regulations which provides for commercial principles of operation.

5.3 The Hon'ble Commission has been regulating the tariff of Chandigarh by approving the ARR and corresponding Tariff for recovery of the ARR since FY 2011-12, any revenue gap arising on account of these years should be allowed to be recovered from the applicable tariff in the State and should not be passed to the Government of India.

5.4 Therefore, CED requests the Hon'ble Commission to allow inclusion of the revenue gap of Rs. 208.17 Cr. in the regulatory asset and allow recovery of the same by amortization of regulator asset.

5.5 Also, with regard to the regulatory asset of Rs. 265.04 Cr., the Hon'ble Commission is requested to approve a liquidation schedule and allow recovery of the same in the tariff from FY 2017-18 onwards. Since the revenue gap amounting to Rs. 78.10 Crore is already covered under the Regulatory Asset of Rs. 265.04 Cr. and shall be covered under liquidation of the Regulatory Asset, a similar amount has been reduced from the total revenue gap determined for the FY 2015-16.

5.6 CED proposes amortization of the regulatory asset including revenue gap upto FY 2013-14 of Rs. 208.17 Cr. as well as regulatory asset of Rs. 265.04 approved by the Hon'ble Commission in the MYT Order to be recovered in three equal installments and have accordingly included the first installment of Rs. 157.72 Crore to be recovered as part of the tariff approval for FY 2017-18.

5.7 Based on the truing-up of FY 2015-16, APR of FY 2016-17 and revised ARR of FY 2017-18, the revenue gap for each year is computed as below:

Table 65: Proposed Revenue Gap for period FY 2015-16 to FY 2017-18 (Rs. Crore)

S. No.	Particular	2015-16	2016-17	2017-18
		Actual	Estimated	Projected
1.	Net Revenue Requirement	778.71	811.23	871.35
2.	Revenue on existing tariff	656.59	801.17	833.49
3.	FPPCA Charged	3.47	69.80	-
4.	Surplus/(Gap) for the year	(118.66)	59.74	(37.85)
5.	Less: Gap covered under Regulatory Asset	78.10		
6.	Net Gap	(40.56)	59.74	(37.85)

5.8 As per clause 4 of Regulation 8 of the MYT Regulations 2014:

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

5.9 Thus in accordance with regulations quoted above and the yearly revenue gap presented in the preceding table for the period FY16-FY18, the table below presents the revenue gap along with carrying cost for the period.

Table 66: Propsoed Revenue Gap inclusive of carrying cost (Rs. Crore)

Particulars	FY 15-16	FY 16-17	FY 17-18
Opening Gap	-	(44.33)	15.42
Addition	(40.56)	59.74	(37.85)
Add: Amortization of Regulatory Asset	-	-	(157.72)
Closing	(40.56)	15.42	(180.16)
Interest Rate	9.30%	9.30%	9.30%
Carrying Cost	(3.77)	-	-
Closing Gap	(44.33)	15.42	(180.16)

5.10 In view of the above submission, CED humbly requests the Hon'ble Commission to approve the total gap for the period FY16-FY18 amounting to Rs 180.16 Crores.

5.11 As submitted in the previous chapter the computed revenue at existing tariff for the MYT period is inadequate to meet the projected annual revenue requirement, accordingly CED has proposed revision in retail tariff for various categories for FY 17-18.

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

Table 67: Existing and Proposed Tariff

Tariff	EXISTING TARIFF		PROPOSED TARIFF	
Category	Variable Cost (Rs. /kWh)	Fixed Cost (Rs/kW/ Month)	Variable Cost (Rs. /kWh)	Fixed Cost (Rs/kW/ Month)
Domestic				
0-150 kWh	2.55	10.00	2.75	12.00
151-400 kWh	4.80	10.00	6.00	12.00
Above 400 kWh	5.00	10.00	6.20	12.00
Commercial			-	-
0-150 kWh	5.00	20.00	6.20	24.00
151-400 kWh	5.20	100.00	6.40	122.00
Above 400 kWh	5.45	100.00	6.80	122.00
Large Supply	5.65	100.00	7.00	122.00
Medium Supply	5.35	100.00	6.50	122.00
Small Power	5.30	20.00	6.45	24.00
Agriculture	2.90	-	2.90	-
Public Lighting	5.35	100.00	6.50	122.00
Bulk Supply	5.55	100.00	6.80	122.00
Others Temporary Supply	8.10	-	9.90	-

5.13 It is further requested that while the above revision shall lead to recovery of the limited gap during FY 2015-16 to FY 2017-18 as well as partial amortization of the regulatory asset as approved by the Commission in the MYT Order dated 28th April 2016.

5.14 In view of the above submission, it can be seen that the tariff structure proposed by CED for the FY 2017-18 will help it meet the revenue deficit resulting from prior year and revised projection for FY 2017-18.

Table 68: Revised Revenue Gap based on Proposed Tariff (Rs. Crore)

Particulars	FY 17-18
ARR for FY 17-18	871.35
Revenue at Existing Tariff	833.49
Surplus/ (Gap) for the year	(37.85)
Add: Surplus/ (Gap) carried forward	15.42
Add: Amortization of Regulatory Asset	(157.72)
Total Gap	(180.16)
Additional Revenue from Proposed Tariff	182.75
Surplus/ (Gap) to carry Forward	**1.25**

5.15 In light of the above submission the CED requests the Hon'ble Commission to approve the revised tariff proposals.

Changes to Tariff Schedule

New SPS (Single Point Supply) category for residents of JJ Clusters/ Slum Dwellers/ Unauthorized Colonies & Structures / Resident outside Lal Dora –to be given through leading person.

5.16 The Hon'ble Commission vide its approved tariff order dated 28th April 2016 passed following order in proposed category:-

*"At the same time, the proposal of the Petitioner is not in line with the provisions of Electricity Act 2003. The Commission is of the view that the supply is to be given through **regular connections only**. Keeping in view of the High Court Judgement, these connections should be released with a proviso that installation of meters is an interim arrangement for and can in no way be construed as right to permanent installation of meters".*

5.17 For following above directions, CED is facing two operational difficulties:-

1. As residents of such JJ Clusters/ Slum Dwellers/ Unauthorized Colonies & Structures / Resident outside Lal Dora do not possess owner/ occupancy certificate regarding premise in question as required by Supply Code Regulations 2010 for applying for connection, CED faces lot of difficulties in releasing connections to them.
2. For giving individual regular connection to such residents, proper distribution system is required to be laid for huge Capex has to be incurred. Since these unauthorized structures can be removed by Government any time, such huge Capex invested may become infructuous.

5.18 Therefore, to avoid theft of electricity and ensure public safety, CED has proposed to release such connections under a leading person/contractor.

5.19 Hon'ble Commission is requested to allow this category for this control period. At the end of the control period, Hon'ble Commission may review the continuation of the same.

Chapter 6: Proposed Tariff Schedule

6.1 This chapter elucidates the proposed fixed and energy charges for FY 2017-18 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. 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	10.0	12.00	2.55	2.75
151-400 kWh			4.80	6.00
Above 400 KWh			5.00	6.20

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)
b. Private educational institutes viz schools, colleges, universities not recognized by Chandigarh administration
c. Coaching institutes and research institutes (Other than those recognized by the Chandigarh Administration)
d. Auditoriums, Hospitals, clinics, dispensaries, nursing homes / diagnostic centers (other than those run by the Chandigarh Administration).
e. Railways (other than traction)
f. Hotels, restaurants, guest houses, boarding / lodging houses, marriage houses
g. Cinemas
h. Banks
i. Petrol pumps.
j. Government / Public Sector offices and undertakings
k. Public halls, auditoriums, exhibitions, theatres, circus, cinemas etc.
l. All other establishments, i.e., shops, chemists, tailors, washing, dyeing etc. which do not come under the Factories Act.
m. Cattle farms, fisheries, piggeries, poultry farms, floriculture, horticulture, plant nursery Farm houses being used for commercial activity.
n. Ice-cream parlors, bars, coffee houses etc.
o. Any other category of commercial consumers not specified/covered in any other category in this Schedule.

NRS supply shall also be applicable to multi consumer 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	6.20
151-400 kWh	*	*	5.20	6.40
Above 400 KWh	*	*	5.45	6.80

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

Connected Load	Fixed charge (Rs. per KW per Month)	
	Existing	Proposed
0-20 KW	20	24
Above 20 KW	100	122

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	100	122	5.65	7.00

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	100.00	122	5.35	6.50

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 (Rs. Per KW per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	20	24	5.30	6.45

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 (AR)

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 (Rs. Per KW per Month)		Energy charge (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 signaling system, road and park lighting managed by municipal corporation, panchayats, institutions(at the discretion of the supplier)etc.

The tariff schedule shall also apply for use of electricity by street lights managed/outsourced to an external agency and advertisement boards, sign boards, bill boards, 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	100.00	122	5.35	6.50

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	100.00	122	7.10	8.70

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	100.00	122	5.55	6.80

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

CHARACTEROFSERVICE

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

TARIFF

Consumption	Fixed charge	Energy charge

range	(Rs. Per KW per Month)		(Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	0.00	0.00	8.10	9.90

Note- No FPPCA shall be levied on Temporary Supply consumers.

10. Single Point Supply (SPS) Category

Single Point Supply (SPS) Category for Temporary Supply to residents of JJ Clusters/ Slum Dwellers/ Unauthorized Colonies & Structures / Resident outside lal dora

APPLICABILITY
This schedule shall apply for charging and providing **Temporary supply** of electricity to JJ Clusters/ Slum Dwellers/ Unauthorized Colonies & Structures / Resident outside lal dora on single point supply system through leading person (e.g. a resident welfare association or an authorized leading person or competent company/ firm or contractor) for predominantly domestic purpose and predominantly commercial purpose

1. The single point supply connection shall be allowed to the leading person with the approval of the competent authority at one or more points.
2. The leading person shall be responsible for giving further service connections to the residents beyond the single point supply connection.
3. The leading person shall follow the terms and conditions mentioned in JERC Electricity Supply Code Regulation, tariff orders and other related regulations issued from time to time.
4. The leading person shall raise and collect the electricity bill to the residents as per approved tariff order notified by JERC from time to time. CED shall issue electricity bill to the leading person for the single point supply connection.
5. The concerned Executive Engineer shall monitor the metering, reading, billing, collection and system network on the basis of reports submitted by concerned SDO on monthly basis.
6. The metering equipments already installed may be removed by leading person and handed over to CED.
7. In case of any consumer complaints, the decision of concerned Executive Engineer shall be final.
8. The leading person shall obtain the initial consumption security from the residents based on load applied as approved by Hon'ble JERC from time to time.. The Leading person shall deposit to CED four times the ACD collected from the residents in the form as specified by the JERC in Electricity Supply Code Regulation/ order.
9. The leading person will be allowed to levy one time service connection charges as notified by JERC from time to time . The service lines and other infrastructure shall, on the expiry or termination of the contract , become the property of CED.
10. The leading person shall follow Measures relating to safety and electric supply regulation notified by CEA from time to time.

11. In case of violation of any terms and conditions/ unsatisfactory services, the concerned Executive Engineer may terminate the contract with 10 days notice to the leading person and forfeit the ACD deposited as security.
12. Each consumer will submit an affidavit in the prescribed format that he or she won't claim regularization of any unauthorized occupation/ structure on the basis of release of electricity connection to them. Wherever there are encroachment or unauthorized structure, the same are liable to be removed without any notice to the leading person and leading person will have no claim due to loss of business.
13. Concerned SDO shall take the reading of SPS connection on 1st day of month and bill shall be issued to leading person by 5th of the every month and leading person shall make the payment of the bill 20th of every month or as per computer billing schedule. In case of non-payment, concerned XEN shall ensure disconnection as per rules and recovery of defaulting amount
14. Checking of theft shall be the sole responsibility of the leading person. However if required, leading person will submit evidence to concerned SDO for lodging FIR under section 135 of EA 2003
15. Amicable Settlement, Dispute Resolution body and Arbitration shall be dealt as per the agreement.
16. No FPPCA, Demand Surcharge, Power Factor surcharge shall be levied on this category.
17. Leading person other than RWA, sarpanch shall be selected through competitive bidding on commission basis. Concerned XEN 'OP' is authorized to select the mode of "Leading Person" to ensure that no theft of electricity takes place under his jurisdiction and to avoid revenue loss to the Electricity Department.

CHARACTER OF SERVICE

AC, 50 cycles, Single phase 230 volts or three phase 400 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.

TARIFF

Consumption range	Fixed charge (Rs. per KW per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
Predominantly domestic purpose	*	*	*	3.10
Predominantly commercial purpose	*	*	*	6.10

The Commission is requested to approve tariff for such a category as it deem fit.

11. 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 75% of contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal 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 upto 0.7(lagging)

(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

10) Maximum Demand

The maximum demand of supply of electricity during a month shall be twice the largest number of Kilo-Volt Ampere hours (KVAH) delivered at the point of supply to the consumers during any consecutive 30 minutes in the month. However for the consumers having contracted demand above 4000 KVA the maximum demand shall be four times the largest number of Kilo-Volt Ampere hours (KVAH) delivered at the point of supply to the consumers during any consecutive 15 minutes in the month.

11) Delayed payment surcharge shall be applicable to all categories of consumers. Delayed payment surcharge of 2% per month or part thereof shall be levied on all arrears of bills. Such surcharge shall be rounded off to the nearest multiple of one rupee. 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.

12) 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.

13) Prompt Payment Rebate: If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.

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 from90%
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) Unauthorized use of Electricity

A) Cases to be treated as Unauthorized Use of Electricity

1) The following acts on the part of consumer are to be considered as unauthorized use of electricity for the purpose of assessment under the provisions of Section 126 of the Act;

I. Use of electricity by any artificial means; or

II. Unauthorized use of electricity by means without the permission of the concerned person or authority or licensee; or

III. Use of Electricity in the premises where supply is disconnected by the licensee.

IV. Disconnection of neutral

V. Tampering with meter or equipments associated with metering provided by the licensee and not reported to the licensee

B) Cases not to be treated as Unauthorized Use of Electricity

I. If connected load of a domestic category is found to be at variance from the sanctioned/contracted load as a result of increase of load or due to replacement of lamps, fans, fuses, switches, low voltage domestic appliances, fittings, etc it shall neither fall under unauthorized use of electricity (Section 126 of EA 2003) nor under theft of electricity (Section 135 of EA 2003).

II. Supply to activities incidental to main activity, for example supply to chemist shop in nursing homes and hospitals; tea shop, canteen, employees' cooperative store, dispensaries, puncture shop in petrol pumps etc. provided that the connected load for such activities remains within 5% of the sanctioned load or 5 kW, whichever is less.

III. In case of domestic/non-domestic connection(s), extension of supply from connection to other portion of the building/plot including for servant quarters, own parking garages or for social requirements relating to personally religious functions, sports etc. in residential areas so long as the supply is not extended to any portion for which connection has been disconnected due to non-payment of dues and there is no change in the category of use.

IV. Professionals such as Doctors , Engineers, lawyers, CAs, Journalists and Consultants practicing from their residence irrespective of location provided that such use shall not exceed 25% of the area of the premises or 50 sq meters, whichever is less subject to installation of MDI meters.

V. For cottage and commercial activities operating in residences such as repair of shoes by cobbler, dhobi, ironing of clothes, stitching/knitting, paan-shop, bakery products etc shops, tea shops etc. with total load (maximum demand) of 5 kW domestic tariff shall be applicable subject to installation of MDI meters.

VI. In industrial or commercial premises where the supply is used by one or more persons where partition in business takes place or division in the family occurs or where user of the connection changes due to succession.

19) 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.

20) 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.

21) **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**	

Sr.	Description	Proposed
	/supplied by the consumer	
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)**	
i	Domestic Supply Non-residential supply Large Supply Medium Supply Small Supply Bulk Supply Public Lighting Agriculture Power Others- Temporary Supply	200/- 500/- 1500/- 500/- 300/- 800/- 750/- 120/- 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 : (ii) Lamps above 150 watts : 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	Rs.16/- per lamp per month Special quotation Rs.49/- per lamp per month Rs.53/- per lamp per month Rs.90/- per lamp per month

Sr. No.	Description	Proposed
	(iv) Lamps of 400 watts : Rs.101/- per lamp per month	Rs.101/- per lamp per month
	A.3 **Fluorescent tubes:**	
	(i) Single 2 ft 20 watts : Rs.26/- per point per month	Rs.26/- per lamp per month
	(ii) Single 4 ft 40 watts : Rs.43/- per point per month	Rs.43/- per lamp per month
	(iii) Double 2 ft 20 watts : Rs.43/- per point per month	Rs.43/- per lamp per month
	(iv) Double 4 ft 40 watts : Rs.68/- per point per month	Rs.68/- 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 COMEMRCIAL SUPPLY

	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
1	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 nonrefundable).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 :

	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. <u>RECOVERY OF SERVICES CONNECTION CHARGES FOR EXTENTION OF LOAD BY CONSUMERS WHO HAD PAID THE FULL COST OF THE LINE</u>

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 7: Compliance of Directives

6.2 This chapter illustrate the compliance report on the directives issued by the Commission in previous tariff orders

Compliance of New Directives issued by the Commission in the MYT Order

Capital Expenditure

The Petitioner is directed to submit the detailed statement of capital expenditure incurred and capitalization for every quarter, within 15 days in the subsequent quarter.	
Commission's Comments FY 2016-17	**Compliance Report**
The Commission has noted that it has not received full compliance for this directive. The Commission again directs the Petitioner to submit the detailed statement of capital expenditure incurred and capitalization for every quarter, within 15 days in the subsequent quarter, failing which the Commission will be bound to take action according to the JERC Regulations and the Electricity Act, 2003. This may include the non-consideration of capital expenditure of FY 2015-16 onwards for purpose of True-up in all the future Orders.	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2625 Dated 28.11.2016.

Compliance of Directives continued by the Commission in the MYT Order

a. Management Information System

The Commission had observed that CED has not maintained proper data in respect of sales, revenue and revenue expenses as also the category wise / slab wise number of consumers, connected load / demand etc. for proper analysis of the past data based on actual and estimate of proper projections for consideration in the ARR and Tariff Petition. The ED Chandigarh is directed to take steps to build credible & accurate and verifiable data base and management information system (MIS) to meet the requirements for filing ARR & Tariff Petition as per regulatory requirement of the Commission & CERC and also to suit the Multi Year Tariff principles. The ED Chandigarh should get a study conducted on computerized database, and shall give a proposal as to how the department proposes to achieve this & submit an action plan with target dates. Petitioner is directed to submit quarterly progress report and the completion date.	
Commission's Comments FY 2016-17	**Compliance Report**
The status report on MIS had been submitted to the Hon'ble JERC vide memo no. 3017 Dated 24.09.2015. The Commission noted the submission made by the Petitioner and directs the Petitioner to continue submission of the	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2647 Dated 30.11.2016. However, it is submitted that the work of

status report and to ensure that an effective MIS is in place by 31st December 2016.	processing of billing and printing of electricity bills, is assigned to M/s NIELIT who regularly generates the MIS at various parameters. On the basis of above MIS, the respective field Sub Divisions take the action to improve the efficiency etc. It is further submitted that for effective MIS, a number of requirements/proposals were forwarded to the M/s NIELIT. In response of that M/s NIELIT vide their Letter No. 12963 dated 28.11.2016 has informed that as lots of changes have been taken place therefore, there is a need for study of requirements and the scope of the project for submitting the fresh proposal to CED.

b. Metering / Replacement of Non-Functional or Defective / 11kV Meters

The Commission has directed CED to ensure replacement of non-functional or defective meter on a continuous basis and bring the pendency to the minimum and bring in 11KV consumer metering urgently. This may be executed through own staff/ outsourced staff/ EPC Contractor.	
Commission's Comments FY 2016-17	**Compliance Report**
The Hon'ble JERC is conducting suo-moto hearings on consumer metering, reading and billing vide Petition no. 77/2012 and CED has regularly been submitting the status report to Commission. The latest status report on these issues was submitted to Hon'ble JERC vide memo no. 3363 dated 28.10.2015(copy attached). The Commission notes the submission made by the Petitioner and directs the Petitioner to continue with the submission of the status report. Further, the Commission directs the Petitioner to install smart meters as per provision 8.4(3) of National Tariff Policy notified on 06th January 2016.	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2561 Dated 22.11.2016. However, summary is as per under: **A. Status on consumer metering, reading and billing as on 30.9.2016 :** Status on consumer metering, reading and billing as on 30.9.2016 is attached as **Annexure A** **B. Status on Installation of Smart Meters as per Provision 8.4(3) of NTP notified on 6.1.2016.** In this regard, it is intimated that the Smart Grid Pilot Project for approx 30,000 consumers amounting to **Rs. 28.58 Crore** has got approved from NSGM, Ministry of Power, New Delhi and M/s REC Power Distribution Company has been appointed as Project Management Agency. Under this project, around 30,000 smart meters will be installed in the project area. Further, Detailed Project Report (DPR) for the implementation of Smart Grid of whole Chandigarh has been prepared within an approximate cost of **Rs. 373.21 Crore** and having the provision of Smart Meters for balance consumers. The same was discussed in Distribution Reforms Committee (DRC) during the meeting held on dated 16.11.2016 which is being sent to Ministry of Power for the accord of approval accordingly.

c. Energy Audit

The CED is directed to get an Energy Audit conducted through an accredited agency to assess actual technical and commercial losses. Based on the studies, ED Chandigarh shall propose reduction of losses in subsequent years. The investment required to reduce the losses be included in the investment plan for augmentation of T&D system to be submitted to the Commission. Effective technical and administrative measures shall be taken to reduce the commercial losses. The action plan for energy audit and loss reduction measures shall be furnished to the Commission.	
Commission's Comments FY 2016-17	**Compliance Report**
The Commission notes the submission made by the Petitioner and directs the Petitioner to continue submission of the quarterly status report and ensure that Energy Audit Report of FY 2015-16 is submitted along with the next Tariff filing.	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 3208 Dated 15.11.2016. However, it is submitted that the earlier estimate for Design, Supply, Erection, Testing & Commissioning of Energy Audit system with 0.2S & 0.5S AMR compatible DLMS complaint 11 kV & 66 kV HT Meters with GPRS/ GSM enabled Modem was revised as per functional requirement to Rs 89.75 Lacs and has been sent to higher authorities for approval. The further course of action will be taken accordingly.

d. Demand Side Management and Energy Conservation

The CED is directed to conduct a detailed study on demand side management and energy conservation through an external accredited agency for efficient use of electricity by various means. CED is directed to inform the time bound action plan for installation of TOD meters.	
Commission's Comments FY 2016-17	**Compliance Report**
CED had sent a proposal for implementation of Efficient Lighting Program by distribution of LED bulbs in the UT of Chandigarh as a part of Demand Side Management Activity, through M/s. Energy Efficiency Services Limited (EESL), New Delhi to higher authorities for approval. The Commission has received a copy of approval and directed CED to submit a detailed roll out plan at the earliest.	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 3212 Dated 15.11.2016. However, the proposal received from M/s EESL was submitted to competent authority of Chandigarh Administration for the approval and accordingly certain clarification have been sought from M/s EESL vide Memo No.2447 dated 01.09.2016. However, no reply has been received from M/s EESL till date. CED has again taken up the matter with M/s EESL vide Memo No.2716 dated 22.09.2016 & Memo No.3029 dated 24.10.2016 and Memo No.3158 dated 10.11.2016. The action will be taken as per EESL reply.

e. Manpower Deployment

CED was directed to conduct a detailed study on manpower requirement by an accredited agency while taking into account the future load growth in Chandigarh. The Manpower Study was conducted by the Consultant M/S Deloitte and has been approved by the Hon'ble Commission and has been also been submitted to Ministry of Power, GoI for its approval so that the same could be implemented. The Commission had directed the Petitioner to vigorously pursue the matter with the Ministry of

Power and close this matter by January 31, 2016	
Commission's Comments FY 2016-17	**Compliance Report**
The status report on Manpower deployment had been submitted to Hon'ble JERC vide memo no. 3648 Dated 20.11.2015 The Commission notes the submission made by the Petitioner and directs the Petitioner to expedite availability of information as desired by MoP in the meeting held on 09th March 2015. Further the Petitioner should make recruitment of manpower as per the report approved by the Commission and submit the status report by 30th September 2016.	The status report on this directive has been submitted to Hon'ble JERC. However, summary is as per under:- **1. To expedite availability of information as desired by MOP in the meeting held on 9th March 2016.** In this regard it is submitted that the required information in respect of clarifications sought by the MOP, has already been forwarded to the Director (R&R) Govt. of India, Ministry of Power, New Delhi vide this office Memo No. 1680 dated 16.6.16 for approval of Manpower Study as recommended by JERC. However the outcome is still awaited. **2. The Petitioner should make recruitment of manpower as per the report approved by the commission and submit the status report by 30th September 2016.** The case regarding approval of Manpower Study as recommended by the JERC vide its order dated 29.12.14 has been sent to Govt. of India, Ministry of Power, New Delhi for final approval. Further, to ensure that the work may not suffer till the posts are sanctioned by the Govt. of India, a decision was taken for filing up the posts covered in previous sanction of GOI as well as now approved by JERC. Accordingly, following posts have been filled up through outsource basis / promotion basis:-

S. No.	**Name of post**	**Total No. of posts required to be filled up**	**No. of posts filled up**	**Vacancy yet to be filled up**	**Remarks**
1.	LDC	50	50	-	-
2.	Lineman	33	10 (Promoted) +23	-	-
3.	ALM	216	96 + 58*	62	58* No. candidates have also qualified the written test held on 24.9.16 and the final selection is under process. For remaining 62 Nos post, the outsource contractor has been directed to sponsor more candidates for taking the written test

f. Segregation of T&D Losses and Loss Reduction Trajectory

The CED is directed to furnish segregation of losses into transmission, distribution and commercial losses separately in their next Petition along with a status report on energy accounting and T&D

losses. In response, CED has framed an estimate for the replacement of all the feeder meters (which have reliable communication interface) to calculate loss level at various voltage level. The NIC, UT Chandigarh has also given its consent to provide the server for such huge data base to be generated for energy audit. An estimate of around Rs. 1,63,20,000/- for replacement of all the feeder meters has been framed along with the modems and the software to read the data and analysis of the losses. The same is under the process of approval.	
Commission's Comments FY 2016-17	**Compliance Report**
The Commission notes the submission made by the Petitioner and directs the Petitioner to install the meters by 30th September 2016 and revert to the Commission with quarterly segregated T&D loss data thereafter.	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2559 Dated 23.11.2016. However, it is submitted that the earlier estimate for Design, Supply, Erection, Testing & Commissioning of Energy Audit system with 0.2S & 0.5S AMR compatible DLMS complaint 11 kV & 66 kV HT Meters with GPRS/ GSM enabled Modem was revised as per functional requirement to Rs 89.75 Lacs and has been sent to higher authorities for approval. Further, a Smart Grid Project for whole Chandigarh has been approved by Distribution Reform Committee (DRC) on dt-16/11/16 for the amount 373.21 Crores. The same will be forwarded to by NSGM, GoI for further approval. This project will help in determining T&D loss of Chandigarh Area.

g. Load Forecasting Study

The CED is directed to conduct a detailed load forecasting study for short term (2-5 years), medium term (7-10 years) and long term (15-25 years) in order to understand the load requirements in their area at various periods. LOI for the load forecasting study along with preparation of action plan for short term, medium term and long term has been issued on 12.10.2015 to the consultant M/S Feedback Infra and the compliance report in this regard has been sent to JERC vide memo no. 3622 Dated 19.11.2015	
Commission's Comments FY 2016-17	**Compliance Report**
The Commission notes the submission made by the Petitioner and directs the Petitioner to expedite the study for load forecasting for short term, medium term and long term by 30th December 2016. The Petitioner should also submit the quarterly status report of the progress in this matter.	The status report on this directive has been submitted to Hon'ble JERC. The Load Forecasting Petition was filed by Chandigarh Electricity Department, U.T Chandigarh and the same was admitted in the Hon'ble Commission vide Petition No. 216/ 2016 followed by the hearing of subject cited Petition conducted at Hon'ble JERC at Gurgaon on dated September 16th, 2016. In its order dated 16.09.2016, Hon'ble JERC has noted the compliance of its direction and take the study report on record for future reference.

h. Optimization of Power Purchase from Short-Term Sources

The CED is directed to give details of power purchase under UI mechanism. The details include the overdrawl frequency, date, time, block, quantity, UI charges, and additional UI charges. The summary of total Sale/Purchase from short term sources including Net gain/Net loss under

purchase of UI and from other sources including power exchange, bilateral etc. The results of gain/loss of such sale/purchase from other sources be explicitly mentioned. In order to optimize the cost of power purchase, if unavoidable, the rotational power cuts could be undertaken by the utility, keeping equity among all consumers of the utility irrespective of their status.	
Commission's Comments FY 2016-17	**Compliance Report**
As per recent directive of the Ministry of Power all utilities will procure short-term power from a common platform. The Petitioner is directed to comply with the same.	The status report on this directive has been submitted to Hon'ble JERC. The CED is in process to purchase short term power as per the Ministry of Power guidelines issued on dated 06/04/16

i. Initiate Action for Corporatization of the Electricity Department

The CED is directed to initiate action for Corporatizing of the Department on similar basis as has been done by other licensee under the jurisdiction of the Commission.	
Commission's Comments FY 2016-17	**Compliance Report**
The Commission noted the submission made by the CED and directs the Petitioner to submit quarterly progress reports in this matter.	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2623 Dated 28.11.2016. However, the Executive Engineer Electy OP Divn No-1 has intimated vide memo No- 7092 Dt-11/07/16 that the tender for corporatization of Electricity Department was floated on Dt-16/6/16 with pre bid meeting on dt-23/6/16 and opening date as 05/07/16 and no representative of any firm has attended the pre bid meeting and no bid was uploaded by any bidder up to on due date,i.e. 05/07/16.

j. Strengthen CGRF and give wide publicity about it

The CGRF cell should be strengthened to make the cell work effectively. Wide publicity is required to be done to make the public aware of the existence of the cell including CGRF contact details at the back of electricity bills.	
Commission's Comments FY 2016-17	**Compliance Report**
The Commission noted the submission made by the CED and directs the Petitioner to submit quarterly progress reports in this matter.	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2621 Dated 28.11.2016. However, CED has already provided 2-No.s LDCs, 1-No. steno typist and 1-No. Peon to CGRF for day to day functioning. Further, for wide publicity, the public notice of CGRF has again been published in three newspapers like Chandigarh Tribune (English), Amar Ujala (Hindi) and Ajit (Punjabi).

k. Renewable Purchase Obligation

The Commission, directs, that all pending RPO up-to FY 2015-16 must be fulfilled by the Petitioner by March 31, 2016 and no backlog would be allowed to be carried forward to the Control Period FY

<table>
<tr><td colspan="2">2016-17 to FY 2018-19. The Commission expects that the Petitioner would give priority to obtaining physical solar and non-solar power.</td></tr>
<tr><td>Commission's Comments FY 2016-17</td><td>Compliance Report</td></tr>
<tr><td>The Commission notes that though the CED has not made any specific submission in regard to fulfilment of this direction it has submitted a plan to fulfil RPO till FY 2015-16. The Commission will examine the matter at the time of True-up of FY 2015-16. Further MoP has set a target of 8% RPO to be achieved till 2022. As a part of this target, the Petitioner is required to install 50 MW solar capacity. CED is required to submit a road-map regarding the same.</td><td>The status report on this directive has been submitted to Hon'ble JERC vide probable memo no. 2651 Dated 30.11.2016.
However, the Renewable Purchase Obligation (RPO) up to the FY 2015-16 have already been fulfilled by the CED and no back lock is pending on the account of CED. The respective information in respect of RPO upto the FY 2015-16 had already been forwarded vide this office Memo No. 2097 to 2100 Dated 28.07.2016.
With the consultation of M/s CREST (Nodal Agency for Installation of Solar Power Project in UT Chandigarh), the road map to install 50 MW Solar capacity in view of MOP target of 8% RPO till 2022, is as under:-
<table>
<tr><th>S. No.</th><th>Year</th><th>Installed Capacity</th></tr>
<tr><td>1.</td><td>2015-16</td><td>4.42 MW (based on actual)</td></tr>
<tr><td>2.</td><td>2016-17 (till 31.03.2017)</td><td>10 MW (Projection) (till 30.10.2016-8.03 MW)</td></tr>
<tr><td>3.</td><td>2017-18</td><td>16 MW</td></tr>
<tr><td>4.</td><td>2018-19</td><td>23 MW</td></tr>
<tr><td>5.</td><td>2019-20</td><td>30 MW</td></tr>
<tr><td>6.</td><td>2020-21</td><td>40 MW</td></tr>
<tr><td>7.</td><td>2021-22</td><td>50 MW</td></tr>
</table>
However, the DNIT for the purchase of Non Solar Power is under consideration for approval.</td></tr>
</table>

I. Energy Saving, Energy Efficiency and Demand Side Management

<table>
<tr><td colspan="2">The CED is directed to conduct a detailed study on demand side management and energy conservation through an external accredited agency for efficient use of electricity by various means. The action taken in this regard and in regard to day light saving may be intimated in the compliance report to the Commission by 30th September, 2015.</td></tr>
<tr><td>Commission's Comments FY 2016-17</td><td>Compliance Report</td></tr>
<tr><td>The proposal for implementation of Efficient Lighting Program by distribution of LED bulbs in the UT of Chandigarh as a part of Demand Side Management Activity, through M/s. Energy Efficiency Services Limited (EESL), New Delhi has been sent to higher authorities for its approval.
The Commission notes the submission made by the Petitioner and directs the Petitioner actively</td><td>The status report on this directive has been submitted to Hon'ble JERC vide memo no. 3212 Dated 15.11.2016.
However, the proposal received from M/s EESL was submitted to competent authority of Chandigarh Administration for the approval and accordingly certain clarification have been sought from M/s EESL vide Memo No.2447 dated 01.09.2016. However, no reply has been</td></tr>
</table>

pursue this matter with the higher authorities and submit quarterly progress reports in this regard.	received from M/s EESL till date. CED has again taken up the matter with M/s EESL vide Memo No.2716 dated 22.09.2016 & Memo No.3029 dated 24.10.2016 and Memo No.3158 dated 10.11.2016. The action will be taken as per EESL reply.

m. Solar Power Purchase

<table>
<tr><td colspan="2">Chandigarh has been declared as a Solar City by MNRE. Solar RPOs should be first met by using Solar Energy produced in the UT from the existing plants or any new plant that may come up, before making any purchases of RECs for RPO compliance. Efforts are to be made to popularize Solar Power by sending handbills along with the bills or any other method.</td></tr>
<tr><td>Commission’s Comments FY 2016-17</td><td>Compliance Report</td></tr>
<tr><td>MoP has set a target of 8% RPO to be achieved till 2022. As a part of this target, the Petitioner is required to install 50 MW solar capacity. The Petitioner is required to submit a road-map regarding the same not later than 30th September 2016.</td><td>
The status report on this directive has been submitted to Hon’ble JERC vide probable memo no. 2651 Dated 30.11.2016.
However, it is further submitted that M/s CREST is nominated as Nodal Agency for Solar Power Projects in the UT Chandigarh and total no. of 162 Solar Power Rooftop Projects (144 Net Metering + 18 Gross Metering) have already been installed at the various building/location of the Chandigarh and actual solar power to the tune of 26.412 MUs (upto September 2016) has been injected.
With the consultation of M/s CREST (Nodal Agency for Installation of Solar Power Project in UT Chandigarh), the road map to install 50 MW Solar capacity in view of MOP target of 8% RPO till 2022, is as under:-
<table>
<tr><th>S. No.</th><th>Year</th><th>Installed Capacity</th></tr>
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(till 30.10.2016-8.03 MW)</td></tr>
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<tr><td>5.</td><td>2019-20</td><td>30 MW</td></tr>
<tr><td>6.</td><td>2020-21</td><td>40 MW</td></tr>
<tr><td>7.</td><td>2021-22</td><td>50 MW</td></tr>
</table>
</td></tr>
</table>

n. Filing of Petition on Time

The last date of filing the ARR & Tariff Petition is 30th November every year. CED has fallen short of filing the Petition in time. The Commission views this as a repeated failure in filing the Petition on time. The CED shall ensure filing the Petition for ARR & Tariff Petition latest by 30th November of the preceding year for which ARR and Tariff is being filed.

Commission's Comments FY 2016-17	Compliance Report
The Commission notes that this time there was considerable delay in filing of the Petition. The Petition was filed on 29th February i.e. 2 months after passing of Business Plan Order. The Petitioner should ensure that henceforth all Tariff Petitions should be filed on or before 30th November.	CED is taking all efforts to comply with the time lines provided by the Hon'ble Commission.

Compliance of Directives under Business Plan

a. Manpower Deployment

Commission's Directive	Compliance Report
The manpower study conducted through M/s Deloitte has been approved by the Hon'ble Commission and the same has been submitted to Ministry of Power, GoI for its approval so that the same could be implemented. The Commission directs the Petitioner to vigorously pursue the matter with the Ministry of Power and close this matter by January 31, 2016.	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 3185 dated 11.11.2016.

S. No.	Name of post	Total No. of posts required to be filled up	No. of posts filled up	Vacancy yet to be filled up	Remarks
1.	LDC	50	50	-	-
2.	Lineman	33	10 (Promoted) +23	-	-
3.	ALM	216	96 + 58*	62	58* No. candidates have also qualified the written test held on 24.9.16 and the final selection is under process. For remaining 62 Nos post, the outsource contractor has been directed to sponsor more candidates for taking the written test

b. Public Awareness and Public Grievance Meetings

Commission's Directive	Compliance Report
The Commission directs the CED to create awareness amongst the consumers on the standards of performance notified by the Commission and arrange to publish the standards of performance/salient features of Supply Code and Distribution Code in all leading	CED is in the process of compiling a response of the directive and shall submit it at the earliest.

newspapers and through notice board displays in the vernacular, in simple language i.e. understandable to the general consumer. The Commission also directs the CED to convene periodic public grievance meetings once in every month to redress consumer related issues.	

c. Approval of Capital Expenditure Schemes

Commission's Directive	**Compliance Report**
As per the provision 22 of MYT Regulations, 2014, the Distribution Licensee shall seek prior approval of the Commission for capital expenditure greater than Rs.10 Crores (Rupees Ten Crores). The Commission has observed that the Petitioner has neither provided the cost-benefit analysis for the schemes above Rs 10 Crores nor provided any supporting documents relating to such schemes for prior approval from the Commission in line with the provisions of MYT Regulations 2014. The Commission directs the petitioner to submit complete documents related to each such scheme along with approvals from the CEA/ UT Administration/ other competent authority for further review and approval of the Commission for all schemes above Rs10 Crores.	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 3183 Dated 11.11.2016.

d. Energy Efficiency Program

Commission's Directive	**Compliance Report**
The Commission directs the Petitioner to submit detailed action plan after finalization of the Efficient Lighting Program (by distribution of LED bulbs in the UT of Chandigarh) by M/s EESL for its approval. The Commission also directs the Petitioner to focus on similar DSM measures through LED lamps in Government buildings and street lights (under National Program for LED Street Lightning).	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 3210 Dated 15.11.2016. However, the proposal received from M/s EESL was submitted to competent authority of Chandigarh Administration for the approval and accordingly certain clarification have been sought from M/s EESL vide Memo No.2447 dated 01.09.2016. However, no reply has been received from M/s EESL till date. CED has again taken up the matter with M/s EESL vide Memo No.2716 dated 22.09.2016 & Memo No.3029 dated 24.10.2016 and Memo No.3158 dated 10.11.2016. The action will be taken as per EESL reply.

e. Smart Grid Initiative

Commission's Directive	**Compliance Report**
The Commission directs the petitioner to submit	The status report on this directive has been

all the details pertaining to technological, financial and implementation aspects for review and approval of the Commission post finalization of the scheme.	submitted to Hon'ble JERC vide memo no. 3181 Dated 11.11.2016. However, the Smart Grid Pilot Project for approx 30,000 consumers amounting to **Rs. 28.58 Crore** has got approved from NSGM, Ministry of Power, New Delhi and M/s REC Power Distribution Company has been appointed as Project Management Agency. Under this project, around 30,000 smart meters will be installed in the project area. Further, Detailed Project Report (DPR) for the implementation of Smart Grid of whole Chandigarh has been prepared within an approximate cost of **Rs. 373.21 Crore** and having the provision of Smart Meters for balance consumers. The same was discussed in Distribution Reforms Committee (DRC) and District Electricity Committee (DEC) during the meetings held on dated 16.11.2016 and the DPR for smart grid project for whole Chandigarh has been sent to Ministry of Power on 2.12.2016 for the accord of approval accordingly.

f. Renewable Purchase Obligation

<table>
<tr><th>Commission's Directive</th><th>Compliance Report</th></tr>
<tr><td>The Commission, directs, that all pending RPO up-to FY 2015-16 must be fulfilled by the Petitioner by March 31, 2016 and no backlog would be allowed to be carried forward to the Control Period FY 2016-17 to FY 2018-19. The Commission expects that the Petitioner would give priority to obtaining physical solar and non-solar power.</td><td>The status report on this directive has been submitted to Hon'ble JERC vide memo no. 3179 Dated 11.11.2016.
However, the Renewable Purchase Obligation (RPO) up to the FY 2015-16 have already been fulfilled by the CED and no back lock is pending on the account of CED. The respective information in respect of RPO upto the FY 2015-16 had already been forwarded vide this office Memo No. 2097 to 2100 Dated 28.07.2016.
With the consultation of M/s CREST (Nodal Agency for Installation of Solar Power Project in UT Chandigarh), the road map to install 50 MW Solar capacity in view of MOP target of 8% RPO till 2022, is as under:-
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</table>
</td></tr>
</table>

	7. | 2021-22 | 50 MW However, the DNIT for the purchase of Non Solar Power is under consideration for approval.

g. True-up for Previous Years

Commission's Directive	**Compliance Report**
The Commission notes that already there is a considerable delay in submission of audited accounts based on commercial principles. The Commission advises the Petitioner to take up the matter with CAG for expediting the same. The Commission directs the Petitioner to submit the accounts prepared on commercial principles before the Commission for truing-up of previous years. The Commission will undertake final true-up for financial years for which accounts are already audited by CAG and provisional true-up for years which the accounts are in process of auditing by CAG.	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2647 Dated 30.11.2016. However, the trued up from FY-2011-12 to FY-2014-15 have already been done by the Hon'ble JERC in its order in Petition No. 198/2016 dt-28th April -2016 based on accounts submitted by CED on commercial pattern . The review of Fy-2015-16 was also made in this order. Further the CED has already submitted its commercial accounts for FY 2015-16 to AG UT for audit vide Memo No – SEE/OP/93/G/2016/2640 Dt – 30/11/16 and the same shall be submitted to Hon'ble commission after getting audited accounts from the AGUT.

h. Procurement of Safety Equipment

Commission's Directive	**Compliance Report**
The Petitioner is directed to take appropriate actions on procurement of necessary safety equipment as mentioned in the last Tariff Order and provide adequate training to the staff on safety measures. The Commission also directs the Petitioner to file progress report on safety equipment purchased in every quarter of the financial year	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 3214 Dated 15.11.2016. However, in this regard, it is submitted that the tender for Procurement of hand tools and other Safety Equipment had already been opened by the CED on dt-27/10/16 and technical / financial evaluation is under process. It is further submitted that for training of employees, this office vide Memo No. SEE/OP/626 to 628 on Dt-11/02/14 had approached various power utilities including NPTI, Faridabad but no any fruitful correspondence is received by them. This office vide Memo No. 2031 Dated 06.06.2014 has contacted to Central Electricity Authority also for seeking advice to move further with regard to imparting training as required under section 7(3) of Chapter-II of CEA Regulations but no reply is received from CEA till date . Finally, , the CED has contacted to the Director Principle, HVPN Power Training Institute,

	Shakti Bhawan, Sector-6, Panchkula, Haryana vide Memo No. 3031 Dated 24.10.2016 and the reply from HVPN is still awaited.

i. MYT Tariff Petition for FY2016-17 to FY2018-19

Commission's Directive	**Compliance Report**
It is directed that the MYT Tariff Petition for the Control Period from FY 2016-17 to FY2018-19 be filed before the Commission within 30 days of the issuance of this Business Plan Order. The Retail Tariff proposals are to be submitted only for the first year of the Control Period namely FY 2016-17 whereas ARR calculations are to be submitted for the full Control Period FY 2016-17 to FY 2018-19.	The status report on this directive has been submitted to Hon'ble JERC vide memo no. 3216 Dated 15.11.2016. However, CED has already filed the MYT Petition before the Commission and same has been registered in the Commission vide Petition No. 198/2016. Wherein the detail tariff proposal is submitted only for the first year of the Control Period namely FY 2016-17 along with ARR calculation for the full control period FY 2016-17 to 2018-19. Accordingly, the Commission has approved the ARR and Tariff for the first MYT Control Period namely FY 2016-17 along with ARR for the MYT Control period from FY 2016-17 to FY 2018-19 vide order dated 28.04.2016. In view of above, it is therefore, requested to kindly drop the above mentioned directives please.

Annexure A: Metering / Replacement of Non-Functional or Defective / 11kV Meters

Status on Consumer Metering, Reading and Billing as on 30.9.2016

CATEGORY	No Of Consumers	Consumer w/O Meter	Consumers With Meter	Consumers With Electromechnical (Em) Meter	Consumers With Electronic (El) Meter	No. Of Em Working	No. Of Em Non-Working	No. Of El Meters Working	El Non-Working Meters	Non-Installed	Em Non-Work Meters	El Non-Working Meters	Em Working Meters	Total Meters Required Replacement
DS/NRS	214336	0	214336	6270	208066	6074	196	204333	3733	0	196	3733	6074	10003
LARGE SUPPLY	100	0	100	0	100	0	0	99	1	0	0	1	0	1
MEDIUM SUPPLY	1264	0	1264	301	963	290	11	917	46	0	11	46	290	347
SMALL POWER	1269	0	1269	100	1169	97	3	1135	34	0	3	34	97	134
PUBLIC LIGHT	1039	0	1039	25	1014	22	3	897	117	0	3	117	22	142
BULK SUPPLY	709	0	709	41	668	40	1	647	21	0	1	21	40	62
AGRICULTURE POWER	121	0	121	4	117	4	0	114	3	0	0	3	4	7
OTHERS-Temporary	553	0	553	0	553	0	0	553	0	0	0	0	0	0
	219391	**0**	**219391**	**6741**	**212650**	**6527**	**214**	**208695**	**3955**	**0**	**214**	**3955**	**6527**	**10696**
											1.90%		2.98%	4.88%

EM- Electro-mechanical

EL- Electronic