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*PETITION FOR TRUE-UP OF FY 2013-14 & FY 2014-15, ANNUAL PERFORMANCE REVIEW OF FY 2015-16 AND AGGREGATE REVENUE REQUIREMENT (ARR) FOR MYT CONTROL PERIOD FROM FY 2016-17 TO FY 2018-19 & TARIFF PROPOSAL FOR FY 2016-17 of CHANDIGARH ELECTRICITY DEPARTMENT*

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*Joint Electricity Regulatory Commission, Gurgaon*



FEBRUARY 26, 2016

ELECTRICITY DEPARTMENT, UT OF CHANDIGARH

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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 1<sup>st</sup> 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 2<sup>nd</sup> 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 peak demand for last year touched 395 MW (FY14-15) and it is anticipated to reach 406 MW in FY 15-16. For FY 2016-17, FY 17-18 and FY 18-19, the peak demand is projected to be 426 MW, 450 MW and 475 MW (As per 18<sup>th</sup> EPS). The departments also buys short term power for meeting the demand-supply shortfall during peak hours.

- 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 is on "cash" basis unlike other utilities/ licensees where it is being maintained on "accrual" basis. The efforts are being made and process is under way for creation of accounts of CED on accrual accounting basis.

### 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 7<sup>th</sup> May 2012 which included review for FY 2011-12. The tariff was made applicable from 1<sup>st</sup> May 2012
- 1.7 On 7<sup>th</sup> 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 15<sup>th</sup> 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 1<sup>st</sup> 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 20<sup>th</sup> January 2014 according to principles outlined in the JERC Tariff Regulations 2009. The Commission issued tariff order on 11<sup>th</sup> April 2014.

#### Filing of ARR and Multi Year Tariff

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 has 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.



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1.12 CED is filing this tariff petition for approval of Annual Revenue Requirement for MYT Control period FY17 to FY 2019 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.

1.13 Further , Clause 38.2 of MYT Regulations, 2014 states

*“Notwithstanding such repeal, any proceedings before the Commission pertaining to the period prior to the commencement of the Control Period, including Petitions for True up of expenses, annual performance review, etc. shall be governed by Joint Electricity Regulatory Commission (Terms and Conditions of Determination of Tariff) Regulations 2009”*

Hence, CED has filed the petition for approval of true up for FY 2013-14, FY14-15 and Annual Performance Review for FY 2015-16 as per the JERC (Terms and Conditions of Tariff) Regulations 2009.

1.14 As per the framework for MYT Regulations outlined in MYT Regulations 2014, the licensee is required to project the ARR for each year of the Control Period based on the Order for Business Plan as approved by the Commission. Therefore, CED has undertaken all assumptions and forecast for projecting the ARR for the period FY17 to FY19 based on the Business Plan approved by the Hon’ble Commission vide an Order dated 28<sup>th</sup> December 2015. Accordingly, CED is filing this Petition for the MYT Control Period FY17-FY19 along with the tariff for FY17 for approval of the Hon’ble Commission.

## Chapter 2: True up of FY 2013-14 & FY 2014-15

- 2.1 CED in its earlier petition for ARR and Tariff approval for FY 2014-15 dated 20<sup>th</sup> January 2014, had filed for review of FY 2013-14 based on the six monthly performance. Accordingly, the Commission in its Order dated 11<sup>th</sup> April 2014 had issued order for FY 2014-15 and carried out performance review for FY 2013-14 after prudence check.
- 2.2 Subsequently, CED had filed a petition for true-up of FY 2013-14 and review of ARR for FY 2014-15 and aggregate revenue requirement for MYT control period from FY 2015-16 to FY 2017-18, before the Hon'ble Commission on 4<sup>th</sup> March 2015. CED in its petition had requested for true-up for FY 2013-14 based on the provisional numbers. However, the Hon'ble Commission in absence of audited annual accounts for FY2013-14 considered it inappropriate to true-up the ARR for FY2013-14 and directed CED to submit the true-up for FY2013-14 along with audited accounts..
- 2.3 Based on the earlier directives of the Hon'ble Commission, CED had already initiated the process for preparation of audited accounts as per the commercial principles. The accounts for FY 2011-12 and FY 2012-13 have been prepared and got audited by CAG and true-up for the respective years was submitted with the Hon'ble Commission for approval vide letter dated 27.9.2015. Since the audit of CED accounts have now been carried out by CAG , Audited Accounts for FY 2013-14 and FY 2014-15 are also prepared. CED has accordingly prepared the true-up for FY 2013-14 and FY 2014-15 based on the audited accounts. The Commission is requested to consider the audited accounts for FY 2013-14 & FY 2014-15 for trueing up. Further, the audit certificates issued by CAG shall be submitted separately.

### Comparison of Approved and Actual Energy Sales for FY 2013-14 & FY 2014-15

- 2.4 The table below summarizes the actual and approved Energy sales for CED for FY 2013-14 & FY 2014-15.

*Table 1: Approved and Actual Sales for FY 2013-14 & FY 2014-15 (MUs)*

S. No	Categories	FY 2013-14	FY 2014-15
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		Approved in T.O 15 <sup>th</sup> April 2013	Revised Approved in T.O 11 <sup>th</sup> April 2014	Actual	Approved in T.O 11 <sup>th</sup> April 2014	Revised Approved in T.O 10 <sup>th</sup> April 2015	Actual
1.	Domestic	663.90	617.79	612.44	660.82	697.57	656
	<i>SPD-JJ Clusters/Unauthorized colonies</i>		18.36				
	<i>0-150 kWh</i>	64.54	52.72		76.03	62.86	
	<i>151-400 kWh</i>	197.62	195.56		209.18	187.4	
	<i>Above 400 kWh</i>	401.74	351.15		375.61	447.31	460
2.	Commercial	455.90	421.44	444.65	421.44	479.18	
	<i>0-150 kWh</i>	6.39	6.26		6.26	5.61	
	<i>151-400 kWh</i>	15.00	14.77		14.77	13.76	
	<i>Above 400 kWh</i>	434.52	400.41		400.41	459.8	
3.	Large Supply	142.53	118.75	121.87	118.75	101.66	117.00
4.	Medium Supply	109.94	92.14	104.47	92.14	97.9	21.00
5.	Small Power	23.14	17.85	21.96	17.85	18.97	104.00
6.	Agriculture	1.58	1.44	1.54	1.59	1.61	1.60
7.	Public Lighting	22.79	18.63	21.05	19.63	18.51	22.00
8.	Bulk Supply	106.74	78.11	85.67	84.25	77.24	83.00
9.	Others Temporary Supply	11.55	7	9.39	7.00	5.69	7.00
	<b>Grand Total</b>	<b>1538.08</b>	<b>1373.1</b>	<b>1423.05</b>	<b>1423.46</b>	<b>1499.32</b>	<b>1471.60</b>

### Power Purchase Quantum and Cost

2.5 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 and 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 petitioner is required to procure UI power along with short term power.

2.6 The table below shows the summary of actual Power Purchase from various sources along with their costs for FY 2013-14 & FY 2014-15 including Transmission Charges, UI charges and purchase from traders.

Table 2: Power Purchase Quantum and cost for FY 2013-14 &amp; FY 2014-15

Source	FY 2013-14		FY 2014-15	
	Energy (Mus)	Cost (Rs Crores)	Energy (Mus)	Cost (Rs Crores)
NTPC Stations	419.28	136.44	426.10	134.50
NHPC Stations	200.50	71.61	215.38	63.15
APCL	18.94	13.46	20.79	12.03
NPCIL	122.88	36.91	97.19	27.89
SJVNL	79.38	30.86	62.26	22.81
BBMB	706.25	204.61	668.26	237.84
THDC	60.93	25.36	36.19	34.03
Others	44.34	17.52	67.39	25.06
Purchase of Power (Prior Period)		(7.99)		
UI (Overdrawl)		20.37	237.39	96.27
PGCIL Charges		34.65		34.87
NRLDC Charges		0.39		1.99
Reactive Energy		0.01		0.46
REC Cost		16.79		10.68
PSPCL Reactive Charges		0.33		0.0
<b>Grand Total</b>	<b>1652.49</b>	<b>601.33</b>	<b>1830.85</b>	<b>701.58</b>

2.7 The Commission had approved a total power purchase cost of Rs 558.81 Crores and Rs 645.67 Crores for the FY 2013-14 and FY 2014-15 respectively. CED has incurred a total cost of Rs 601.33 Crores and Rs 701.59 Crores for the corresponding years. We request the Hon'ble Commission to approve the total power purchase cost of Rs 601.33 Crores and Rs 701.59 Crores against power purchase for FY 2013-14 & FY 2014-15.

2.8 The table below presents actual solar and Non-Solar compliance for FY 13-14 & FY 14-15.

Table 3: Actual Solar and Non-Solar Compliance for FY 13-14

S No	Date	Solar	Non Solar	Amount (In Rs)
1	26.04.13	500	3500	11369888
2	29.05.13	513	3500	11058147
3	29.06.13	250	1750	5009944
4	01.08.13	543	3471	10376708
5	28.08.13	543	3471	10286505
6	25.09.13	1825	3974	23107308
7	30.10.13	5000	10000	61949580
8	27.11.13	3234	7818	42134451
9	26.12.13	3200	5000	37505770

10	<b>Total</b>	<b>15608</b>	<b>42484</b>	<b>212798301</b>
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Table 4: Actual Solar and Non-Solar Compliance for FY 14-15

S No	Date	Solar	Non Solar	Amount (In Rs)
1	28.05.14	1500	7000	24688287
2	25.06.14	650	2600	10036110
3	30.07.14	600	3000	10180922
4	27.08.14	600	3000	10180922
5	24.09.14	800	3500	12810545
6	26.11.14	500	5000	12304186
7	31.12.14	1500	4500	20868203
8	25.02.14	1000	5000	11168203
9	25.03.14	0	3000	4584102
10	<b>Total</b>	<b>7150</b>	<b>36600</b>	<b>116821480</b>

## Operation and Maintenance Expenses

2.9 The summary of approved and actual Employees' Expenses, R&M expense and A&G expense as incurred by the CED in FY 2013-14 & FY 2014-15 is as below:

Table 5: Employees' Expenses for FY 2013-14 &amp; FY 2014-15 (in Rs Crores)

Particulars	FY 2013-14			FY 2014-15		
	Approved in T.O 15 <sup>th</sup> April 2013	Revised Approved in T.O 11 <sup>th</sup> April 2014	Actual	Approved in T.O 11 <sup>th</sup> April 2014	Revised Approved in T.O 10 <sup>th</sup> April 2015	Actual
Employees' Expenses	58.28	56.54	51.31	59.75	58.65	60.06
R & M Expense	10.42	10.11	10.79	10.68	10.68	13.6
A & G Expense	2.52	2.45	3.17	2.58	2.58	3.42

2.10 As evident from the above table, the actual employee expenses for the FY 2013-14 are lower than approved number. The employee expense for FY 2014-15 the expenses are in line with the approved figures. The CED hereby requests the commission to approve the Employee expenses on actual basis.

2.11 Also, it is submitted that the actual employee expense recorded in the audited accounts are currently lower due to non-provisioning of the pensionary charge/ liability of the Board and the Leave salary pension charges in respect of employees of CED.

2.12 As per the notes to accounts prepared by the auditor, the following is stated

*“No provision has been made during the year for Pensionery Charges/ liability of the composite CED as merging units are demanding Pensionery charges @ 3.50% as per Notification whereas UT Admn. has decided to pay Pensionery Liability at the rate of 0.59% on population basis. The case of pensionaly liabilities has been forwarded to the Govt. of India, Ministry of Power by the PSEB, Patiala (NOW POWERCOM) for conveying the decision in this regards. The expenses with respect to Leave salary pension charges are being undertaken at the Treasury Officer, UT Chandigarh; the Department is in the process of compiling data for all type of retirement benefits and necessary provisions as per the rules shall be made as soon as the data is complied.*

2.13 CED therefore requests the Hon’ble Commission to approve any liability arising in the later years on account of the same.

2.14 The higher R&M expenses for FY 2013-14 and FY 2014-15 are account of increase in GFA of the CED for the respective years. The higher R&M expenses can also be attributed to higher maintenance requirement due to aging infrastructure of CED.

2.15 It is also pertinent to mention it here that the A&G expense claimed by the petitioner for the FY 13-14 and FY 14-15 are exclusive of provision of bad debts considered in the annual accounts.

2.16 While the R&M and A&G expense of CED is higher than that approved by the Hon’ble Commission in the Order, it is humbly submitted that in absence of audit of the income and expense, the actual cost was unknown even for the past years resulting in underestimation of actual expense. Therefore, Hon’ble Commission is requested to approve the actual O&M expense as per the audited accounts.

#### GFA and Depreciation

2.17 The opening balance of fixed assets for FY 2013-14 and FY 2014-15 as per CED accounts prepared on commercial principles is Rs 356.61 Crores and 381.37 Crores respectively.

In absence of the Fixed Asset Register and audited annual accounts, the Hon'ble Commission had not been considering the past GFA for ARR projection. . CED submits that in view of the availability of accounts on commercial principles, the Hon'ble Commission should consider the GFA as per the audited accounts for the respective years.

2.18 The CED has added assets worth Rs 24.77 Crores and Rs 10.19 Crores for the FY 2013-14 & FY 2014-15 respectively. The table below presents the approved and actual asset addition during the FY 2013-14 and FY 2014-15. The Hon'ble Commission is requested to approve the same :-

Table 6: Asset Addition for FY 2013-14 and FY 2014-15 (Rs Crores)

Particulars	FY 2013-14			FY 2014-15		
	Approved in T.O 15 <sup>th</sup> April 2013	Revised Approved in T.O 11 <sup>th</sup> April 2014	Actual	Approved in T.O 11 <sup>th</sup> April 2014	Revised Approved in T.O 10 <sup>th</sup> April 2015	Actual
Asset Addition	22.5	12.5	24.7	39.6	7.64	10.2

2.19 The table below presents the approved and actual asset details for the FY 2013-14 and FY 2014-15. The rate of depreciation for the corresponding years is 4.82% and 5.12% respectively. The Hon'ble Commission is requested to approve the depreciation as given in the table below:-

Table 7: Depreciation for FY 2013-14 & FY 2014-15 (Rs Crores)

Particulars	FY 2013-14			FY 2014-15		
	Approved in T.O 15 <sup>th</sup> April 2013	Revised Approved in T.O 11 <sup>th</sup> April 2014	Actual	Approved in T.O 11 <sup>th</sup> April 2014	Revised Approved in T.O 10 <sup>th</sup> April 2015	Actual
Opening Assets at the Beginning of the year	45.5	45.5	356.61	58.00	58.00	381.37
Addition of assets during the year	22.5	12.5	24.77	39.60	7.64	10.19
Gross Fixed assets at the end of the year	68.0	58.0	381.37	97.59	65.54	391.57
Average Assets	56.75	51.75	368.99	77.80	61.82	386.47
Average Rate of Depreciation	5.28%	5.28%	4.82%	5.28%	5.28%	5.12%
Depreciation for the year	3.0	2.73	17.79	4.11	3.26	19.77

2.20 CED humbly requests the Hon'ble Commission to approve the depreciation based on actual as recorded in the audited accounts.

## Interest on Loan

2.21 It is respectfully submitted that the entire capital expenditure incurred by CED had been funded through equity infusion by GOI through budgetary support without any external borrowings. As per Regulation 25 of JERC Tariff Regulations, 2009, the interest rate on the amount of equity above 30% treated as loan shall be the weighted average rate of interest on loan capital of the licensee. Therefore, for the purpose of determination of ARR, CED has considered debt equity ratio of 70:30 for projecting normative loan for FY 2013-14 & FY 2014-15. Repayment has been considered to be equal to the depreciation amount computed in section above. The interest at the SBI PLR rate of 14.75% as on April 1st, 2014 has been applied on the average normative debt in order to project the amount of normative interest on normative long-term loans for the corresponding years.

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

Table 8: Interest on Normative Loan for FY 2013-14 & FY 2014-15 (Rs Crores)

Particulars	FY 2013-14			FY 2014-15		
	Approved in T.O 15 <sup>th</sup> April 2013	Revised Approved in T.O 11 <sup>th</sup> April 2014	Actual	Approved in T.O 11 <sup>th</sup> April 2014	Revised Approved in T.O 10 <sup>th</sup> April 2015	Actual
Opening Normative Loan	36.85	36.85	170.04	41.91	41.91	169.59
Add: Normative Loan during the year	15.75	8.75	17.34	27.72	5.35	7.14
Less: Normative Repayment	3.69	3.69	17.79	4.19	3.26	19.77
Closing Normative Loan	48.92	41.91	169.59	65.44	44	156.95
Average Normative Loan	42.88	39.38	169.81	53.68	42.96	163.27
Rate of Interest (@SBAR rate)	14.45%	14.45%	14.45%	14.75%	14.75%	14.75%
Interest on Normative Loan including bank charges	6.20	5.69	24.54	7.92	6.34	24.08

## Interest on Working Capital

2.23 CED has computed the working capital as per Clause 29 of JERC (Terms and Conditions for determination of Tariff Regulations), 2009. As per Commission previous tariff order closing balance of security deposit has been deducted from the total working capital requirement considering that the security deposit available with CED accounts.



2.24 It is to be noted that the clause 6.10 of JERC (Electy. Supply code) regulations 2010, inter-alia requires that the amount of Consumer Deposit obtained from the consumer should be reviewed by the licensee (i.e. Electy. Deptt.), annually on the basis of consumption during the previous 12 months for L.T. consumers and half yearly on the basis of consumption during the previous six months of HT / EHT consumers. The consumers shall be required to pay an additional security deposit / shall be refunded based on the consumption during the period concerned if it exceeds / is lower than the amount of security deposit held by the licensee, by 20 percent. Accordingly, CED has booked or refunded the Additional Security Deposit of the consumers during the year 2013-14 and 2014-15. The closing Consumer security deposit for FY 2013-14 and FY 2014-15 are to the tune of Rs 96.82 Crores and Rs 133.84 Crores.

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

Table 9: Interest on Working Capital for FY 2013-14 & FY 2014-15 (Rs Crores)

Particulars	FY 2013-14			FY 2014-15		
	Approved in T.O 15 <sup>th</sup> April 2013	Revised Approved in T.O 11 <sup>th</sup> April 2014	Actual	Approved in T.O 11 <sup>th</sup> April 2014	Revised Approved in T.O 10 <sup>th</sup> April 2015	Actual
Fuel cost for 2 months	0	0		0	0	0
Power Purchase Cost of 1 month	50.44	46.57	50.11	44.82	53.81	58.47
Employee Cost for 1 months	4.86	4.71	5.54	6.09	5.99	6.42
A&G Expense for 1 month	0.21	0.20				
R&M Expense for 1 month	0.87	0.84				
Net Working Capital	56.38	52.33	55.65	50.91	59.80	64.89
Total Working Capital after Deduction of Security Deposit	20.46	17.21	(41.17)	14.19	24.25	(68.95)
Interest Rate	14.45%	14.45%	14.45%	14.5%	14.75%	14.75%
Interest on Working Capital	2.96	2.49	0	2.09	3.58	0

#### Interest on Consumer Security Deposit

2.26 The provision of Regulation 25 (4) of Tariff Regulations 2009 & 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 or more

as may be specified by the commission. The CED is obligated to pay interest on consumer security deposit and entitled to claim the same through tariff. The opening closing balance and addition during the FY 2013-14 & FY 2014-15 and claim of interest on security deposit is given in the table below, CED requests the Commission to approve the same.

Table 10: Interest of Consumer Security Deposit for FY 2013-14 & FY 2014-15 In ( Rs Crores)

Particulars	FY 2013-14			FY 2014-15		
	Approved in T.O 15 <sup>th</sup> April 2013	Revised Approved in T.O 11 <sup>th</sup> April 2014	Actual	Approved in T.O 11 <sup>th</sup> April 2014	Revised Approved in T.O 10 <sup>th</sup> April 2015	Actual
Opening Consumer Security Deposit	34.31	34.31	29.32	35.92	32.55	96.82
Net Addition During the year	1.62	1.62	67.50	1.60	3.00	37.02
Less: Deposit Refunded	0.02	0.02				
Closing Consumer Security Deposit	35.92	35.92	96.82	37.52	35.55	133.84
Average Deposit	35.12	35.12	63.07	36.72	34.05	115.33
Bank Rate	8.75%	8.50%	8.50%	8.75%	8.75%	8.50%
Interest on Consumer Security Deposit	3.14	2.85	4.87	3.07	2.98	11.30

### Return on Equity

2.27 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 assets as per its accounts. The Commission has not approved the total fixed assets of the CED in absence of the fixed asset register and had directed the CED to prepare the FAR on urgent basis. CED has already prepared fixed asset register and submitted the same to the Hon'ble Commission. Accordingly the CED has computed the Return on capital employed as per assets in its audited accounts.

2.28 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 11: Return on Equity for FY 2013-14 &amp; FY 2014-15 (Rs Crores)

Particulars	FY 2013-14			FY 2014-15		
	Approved in T.O 15 <sup>th</sup> April 2013	Revised Approved in T.O 11 <sup>th</sup> April 2014	Actual	Approved in T.O 11 <sup>th</sup> April 2014	Revised Approved in T.O 10 <sup>th</sup> April 2015	Actual
Gross block at beginning of the Year	45.50	45.50	356.61	58.80	58.00	381.37
Less accumulated depreciation	1.86	2.52	104.69	5.25	5.25	122.62
Net block at beginning of the year	43.64	42.98	251.92	52.74	52.74	258.76
Less accumulated consumer contribution	0.00	0.00	0.00	0.00	0.00	0.00
Net fixed assets at beginning of the year	43.64	42.98	251.92	52.74	52.74	258.76
Reasonable Return at 3% of NFA	1.31	1.29	7.56	1.58	1.58	7.76

### Provision for Bad and Doubtful Debt

2.29 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. The CED hereby submits that that Sundry debtors as on 31<sup>st</sup> March 2014 and 31<sup>st</sup> March 2015 amount to 93.53 Crores and 99.54 Crores respectively. Accordingly, CED has proposed the provision for bad and doubtful debts on 1% of the receivables for FY 2013-14 & FY 2014-15. The CED has estimated the provision of bad debt as RS 6.97 Crores and Rs 8.24 crores for FY 2013-14 & FY 2014-15.

### Non- tariff Income

2.30 The table below presents the approved and actual non-tariff income for FY 2013-14 & FY 2014-15 is as given in the table below:-

Table 12: Non-Tariff Income for FY 2013-14 &amp; FY 2014-15 (Rs Crores)

Particulars	FY 2013-14			FY 2014-15		
	Approved in T.O 15 <sup>th</sup> April 2013	Revised Approved in T.O 11 <sup>th</sup> April 2014	Actual	Approved in T.O 11 <sup>th</sup> April 2014	Revised Approved in T.O 10 <sup>th</sup> April 2015	Actual
<b>Non-Tariff Income</b>	14.63	15.36	19.35	16.13	17.82	22.21

## Revenue from Sale of Surplus Power

2.31 The CED earned Rs 12.31 Crores and Rs 4.09 Crores in FY 2013-14 and FY 2014-15 respectively.

Table 13: Revenue from Sale of Surplus Power for FY 2013-14 & FY 2014-15 (Rs Crores)

Particulars	FY 2013-14		FY 2014-15	
	Actual		Actual	
Revenue from Sale of Surplus Power	12.31		4.09	

## Revenue on Current Tariff

2.32 The billed revenue on actual sales and tariff approved by the Commission is given in the table below

Table 14: Revenue on Current Tariff for FY 2013-14 & FY 2014-15 (Rs Crores)

Particulars	FY 2013-14			FY 2014-15		
	Approved in T.O 15 <sup>th</sup> April 2013	Revised Approved in T.O 11 <sup>th</sup> April 2014	Actual	Approved in T.O 11 <sup>th</sup> April 2014	Revised Approved in T.O 10 <sup>th</sup> April 2015	Actual
Billed Revenue at Current Tariff	716.43	623.39	602.17	668.24	707.13	624.97

## FPPCA Billed During the year

2.33 Total FPPCA billed during the FY 2013-14 & FY 2014-15 is given in the table below:-

Table 15: FPPCA billed during FY 2013-14 & FY 2014-15 (Rs Crores)

Particulars	FY 2013-14	FY 2014-15
Total	78.20	16.34

## Aggregate Revenue Requirement and Deficit for true-up of FY 2013-14 & FY 2014-15

2.34 The Aggregate Revenue Requirement and deficit for the FY 2013-14 and FY 2014-15 is as given in the table below :-

Table 16: Aggregate Revenue Requirement and Deficit for True-Up of FY 2013-14 and FY 2014-15 (Rs Crores)

S No	Particulars	FY 2013-14	FY 2014-15
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		Approved in T.O 15 <sup>th</sup> April 2013	Revised Approved in T.O 11 <sup>th</sup> April 2014	Actual	Approved in T.O 11 <sup>th</sup> April 2014	Revised Approved in T.O 10 <sup>th</sup> April 2015	Actual
1.	Cost of power purchase for full year	605.34	558.81	601.33	537.87	645.67	701.59
2.	Employee costs	58.28	56.54	51.31	59.75	58.65	60.06
3.	Administration and general expenses	2.52	2.45	3.17	2.58	2.58	3.42
4.	R&M expenses	10.42	10.11	10.79	10.68	10.68	13.60
5.	Depreciation	3.00	2.73	17.79	4.11	3.26	19.77
6.	Interest and finance charges	6.20	5.69	24.54	7.92	6.34	24.08
7.	Interest on working capital	2.96	2.49	-	2.09	3.58	-
8.	Return on NFA /Equity	1.31	1.29	7.56	1.58	1.58	7.76
9.	Provision for Bad Debt	3.58	-	6.97	3.34	3.54	8.24
10.	Interest on Security Deposit	3.14	2.85	4.87	3.07	2.98	11.30
<b>11.</b>	<b>Total Revenue Requirement</b>	<b>696.75</b>	<b>642.96</b>	<b>728.32</b>	<b>632.99</b>	<b>738.86</b>	<b>849.81</b>
12.	Less: Non-Tariff Income	14.63	15.36	19.35	16.13	17.82	22.21
13.	Less: Revenue from Sale through UI	-	.20			6.42	
14.	Less: Revenue from Sale of Power-Exchanges	-	-	12.31		3.15	4.09
<b>15.</b>	<b>Net Revenue Requirement</b>	<b>682.12</b>	<b>627.40</b>	<b>696.66</b>	<b>616.86</b>	<b>711.47</b>	<b>823.52</b>
16.	Revenue from retail sales at Existing Tariff	716.43	623.39	602.17	668.24	707.13	624.97
17.	FPPPCA billed during the year		60.38	78.2	-	17.0	16.34
<b>18.</b>	<b>Revenue Gap/Surplus() for the Year</b>	<b>(34.31)</b>	<b>(56.37)</b>	<b>16.29</b>	<b>(51.38)</b>	<b>(12.66)</b>	<b>182.21</b>

2.35 CED would also like to highlight that the true-up for FY 11-12 & FY 12-13 has already been submitted for approval of the Commission. CED had proposed a total of Rs 441.18 Crores as revenue gap for FY 11-12 and FY 12-13 along with corresponding year's carrying cost.

2.36 The CED humbly requests the Hon'ble Commission to approve the revenue gap for the FY 13-14 and FY 14-15 as presented above.

## Chapter 3: Review of ARR for FY 2015-16

- 3.1 CED had filed a petition for review of FY 2013-14 and ARR for FY 2014-15 and aggregate revenue requirement for MYT control period from FY 2015-16 to FY 2017-18 before the Hon'ble Commission on 4<sup>th</sup> March 2015 under Regulation 12.1 of the MYT regulation 2014.
- 3.2 In view of the delays in submission of business plan and MYT Petition, the Hon'ble Commission had decided to postpone the Control Period by a year. Therefore, the ARR and tariff for FY 2015-16 was approved under the JERC (Terms and Condition for determination of Tariff) Regulations, 2009. For approval of the various ARR parameters of FY 2015-16, the Commission had considered the actual figures for FY 2013-14 which were provisional in nature.
- 3.3 Since the audited accounts for FY2013-14 and FY2014-15 are available and the asset register has been prepared, the ARR projections for FY 2015-16 have been revised in view of the actual expenses of the utility in the past years. The Hon'ble Commission is requested to review the ARR for FY 2015-16 based on the same.

### Energy sales and Connected Load

- 3.4 The category wise sales for first six months of FY 2015-16 is given in the table below. The sales for FY 2015-16 have been estimated based on the actual sales for the first six months of the year and considering energy sale trend for the remaining months in line with the sales for the corresponding months in the past years. The sales approved and estimated for full year is given in the table below:

Table 17: Energy sales for FY 2015-16 (MUs)

S No	Categories	Approved as per T.O dated 10 <sup>th</sup> April 2015	Actual 6 months	Estimated for full year
1.	Domestic	732.44	337.34	667.00
2.	Commercial	493.55	237.78	485.00
3.	Large Supply	101.66	69.00	120.00

S No	Categories	Approved as per T.O dated 10 <sup>th</sup> April 2015	Actual 6 months	Estimated for full year
4.	Medium Supply	97.9	56.01	103.75
5.	Small Power	18.97	10.00	20.52
6.	Agriculture	1.63	0.78	1.61
7.	Public Lighting	20.49	10.66	20.36
8.	Bulk Supply	83.42	43.55	84.61
9.	Others Temporary Supply	5.69	3.50	7.15
	<b>Grand Total</b>	<b>1555.75</b>	<b>768.61</b>	<b>1510.00</b>

3.5 In view of the actual sales for six months, it is estimated that the actual sales for FY 2015-16 shall be lower than the approved sales of 1555.75 Mus. Accordingly, the Hon'ble Commission is requested to approve the revised sales for FY 2015-16 as per projections above.

#### Distribution Losses and Energy Requirement

3.6 CED estimates the Distribution losses of 14.5% for FY 2015-16 as per the Hon'ble Commission order dated 5th May 2014 in petition no 76/2012. CED has estimated transmission losses of approx. 3.57% based up on the recent 52 weeks (5<sup>th</sup> January 2015-3<sup>rd</sup> January 2016) moving average of regional transmission losses for interstate transmission circuit. CED once again reiterates and submits before the Hon'ble Commission that actual distribution losses for UT of Chandigarh are much lower after consideration of interstate point inside the limits of UT of Chandigarh. The CED has to bear additional losses towards inter-state due to not availability of interconnection point within the boundary of UT of Chandigarh resulting in additional losses. Therefore, CED requests the Hon'ble Commission to approve 14.5% loss as also approved by the Commission in the T&D trajectory of Chandigarh. The energy balance for FY 2015-16 is as given in the table below, the Hon'ble Commission is requested to approve the same :-

Table 18: Energy Balance for FY 2015-16

Particulars	Approved	Estimated
Energy Sales	1555.75	1,510.00
Loss %	13.75%	14.50%
Loss (MUs)	248.02	256.08

Particulars	Approved	Estimated
Total Energy Required at UT Periphery	1803.77	1,766.08
Transmission Loss (%)	3.78%	3.57%
Transmission Loss (MUs)	70.73	55.38
Net Energy requirement (Excluding Solar)	<b>1871.13</b>	<b>1821.46</b>
Solar	3.5	-
Net Energy requirement to be Procured	<b>1874.63</b>	<b>1821.46</b>

### Power Purchase Quantum and Cost

3.7 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.

3.8 The current 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. 3/1/2015-OM dated 04.06.2015 have been considered for estimating the power procurement units. Since the allocation of power from various sources is inadequate, the Petitioner is required to procure power from short term sources i.e. power exchange, other trading sources.

3.9 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 2015-16 (Rs Crores)

Particulars	Rs Crores	
	Energy in MUs	Gross Total
NTPC	244.47	76.97
NHPC	176.42	44.03
APCL	18.05	11.00
NPCIL	63.74	18.59
SJVNL	57.87	14.02
BBMB	389.02	124.78
THDC	23.04	24.98
Bilateral	29.30	0.74
CREST	0.30	0.48



Particulars	Rs Crores	
	Energy in MUs	Gross Total
UI Congestion Charges		0.41
PGCIL Charges		12.48
NRLDC Charges		0.15
Reactive Energy		0.062
REC Cost		4.1
<b>Grand Total</b>	<b>1002.00</b>	<b>332.87</b>

While the above power purchase quantum and cost is actual for FY 2015-16 for six months, the power purchase quantum estimated for entire year for FY 2015-16 is as below:

Table 20: Approved and Estimated Power Purchase Quantum for FY 2015-16 (in MUs)

Particulars	Approved	Estimated
Power Purchase from Renewable Sources ( Solar Roof Top Plants in Chandigarh)	3.50	-
NPCIL	87.38	118.12
BBMB	693.22	668.70
THDC	37.46	44.76
SJVNL	74.41	73.12
Power Purchase from Other Sources	648.05	646.72
Power purchase from Short Term sources	330.63	270.04
<b>Gross Purchase Purchase</b>	<b>1874.63</b>	<b>1821.46</b>

3.10 With respect to the RPO compliance approved by the Commission for FY 2015-16, the solar and non-solar power required to be procured is as below:

Table 21: Revised Solar and non-solar RPO compliance for FY 2015-16

Particulars		Estimated Units(Mus)	Cost (Rs. Cr.)
Revised Sales		1510	
<b><u>RPO Compliance</u></b>			
Solar	0.85%	12.84	4.49
Non-solar	2.70%	40.77	6.12
<b>Total</b>		<b>53.61</b>	<b>10.61</b>

3.11 Since the availability of solar and non-solar power within the UT is limited, CED has to rely on REC for meeting its RPO compliance. Accordingly, CED has been able to procure actual Non- Solar and Solar RPO REC for the FY 15-16 as detailed in tables below:

Table 22: Actual Non-Solar RPO Compliance for 10 months of FY 15-16

S No	Month	Non Solar REC	Rate in Rs/REC	REC Amount (In Rs)	Trading Charges @ Rs 24.95/REC	Service Tax @ 12% on (d)	E.D Cess & SHEc @ 3% on €	Total Amount of REC( In Rs) (c+d+e+f)	Rate/REC
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	April-15	3000	1500	4500000	74850	8982	269	4584101	1528.03
2	May-15	3000	1500	4500000	74850	8982	269	4584101	1528.03
3	June-15	3000	1500	4500000	74850	8982	269	4584101	1528.03
4	July-15	3500	1500	5250000	87325	10479	314	5348118	1528.03
5	Aug-15	3500	1500	5250000	87325	10479	314	5348118	1528.03
6	Sep-15	3000	1500	4500000	74850	8982	269	4584101	1528.03
7	Oct-15	3000	1500	4500000	74850	8982	269	4584101	1528.03
8	Nov-15	2500	1500	3750000	62375	7485	225	3820085	1528.03
9	Dec-15	2500	1500	3750000	62375	7485	225	3820085	1528.03
10	Jan-16	3000	1500	4500000	74850	8982	269	4584101	1528.03
11	<b>Total</b>	<b>30,000.00</b>		<b>45000000</b>	<b>748500</b>	<b>89820</b>	<b>2694.60</b>	<b>45841015</b>	<b>1528.03</b>

Table 23: Actual Solar REC Procured during 10 months of FY 15-16

S. No.	Month	Solar REC	Rate in Rs/REC	REC Amount (In Rs)	Trading Charges @ Rs 24.95/REC	Service Tax @ 12% on (d)	E.D Cess & SHEc @ 3% on (e)	Total Amount of REC (In Rs) (c+d+e+f)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	April-15	800	3500	2800000	19960	2395	71.86	2822427
2	May-15	700	3500	2450000	17465	2096	62.87	2469624
3	June-15	500	3500	1750000	12475	1497	44.91	1764017
4	July-15	400	3500	1400000	9980	1198	35.93	1411214
5	Aug-15	500	3500	1750000	12475	1497	44.91	1764017
6	Sep-15	500	3500	1750000	12475	1497	44.91	1764017
7	Oct-15	500	3500	1750000	12475	1497	44.91	1764017
8	Nov-15	400	3500	1400000	9980	1198	35.93	1411214
9	Dec-15	500	3500	1750000	12475	1497	44.91	1764017
10	Jan-16	1000	3500	3500000	24950	2994	89.82	3528034
11	<b>Total</b>	<b>5,800</b>		<b>20300000</b>	<b>144710</b>	<b>17365.20</b>	<b>520.96</b>	<b>20462596</b>

Table 24: Actual Solar Power procured during 10 months of FY 15-16

S. No.	Month	Solar (Crest) Energy (MU)	Amount paid to Crest
1	April-15	0.30	783,524
2	May-15	0.37	822,365
3	June-15	0.35	1,207,711
4	July-15	0.29	611,705
5	Aug-15	0.31	718,685
6	Sep-15	0.32	679,646
7	Oct-15	0.32	941,703
8	Nov-15	0.26	620,340
9	Dec-15	0.19	624,539
10	Jan-16	0.20	551,052
11	<b>Total</b>	<b>2.90</b>	<b>7,561,270</b>

3.12 The power purchase cost for FY 2015-16 is computed based on the estimated units to be procured from the generating stations as per the allocations

- The fixed cost for each plant is computed based upon the % allocation of the plant capacity to CED and corresponding capital cost of plant.
- The generation units available from each plant are computed considering the average PLF of the plants in past three years/design energy.
- The deficit in energy is proposed to meet through short term power.

- d. PGCIL, NRLDC and reactive Energy charges are computed based upon the escalation of 5% over the cost incurred during FY 2014-15.

3.13 The estimated power quantum and power purchase cost is summarized in the table below.

Table 25: Estimated Power Purchase Quantum and Cost for FY 2015-16

Particulars	Rs Crores	
	Energy in MUs	Gross Total
NTPC	424.06	152.87
NHPC	203.18	87.43
APCL	19.49	14.45
NPCL	118.12	36.07
SJVNL	73.12	21.85
BBMB	668.70	237.83
THDC	44.76	25.56
Bilateral/Short Term	270.04	108.02
PGCIL Charges		34.58
NRLDC Charges		0.36
Reactive Energy		0.52
REC Cost towards RPO compliance		10.61
<b>Grand Total</b>	<b>1821.42</b>	<b>730.16</b>

3.14 The Commission approved a total power purchase cost of Rs 647.12 Crores for FY 2015-16 for procurement of 1874.64 MUs of energy. Based on the actual power purchase cost incurred by the CED for FY 2014-15 and six months of FY 2015-16, CED requests the Hon'ble Commission to revise the approved power purchase cost for FY 2015-16 amounting to Rs. 730.16 Cr. as projected above.

### Operations and Maintenance Expenses

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

3.16 With respect to the estimation of O&M elements, it is submitted that the earlier approved amount were based on non-audited figures and therefore were not realistic. CED requests the Hon'ble Commission to approve the revised projections which is based

on the actual expense towards employee, R&M and A&G expense as per the audited accounts of FY 2014-15.

#### *O&M Expenses*

3.17 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 2015-16.

*Table 26: Approved and Estimated O&M Expenses for FY 2015-16 (Rs Crores)*

Particulars	Approved	Estimated
Employee Expense	60.45	63.12
R&M Expense	11.32	13.71
A&G Expense	2.73	3.59
<b>Total O&amp;M Expenses</b>	<b>74.50</b>	<b>80.43</b>

3.18 The employee expense for the FY 2015-16 has been estimated by considering an escalation of 5.10% (Average growth of WPI for past three years) over the actual employee expenses incurred by CED in FY 2014-15. The R&M expense for the FY 2015-16 has been estimated by considering actual R&M expense for FY 2013-14 and FY 2014-15 and as per the JERC tariff regulation 2009. The A&G expense for the FY 2015-16 has been estimated by considering an escalation of 5.10% (Average growth of WPI for past three years) over the actual A&G expenses incurred by CED in FY 2014-15.

3.19 It is submitted that the employee cost for FY 2014-15 is excluding any pension cost as the matter is yet to be decided at the Administration of UT level and CED requests that any impact on account of the same in later date should be allowed by the Hon'ble Commission. The auditor have stated the following difficulty to include the same as per the notes to account which is reproduced below:

*"M. No provision has been made during the year for Pensionary Charges/ liability of the composite CED as merging units are demanding Pensionary charges @ 3.50% as per Notification whereas UT Admn. has decided to pay Pensionary Liability at the rate of 0.59% on population basis. The case of pensionaly liabilities has been forwarded to the*

*Govt. of India, Ministry of Power by the PSEB, Patiala (NOW POWERCOM) for conveying the decision in this regards.*

*The liability on account of Leave salary pension charges in respect of employees of Electricity Deptt. has not been worked out and shown in the accounts due to the fact that the employees are getting pensionary charges under pension head account being maintained by AG, UT, Chd. The Defined Contributory pension scheme in respect of employees appointed on or after 01.01.2004 has been enforced and arrears has been worked out and informed to the Treasury officer for necessary action. Provision for Employer's contribution has not been provided in the accounts due to the fact that Deptt. is not drawing any budget grant for employers share. The whole adjustment is made at the level of the Treasury Officer UT Chd. The Department is in the process of compiling data for all type of retirement benefits and necessary provisions as per the rules shall be made as soon as the data is complied."*

### GFA and Depreciation

3.20 The opening assets for FY 2015-16 as per annual accounts are Rs 391.57 Crores. CED has considered capitalization amounting to Rs 9.96 Crore as approved in tariff order dated 10th April 2015. In absence of the Fixed Asset Register and audited annual accounts, the Hon'ble Commission had disallowed the GFA in previous tariff order and has therefore not considered the same for ARR determination process. CED submits that it has already prepared the Fixed Asset Register and submitted to Commission. CED requests the Hon'ble Commission to approve the fixed assets in the table below:

*Table 27: Approved and Estimated Assets Addition for FY 2015-16 ( Rs Crores)*

Particulars	Approved	Estimated
<b>Asset Addition</b>	<b>9.96</b>	<b>9.96</b>

3.21 Depreciation for FY 2015-16 is estimated on the average rate of 5.28%. The Hon'ble Commission is requested to approve the opening and closing balance of the assets and depreciation as computed below:

Table 28: Approved and Estimated Depreciation for FY 2015-16 (Rs Crores)

Particulars	Approved	Estimated
Opening Assets at the Beginning of the year	65.64	391.57
Addition of assets during the year	9.96	9.96
Gross Fixed assets at the end of the year	75.60	401.53
Average Assets	70.62	396.55
Average Rate of Depreciation	5.28%	5.28%
<b>Depreciation for the year</b>	<b>3.73</b>	<b>20.94</b>

### Interest on Loan

3.22 The CED has estimated the interest on loan for FY 2015-16 in accordance with the revision in asset valuation for the FY 2013-14 and FY 2014-15 owing to preparation of audited accounts on commercial principle. It is respectfully submitted that the entire capital expenditure incurred by CED has been funded through equity infusion by GOI through budgetary support without any external borrowings. As per Regulation 25 of JERC Tariff Regulations, 2009, the interest rate on the amount of equity above 30% treated as loan shall be the weighted average rate of interest on loan capital of the licensee. Therefore, for the purpose of determination of ARR, CED has considered debt equity ratio of 70:30 for estimating normative loan for FY 2014-15. Repayment has been considered depreciation for the year. The interest at the SBI PLR rate of 14.75% as on April 1st, 2014 has been applied on the average normative debt in order to project the amount of normative interest on normative long-term loans for FY 2014-15.

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

Table 29: Approved and Estimated Interest on Normative Loan for FY 2015-16 (Rs Crores)

Particulars	Approved	Estimated
Opening Normative Loan	44.00	156.95
Add: Normative Loan during the year	6.97	6.97
Less: Normative Repayment	3.73	20.94
Closing Normative Loan	47.24	142.98
Average Normative Loan	45.62	149.97
Rate of Interest (@SBAR rate)	14.75%	14.75%

Particulars	Approved	Estimated
<b>Interest on Normative Loan including bank charges</b>	<b>6.73</b>	<b>22.12</b>

### Interest on Working Capital

3.24 CED has computed the working capital for FY 2014-15 as per Clause 29 of JERC (Terms and Conditions for determination of Tariff Regulations), 2009. As per Commission's previous tariff order closing balance of security deposit has been deducted from the total working capital requirement considering that the security deposit available with CED accounts. The SBI advance rate as on 1<sup>st</sup> April 2014 is considered for computation of interest on working capital.

2.37 As submitted earlier as per the clause 6.10 of JERC (Electy. Supply code) regulations 2010, inter-alia requires that the amount of Consumer Deposit obtained from the consumer should be reviewed by the licensee (i.e. Electy. Deptt.), annually on the basis of consumption during the previous 12 months for L.T. consumers and half yearly on the basis of consumption during the previous six months of HT / EHT consumers. The consumers shall be required to pay an additional security deposit / shall be refunded based on the consumption during the period concerned if it exceeds / is lower than the amount of security deposit held by the licensee, by 20 percent. Accordingly, CED has booked or refunded the Additional Security Deposit of the consumers during the year 2013-14 and 2014-15. The closing Consumer security deposit for FY 2013-14 and FY 2014-15 are to the tune of Rs 96.82 Crores and Rs 133.84 Crores and an addition of Rs 5 Crore is estimated for the FY 2015-16.

3.25 The working capital requirement and interest computed as per the regulations is summarized in table below:

Table 30: Interest on Working Capital for FY 2015-16 (Rs Crores)

Particulars	Approved	Estimated
Fuel cost for 2 months	0.00	0.00
Power Purchase Cost of 1 month	53.93	60.85



Particulars	Approved	Estimated
O&M Expenses for 1 months	6.21	6.70
Security Deposit	37.05	138.84
Net Working Capital	23.09	(71.29)
Interest Rate	14.75%	14.75%
Interest on Working Capital	3.41	-

### Interest on Consumer Security Deposit

3.26 As per the provision of Regulation 25 (4) of Tariff Regulations 2009 & 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 or more as may be specified by the commission. The CED is obligated to pay interest on consumer security deposit and entitled to claim the same through tariff. The opening closing balance and estimated addition during the FY 2015-16 and claim of interest on security deposit is given in the table below, CED requests the Commission to approve the same.

Table 31: Interest on Consumer Security Deposit for FY 2014-15 (Rs Crores)

Particulars	Approved	Estimated
Opening Consumer Security Deposit	35.55	133.84
Net Addition During the year	3.00	5.00
Closing Consumer Security Deposit	38.55	138.84
Average Deposit	37.05	136.34
Bank Rate	8.50%	8.50%
<b>Interest on Consumer Security Deposit</b>	<b>3.15</b>	<b>11.59</b>

### Return on Equity

3.27 Provision 23 (2) and 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 Commission has not approved the total fixed assets of the CED in absence of the fixed asset register and had directed the CED to prepare the Fixed Asset Register on urgent basis. CED submits that it has already prepared the Fixed Asset Register and submitted to Commission. The CED has considered the GFA for 2015-16 in

accordance with the annual accounts prepared on commercial principle for FY 2013-14 and FY 2014-15. 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. We request the Hon'ble Commission to approve the RoE presented in table below keeping in view the revised asset valuation.

Table 32: Approved and Estimated Return on Equity for FY 2015-16 (Rs Crores)

Particulars	Approved	Estimated
Gross block at beginning of the Year	65.64	391.57
Less accumulated depreciation	8.98	142.39
Net block at beginning of the year	56.66	249.18
Less accumulated consumer contribution	0.0	0.0
Net fixed assets at beginning of the year	56.66	249.18
<b>Reasonable Return at 3% of NFA</b>	<b>1.70</b>	<b>7.48</b>

### Provision for Bad and Doubtful Debt

3.28 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.

3.29 Further it is pertinent to mention here that Hon'ble Commission in its review order dated 14<sup>th</sup> August 2015 had considered that provision for bad and doubtful debt can be allowed to the extent of 1% on receivables subject to preparation of audited accounts.

*“From reading the provisions of Regulation 28 of JERC (Terms and Condition for determination of Tariff) Regulations, 2009, it is clear that the Commission can allow bad debts up to 1% of the receivables in the revenue requirement. The Petitioner in the original petition, public hearing, review petition and hearing of the present review petition admitted that the receivables are not yet audited. Therefore, the Commission after the Petitioner gets the receivables audited, may allow a provision for bad debts up to 1% of receivables in the revenue requirement of the Petitioner.”*

3.30 Accordingly, CED has proposed the provision for bad and doubtful debts on 1% of the estimated receivables for FY 2015-16. The CED has estimated the provision of bad debt as Rs 8.61 crores for FY 2015-16.

#### Non- tariff Income

3.31 Actual non-tariff income for first eight months of FY 2014-15 and estimated for whole FY 2014-15 is as given in the table below:-

Table 33: Approved and estimated Non-Tariff Income for FY 2015-16 ( Rs Crores)

Particulars	Approved	Estimated
<b>Non-Tariff Income</b>	<b>17.82</b>	<b>20.78</b>

#### Revenue on Current Tariff

3.32 It is submitted that the revenue estimated on the approved sales is very high and cannot be recovered by the utility. The revised revenue on estimated sales and prevailing tariff approved by the Commission for FY 2015-16 is estimated in the table below:

Table 34: Revenue on Current Tariff for FY 2015-16 (Rs Crores)

Particulars	Approved	Estimated
Billed Revenue at Current Tariff	734.04	661.58

#### FPPCA Billed During the year

3.33 The Hon'ble Commission in its review order for FY 2015-16 dated 14.07.2015 had allowed the CED to recover the FPPCA from the consumers as reproduced below.

*“The Commission considered the difficulty shown by the Petitioner on the direction for adjustment of approved surplus in recovery of FPPCA and reached the conclusion that this issue falls within the ambit of Order 47 Rules (1) and (2) CPC and Section 74 of the EA, therefore, decides to review the issue and allow the Petitioner to recover the FPPCA from the consumers, in accordance with the JERC (Terms & Conditions for Determination of Tariff) Regulations, 2009, and no adjustment of approved surplus is required at this stage.”*

3.34 Accordingly the CED has billed FPPCA from the consumers. Total category wise FPPCA billed till 30<sup>th</sup> September 2015 is given in the table below:-

Table 35: FPPCA Billed during the FY 2015-16 (Rs Crores)

Particulars	Billed FPPCA (Rs Crores) till 30.09.2015
Domestic	0.14
Commercial	0.14
Large supply	0.19
Medium supply	0.11
Small power	0.02
Public light	0.02
Bulk supply	0.11
<b>Total</b>	<b>0.73</b>

3.35 The CED has estimated for the FPPCA for the FY 2015-16 on the pro-rata basis and requests Commission to approve the same.

#### Estimated Aggregate Revenue Requirement and Deficit for Review of FY 2015-16

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

Table 36: Estimated Aggregate Revenue Requirement and deficit for the FY 2015-16 (Rs Crores)

S No	Particulars	Approved	Estimated
1.	Cost of power purchase for full year	647.12	730.16
2.	Employee costs	60.45	63.12
3.	R&M Expense	11.32	13.71
4.	Administration and general expenses	2.73	3.59
5.	Depreciation	3.73	20.94
6.	Interest and finance charges	6.73	22.12
7.	Interest on working capital	3.41	-
8.	Interest on Security Deposit	3.15	11.59
9.	Return on NFA /Equity	1.70	7.48
10.	Provision for Bad Debt	0.00	8.61
<b>11.</b>	<b>Total Revenue Requirement</b>	<b>740.34</b>	<b>881.31</b>
12.	Less: Non-Tariff Income	17.82	20.78
<b>13.</b>	<b>Net Revenue Requirement (11-12-13-14)</b>	<b>722.52</b>	<b>860.54</b>
14.	Revenue from retail sales at Existing Tariff	734.04	661.58
15.	FPPCA billed during the year	0	1.45

S No	Particulars	Approved	Estimated
16.	Revenue Gap/Surplus(-) for the Year	(11.52)	197.50

3.37 The revenue gap determined for the FY 15-16 amounts to Rs 197.50 Cr and Hon'ble Commission is requested to approve the same.

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## Chapter 4: Annual Revenue Requirement for MYT Control Period (FY 2016-17 to FY 2018-19)

- 4.1 The Joint Electricity Regulatory Commission has notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Multi Year Distribution Tariff) Regulations, 2014 (Hereinafter referred as “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.
- 4.2 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 28<sup>th</sup> December 2015.
- 4.3 Present petition is prepared in line with the Business plan approved by Hon’ble Commission. Based on the above mentioned regulations, this MYT petition is being filed by the petitioner for the Control Period i.e. FY 2016-17 to FY 2018-19. This chapter provides the details of the expenditure estimated by CED for the each of the year of the Control Period from FY 2016-17 to FY 2018-19.

### Energy sales and Connected Load

- 4.4 As detailed in the section above, the energy sales for FY 2015-16 has been lower than the approved sales for FY 2015-16 by the Commission. Therefore, based on the revised estimation of sales for FY 2015-16, the sales for the subsequent years have been modified. One of the reasons for revised estimation for FY 2015-16 being lower than the approved is the climate conditions which had resulted in lower offtake of energy by various consumer categories. However, the growth rate considered by the Commission

for various categories in its order for approval of Business plan has been used by the CED for sales projections during the Control Period as the same have been derived based on historical trends and does not require a change. The approved sales growth rate has been applied over the estimated sales for the FY 15-16. Accordingly, the sales figures considered for the MYT period is given in the table below.

Table 37: Category wise Sales considered for the Control Period FY16-17 to FY18-19 (in MU's)

S. No	Categories	FY 2016-17	FY 2017-18	FY 2018-19
1.	Domestic	718.05	773.01	832.17
2.	Commercial	500.99	517.50	534.56
3.	Large Supply	120.00	120.00	120.00
4.	Medium Supply	103.75	103.75	103.75
5.	Small Power	20.52	20.52	20.52
6.	Agriculture	1.74	1.88	2.03
7.	Public Lighting	22.00	23.78	25.69
8.	Bulk Supply	87.65	90.80	94.06
9.	Others Temporary Supply	7.15	7.15	7.15
10.	<b>Total Sales</b>	<b>1,581.85</b>	<b>1,658.39</b>	<b>1,739.94</b>

4.5 The Commission had approved load growth for MYT period as proposed by the CED. The category wise connected load projected for each year of MYT period is given in the table below:

Table 38: Projected Category wise connected load for MYT period FY16-17 to FY18-19 (Kw)

S.No	Categories	FY 2016-17	FY 2017-18	FY 2018-19
1.	Domestic	876,406	920,226	966,238
2.	Commercial	430,983	456,842	484,253
3.	Large Supply	74,661	76,155	77,678
4.	Medium Supply	71,285	74,136	77,102
5.	Small Power	19,655	19,852	20,050
6.	Agriculture	737	744	751
7.	Public Lighting	6,197	6,321	6,447
8.	Bulk Supply	41,464	41,464	41,464
9.	Others Temporary Supply	4,187	4,187	4,187
10.	<b>Grand Total</b>	<b>1,525,574</b>	<b>1,599,926</b>	<b>1,678,169</b>

### Energy Availability and Power Purchase Quantum

4.6 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

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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.

4.7 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 letter No. 3/1/2015-OM dated 04.06.2015. Current allocation from different plants to U.T. of Chandigarh has been considered for the availability to CED for all three years of control period.
- 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 meet through short term power.

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

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



- c. NPCIL: The energy generated from the generating stations of NPCIL has been estimated by considering average PLF of past three years. Based upon the generated energy from each plant and its corresponding entitlement to the UT of Chandigarh, the unit availability has been calculated.
- d. SJVNL: The estimation of energy generated from the 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 unit availability has been considered based upon the average generation of past three years as well as its share with the other states. Estimation of unit generation from Pong and Dehar power plant has been done on the same line.
- f. THDC: The unit generation from the Koteswar 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.
- 4.9 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.
- 4.10 Based on the above assumptions and methodology, the power availability to CED from various generating stations during the Control Period is as summarized below:

Table 39: Energy Available from different plants for Control Period

S. No	Organization	Name of Project	Type	Capacity	Total Avg Entitlement in %	Entitlement in MW
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S. No	Organization	Name of Project	Type	Capacity	Total Avg Entitlement in %	Entitlement in MW
1	NTPC	Anta	Gas	419.33	1.830	7.67
2		Auraiya	Gas	663.00	1.190	7.89
3		Dadri GPP	Gas	829.78	0.910	7.55
4		Dadri II TPP	Coal	980.00	0.260	2.55
5		Kahalgaon II	Coal	1,500.00	0.200	3.00
6		Rihand I	Coal	1,000.00	1.240	12.40
7		Rihand II	Coal	1,000.00	1.050	10.50
8		Rihand III	Coal	1,000.00	0.825	8.25
9		Singrauli	Coal	2,000.00	0.240	4.80
10		Unchahar I	Coal	420.00	0.570	2.39
11		Unchahar II	Coal	420.00	0.990	4.16
12		Unchahar III	Coal	210.00	0.760	1.60
13		Jhajjar ( Aravali)	Coal	1,500.00	0.320	4.80
14		Koldam	Hydel	800	1.375	11.00
15	NHPC	Chamera I	Hydel	540.00	3.900	21.06
16		Chamera II	Hydel	300.00	1.440	4.32
17		Chamera III	Hydel	120.00	1.241	1.49
18		Dhauliganga	Hydel	290.00	1.360	3.94
19		Dulhasti	Hydel	390.00	1.110	4.33
20		Parbathi III	Hydel	520.00	1.240	6.45
21		Salal	Hydel	690.00	0.270	1.86
22		Sewa II	Hydel	120.00	1.470	1.76
23		Tanakpur	Hydel	94.00	1.280	1.20
24		Uri-I	Hydel	480.00	0.600	2.88
25	Uri II	Hydel	240.00	0.600	1.44	
26	NPCIL	NAPP	Nuclear	440.00	1.760	7.74
27		RAPP (#3 and #4)	Nuclear	440.00	0.792	3.48
28		RAPP(#5 and #6)	Nuclear	440.00	1.720	7.57
29	SJVNL	NATHPA JHAKRI	Hydel	1,500.00	0.950	14.25
		RAMPUR (Additional)	Hydel	412.00	9.71	40
30		RAMPUR ( U Q)	Hydel	412.00	0.390	1.61
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	0.780	2.80
37		Tehri	Hydel	1,000.00	1.020	9.40

4.11 Based on the above entitlements and reasonable assumptions, the power availability to CED from various generating stations during the Control Period is as summarized below:

S. No	Name of Project	FY 2016-17	FY 2017-18	FY 2018-19
	<b>NTPC Stations</b>			
1	Anta	34.29	34.29	34.29
2	Auraiya	23.98	23.98	23.98
3	Dadri GPP	30.45	30.45	30.45
4	Dadri II TPP	16.92	16.92	16.92
5	Kahalgaon II	17.94	17.94	17.94
6	Rihand I	84.08	84.08	84.08
7	Rihand II	70.04	70.04	70.04
8	Rihand III	55.03	55.03	55.03
9	Singrauli	34.70	34.70	34.70
10	Unchahar I	16.64	16.64	16.64
11	Unchahar II	28.90	28.90	28.90
12	Unchahar III	11.09	11.09	11.09
13	Jhajjar ( Aravali)	19.49	19.49	19.49
14	Koldam	42.84	42.84	42.84
	<b>NHPC Stations</b>			
15	Chamera I	64.16	64.16	64.16
16	Chamera II	21.34	21.34	21.34
17	Chamera III	13.59	13.59	13.59
18	Dhauliganga	15.25	15.25	15.25
19	Dulhasti	20.91	20.91	20.91
20	Parbathi III	24.21	24.21	24.21
21	Salal	8.24	8.24	8.24
22	Sewa II	7.76	7.76	7.76
23	Tanakpur	5.73	5.73	5.73
24	Uri-I	15.34	15.34	15.34
25	Uri II	6.66	6.66	6.66
	<b>NPCIL Stations</b>			
26	NAPP	43.19	43.19	43.19
27	RAPP (#3 and #4)	23.62	23.62	23.62
28	RAPP(#5 and #6)	51.31	51.31	51.31
	<b>Others</b>			

S. No	Name of Project	FY 2016-17	FY 2017-18	FY 2018-19
29	NATHPA JHAKRI	65.89	65.89	65.89
30	RAMPUR (ADDITIONAL)	180.15	180.15	180.15
31	RAMPUR ( U Q)	7.24	7.24	7.24
32	BBMB 3.5 %	132.35	132.35	132.35
33	BBMB 1 LU	36.50	36.50	36.50
34	BBMB 10 LU	365.00	365.00	365.00
35	PONG	45.91	45.91	45.91
36	DEHAR	88.95	88.95	88.95
37	Koteshwar	10.13	10.13	10.13
38	Tehri	34.63	34.63	34.63
	<b>Annual Total</b>	<b>1774.41</b>	<b>1774.41</b>	<b>1774.41</b>

4.12 Apart from the above allocations from central generating stations, 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 JERC for State of Goa and UTs (Procurement of Renewable Energy) 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.

4.13 The RPO targets for the control period to be achieved by the CED during the Control Period as specified in the Regulations is as follows:

Table 40: CED RPO Obligation for the Control Period

FY	Solar RPO (%)	Non-Solar RPO (%)
<b>2016-17</b>	1.15	2.80
<b>2017-18</b>	1.50	2.80
<b>2018-19</b>	1.85	2.80

4.14 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 from roof-top projects 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).

4.15 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.

4.16 The summary of projected Solar and Non-Solar compliance by CED during the Control Period is summarized in the table below:

Table 41: Units to be Purchase under RPO

Solar Obligation	2016-17	2017-18	2018-19
Solar RPO (In %)	1.15%	1.50%	1.85%
Projected Sales	1,581.85	1,658.39	1,739.94
Total Power to be Procured to meet Solar Obligation (In MU)	18.19	24.88	32.19
<b>Breakup of Sources for Solar RPO Compliance</b>			
Power planned to be procured from NET Metering Mode (In MW)	5	8	12
Power planned to be procured from NET Metering Mode (In MU's)	7.01	11.21	16.82
Power planned to procure from Gross Metering Mode (In MW)	2.00	5.00	10.00
Power planned to procure from Gross Metering Mode (In MU's)	2.80	7.01	14.02
RPO to be met with REC (In MU's)	8.38	6.66	1.35
Non Solar Obligation	2016-17	2017-18	2018-19
Non Solar RPO (In %)	2.80%	2.80%	2.80%
Projected Sales (In MU's)	1,581.85	1,658.39	1,739.94
Total Power to be Procured to meet Non Solar Obligation (In MU's)	44.29	46.43	48.72

4.17 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 as illustrated in the table below:

Table 42: Summary of Power Purchase for the MYT Control Period (MUs)

Particulars	2016-17	2017-18	2018-19
Long Term Power Purchase	1774.41	1774.41	1774.41
Power Procurement (Net Metering)	7.01	11.21	16.82
Power Procurement (Gross Metering)	2.80	7.01	14.02
Short Term Power	118.48	193.48	269.59
<b>Total Power Purchase</b>	<b>1902.70</b>	<b>1986.11</b>	<b>2074.83</b>

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## Distribution Losses and Energy Requirement

- 4.18 CED respectfully submits that it is taking all efforts in reducing the distribution losses in UT of Chandigarh. It has initiated implementation of various schemes for reducing the technical and commercial losses. However, losses in UT is much lower than the average losses in country and incremental reduction in losses at this level becomes very difficult. Further, CED once again 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.
- 4.19 During the 30<sup>th</sup> Standing Committee meeting of CES held on dated 02.01.2013, in principal approval for establishment of 2x160 MVA, 220/66 kV Grid Sub Station alongwith 200 kV D/C line from Barwala (Panchkula) was accorded. It was also decided during the meeting may be fine-tuned after discussion with Chandigarh, HVPNL and CTU further. Accordingly as decided walk over survey was carried out by POWERGRID and it was conveyed by POWERGRID that the land for 220 kV Grid Sub Station is available at 2 sites namely Hallomajra and Raipur Kalan. Further PGCIL vide their letter dated 07.04.2015 intimated that Central Electricity Authority vide letter No. 1/3/2015-SP&PA March, 2015 has conveyed approval of Government of India (GOI) to execute the work by POWERGRID for establishment of 220/66kV, 2 x 160MVA, GIS Sub Station at UT Chandigarh and alongwith 220kV D/C line from Chandigarh to 440/220kV, Panchkula, PGCIL Sub Station.

The H.E. the Administrator, UT Chandigarh has accorded the approval of site measuring 8 acre for establishment of New 220 kV Grid Sub Station adjoining village Hallomajra. Further, Estate Office, UT Chandigarh vide Endst.No.26671/M/1165/G-VI/20105 dated 31.12.2015 has transferred/ allotted the land measuring 8 acre adjoining Village

Halomajra for new 220/66 kV Grid Sub Station to Power Grid Corporation of India Limited.

- 4.20 It is pertinent to mention here that as per the actual information for past years, CED has been able to reduce its losses from 24.22% in FY 2003-04 to 15.27% in FY 2013-14. Further, CED submits that the system improvement and augmentation works executed each year under the planned schemes have resulted in the reduction of T&D losses in its distribution area. CED has been successful in maintaining the T&D losses within 20% in spite of having a consumer profile where majority of the consumers are LT category consumers.
- 4.21 The Distribution losses for the Control Period FY 2016-17 and FY 2018-19 are projected by the CED based on the Hon'ble Commission Order dated 5<sup>th</sup> May 2014 in Suo-moto petition no 76/2012.

Table 43: Loss Target for UT of Chandigarh approved by Hon'ble Commission

Loss %	FY 14-15	FY 15-16	FY 16-17
T&D Losses (ED –Chandigarh)	15.00%	14.50%	14.00%

- 4.22 Therefore, in view of the target specified by the Hon'ble Commission vide Order dated 5th May 2014, CED has retained the T&D loss target approved by the Hon'ble Commission for FY 2016-17. Further, CED proposes 0.25% reduction each year in T&D loss target for the balance period of the Control Period. The loss reduction of 0.25 percentage is anticipated in future year in view of the fact that incremental reduction after certain point becomes difficult and investment intensive. However, CED would request the Hon'ble Commission to review the targets for the MYT Period once the interstate point is provided to CED and actual T&D loss level could be ascertained. The projected distribution losses for MYT control period is given in the table below, we request the Hon'ble Commission to approve the same.

Table 44: Target/Projected Distribution Losses for the MYT Control Period FY16-17 to FY18-19

Categories	FY 2016-17	FY 2017-18	FY 2018-19
<b>Distribution Losses</b>	<b>14.00%</b>	<b>13.75%</b>	<b>13.50%</b>

4.23 The Transmission losses in the interstate circuit is considered at 3.57% based up on the recent 52 weeks (5<sup>th</sup> January 2015-3<sup>rd</sup> January 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 45: Energy Balance for the Control Period

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Energy Sales	1,581.85	1,658.39	1,739.94
Loss %	14.00%	13.75%	13.50%
Loss (MUs)	257.51	264.38	271.55
<b>Total Energy Required at UT Periphery</b>	<b>1,839.36</b>	<b>1,922.77</b>	<b>2,011.49</b>
<b>Energy Available</b>			
Units Available from Firm Sources	1,774.41	1,774.41	1,774.41
Transmission Loss (%)	3.57%	3.57%	3.57%
Transmission Loss (MUs)	63.34	63.34	63.34
<b>Net Energy Available at UT Periphery</b>	<b>1,711.07</b>	<b>1,711.07</b>	<b>1,711.07</b>
<u>Power Available within UT</u>			
Power planned to be procured from NET Metering Mode (In MU's)	7.01	11.21	16.82
Power planned to procure from Gross Metering Mode (In MU's)	2.80	7.01	14.02
<b>Total Energy Available</b>	<b>1,720.88</b>	<b>1,729.29</b>	<b>1,741.91</b>
<b>Demand Supply (Gap) / Surplus</b>	<b>(118.48)</b>	<b>(193.48)</b>	<b>(269.59)</b>

#### Power Purchase cost

4.24 The power purchase cost for these plants is computed based on the actual power purchase cost incurred in FY 2014-15.

- a. The fixed charges billed by each plant for FY 2013-14 has been escalated by 10% and considered same for each year of the MYT control period.
- b. The Energy Charges for each plant is computed by multiplying variable charge per units for FY 2014-15 escalated at 5% with units available from each plant mentioned above.
- c. The rate of Short term power has been considered at Rs. 4 per unit in view of the average rate of bilateral power rate in energy exchange
- d. In absence of any recent tariff orders for plants of SJVN, THDC, etc., the fixed and energy charges have been assumed similar to the actual charges paid by CED during FY 2014-15 and any variation in the cost may be recovered as part of FPPCA or at the time of truing-up. Similarly, for BBMB plants, the combined cost



paid for the energy drawn during FY 2014-15 has been considered for projecting the cost of power from BBMB during the Control Period.

- e. PGCIL Charges, NRLDC Charges, Reactive Energy charges are computed at an escalation of 5% y-o-y over actuals billed per unit in FY 2014-15

#### *Power Purchase from Renewable Sources /RECs*

- 4.4 The cost of power procurement from solar power plant has been estimated as below for the control period. Based on the current scenario a gradual decrease in the range of 3%-4% in price of solar power has been considered for the period.

*Table 46: Cost of Solar Power Purchase (Gross Metering Mode)*

Particulars	2016-17	2017-18	2018-19
<b>Cost of Solar power (Rs/Unit)</b>	8.4	8.2	7.9

- 4.5 The cost of solar power purchase from net metering mode has been estimated as below. The cost is arrived at after considering the fact that the net metering consumer will consume approx. 3/4th of the power generated while the rest of the power generated will be injected in the grid. In such a scenario the CED shall pay the net metering user for the units injected in to the grid while the RPO compliance will be met for the power generated by the net metering consumer, resulting in reduced effective cost from the net metering mode. The consumption/export may vary from consumer to consumer.

*Table 47: Cost of Solar Power Purchase (Net Metering Mode)*

Particulars	2016-17	2017-18	2018-19
<b>Cost of Solar power (Rs/Unit)</b>	3.5	3.5	3.5

- 4.25 For the balance solar obligation as well as for non-solar obligation, CED has projected to meet the same from REC certificates during the Control period. The cost of solar REC certificates' price is considered at floor price of Rs 3500 and that for non-solar certificate price is considered as Rs 1500 per certificate in line with the CERC approved rates for RECs.

4.26 The Energy quantum, equivalent certificates and total cost of meeting RPO obligation is given in the table below.

Table 48: Cost of meeting RPO for the MYT Control Period

Particulars	2016-17	2017-18	2018-19
<b>Solar RPO</b>	1.15%	1.50%	1.85%
Sales	1,581.85	1,658.39	1,739.94
<b>Solar RPO Quantum (MUs)</b>	<b>18.19</b>	<b>24.88</b>	<b>32.19</b>
Power planned to be procured from NET Metering Mode (In MW)	5.00	8.00	12.00
Power planned to be procured from NET Metering Mode (In MU's)	7.01	11.21	16.82
<b>Cost of Power from Net Metering Mode (Rs. Cr.)</b>	<b>2.45</b>	<b>3.92</b>	<b>5.89</b>
Power planned to procure from Gross Metering Mode (In MW)	2.00	5.00	10.00
Power planned to procure from Gross Metering Mode (In MU's)	2.80	7.01	14.02
<b>Cost of Power from Gross Metering Mode (Rs. Cr.)</b>	<b>2.35</b>	<b>5.75</b>	<b>11.07</b>
RPO to be met with REC	8.38	6.66	1.35
Certificates to be bought	8380	6655	1353
Price of Certificates (Rs/certificate)	3500	3500	3500
<b>Cost of Solar REC (Rs Crores)</b>	<b>2.93</b>	<b>2.33</b>	<b>0.47</b>
<b>Non-Solar RPO</b>	2.80%	2.80%	2.80%
<b>Non-Solar RPO Quantum (MUs)</b>	<b>44.29</b>	<b>46.43</b>	<b>48.72</b>
Certificates to be bought	44291	46434	48718
Price of Certificates (Rs/certificate)	1500	1500	1500
<b>Cost of Non-Solar RECs (Rs Crores)</b>	<b>6.64</b>	<b>6.97</b>	<b>7.31</b>

4.27 Based on the various assumptions for projecting the cost of power from each source, the estimated power purchase cost is summarized in the table below.

Table 49: Projected Power Purchase Cost for the Control Period (Rs Crores)

Power Plant	FY 17	FY 18	FY 19
<b>NTPC Stations</b>			
Anta	16.75	17.38	18.04
Auraiya	15.26	15.85	16.48
Dadri GPP	17.87	18.60	19.37
Dadri II TPP	9.80	10.13	10.48
Kahalgaon II	7.59	7.84	8.09
Rihand I	22.78	23.54	24.34
Rihand II	20.41	21.05	21.72
Rihand III	18.30	18.80	19.33
Singrauli	6.51	6.74	6.98
Unchahar I	6.52	6.77	7.03
Unchahar II	11.47	11.90	12.36
Unchahar III	4.83	4.99	5.15

Power Plant	FY 17	FY 18	FY 19
Koldam	16.02	16.82	17.66
APCL	14.85	15.26	15.70
<b>NHPC Stations</b>			
Chamera I	18.75	19.06	19.39
Chamera II	8.75	8.92	9.10
Chamera III	8.39	8.57	8.75
Dhauliganga	6.57	6.69	6.82
Dulhasti	18.20	18.53	18.87
Parbathi III	13.27	13.67	14.09
Salal	1.17	1.19	1.21
Sewa II	4.96	5.05	5.15
Tanakpur	1.96	2.00	2.03
Uri-I	3.60	3.66	3.73
Uri II	3.56	3.62	3.69
<b>NPCIL</b>			
NAPP	11.29	11.86	12.45
RAPP (#3 and #4)	7.14	7.50	7.88
RAPP(#5 and #6)	19.43	20.40	21.42
<b>SJVNL</b>			
Nathpa Jhakri	19.85	19.85	19.85
Rampur (Additional)	64.85	64.85	64.85
Rampur	2.61	2.61	2.61
<b>BBMB</b>	237.83	237.83	237.83
<b>THDC</b>			
Koteshwar	5.33	5.33	5.33
Tehri	20.24	20.24	20.24
<b>Other Sources</b>			
Power Procurement (Net Metering)	2.45	3.92	5.89
Power Procurement (Gross Metering)	2.35	5.75	11.07
Short Term/Bilateral	47.39	77.39	107.84
Cost of REC certificates	9.58	9.29	7.78
<b>Grand Total</b>	<b>712.44</b>	<b>756.63</b>	<b>802.94</b>

4.28 The Other charges comprising of inter-state transmission charges, scheduling charges, etc are projected considering an increase of 5% y-o-y over the actuals for FY 2014-15.

The projected charges for each head are as summarized in the table below :-

Table 50: Transmissions and Other Charges projected for the MYT Control Period (Rs Crores)

Particulars	FY 17	FY 18	FY 19
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Particulars	FY 17	FY 18	FY 19
PGCIL Charges	36.31	38.13	40.03
NRLDC Charges	0.38	0.40	0.42
Reactive Energy Charges	0.55	0.58	0.61
<b>Total</b>	<b>37.24</b>	<b>39.10</b>	<b>41.06</b>

4.29 Based on the source-wise cost of power purchases, the total cost projected for MYT period is as provided in table below. The Hon'ble Commission is requested to approve the power purchase cost as projected for the Control Period.

Table 51: Projected Power Purchase Cost for the MYT Control Period (Rs Crores)

Particulars	2016-17	2017-18	2018-19
<b>Total Power Purchase Cost</b>	<b>749.69</b>	<b>795.73</b>	<b>844.00</b>

### Operations and Maintenance Expenses

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

4.31 The Regulation 21 of the MYT Regulations 2014 specifies that the Commission shall stipulate a separate trajectory of norms for each of the component of O&M expenses. The norms may consider no of employees per 1000 customers and per substation, A&G expenses per employee, R&M expenses as percentage of assets, productivity improvement etc . The norms shall exclude onetime expenses such as expenses arising due to change in accounting policy, arrears etc, expenses beyond control of utility, the justified inflation shall apply while projecting the O&M expenses for a year.

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*Employees Expenses*

- 4.32 As per regulations 21.1 employees cost shall be computed as per the approved norms escalated by wholesale price index (WPI) adjusted by provisions for expenses beyond control of the Distribution Licensee and one time expected expenses such as recovery of terminal benefits, implication of pay commission , arrears and interim relief. The Employee expenses shall be governed by the following formula

$$EMP_n = (EMP_b * WPI Inflation) + Provision$$

Where:

*EMP<sub>n</sub>: Employee expense for the year n*

*EMP<sub>b</sub>: Including yearly increments of employees, bonus, promotion, VRS, employee expenses as per norm*

*WPI Inflation: is the average increase in the wholesale price index (WPI) for immediately preceding three years*

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

- 4.33 The Commission in its Order on Business Plan dated 28th December 2015 has approved Employee cost norms as per the above mentioned regulation. CED has not considered any one time expenses for projecting the employees' expenses for MYT period and hence provisions are kept as NIL. However, it is pertinent to mention that the norms for employee cost approved by the Hon'ble Commission are based on actual employee cost submitted by CED. As discussed in previous chapters, the employee cost recorded in the accounts of CED are excluding any provisioning towards the pensionary charge/ liability of the Board and the Leave salary pension charges in respect of employees of CED. Since the expenses with respect to these elements are being undertaken at the Treasury Officer, UT Chandigarh; the Department is in the process of compiling data for all type of retirement benefits and necessary provisions as per the rules shall be made as soon as the data is compiled. Therefore, CED requests the Hon'ble Commission to approve any liability arising in the later years on account of the same based on actuals.

4.34 The average increase in WPI for immediately three years i.e. 5.10% which is considered as inflation factor for escalating the Employees cost per annum approved by the Commission. The approved annual per employee cost and existing number of employees along with proposed addition in employees as per the man-power study previously approved by the Commission, has been considered for the projection of Employee Cost for each year of the Control Period. The projected Employees expenses for Control Period is given below, the Hon'ble Commission is requested to approve the same.

Table 52: Projected Employees' Expenses for the MYT Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
<b>Employees' Expenses</b>	<b>76.36</b>	<b>89.32</b>	<b>93.52</b>

4.35 It is submitted that the CED in earlier years has not been recording the expense towards free power being made available to its employees under perks/ benefits. Therefore, the cost of the same has not been considered while approving the norms for average employee cost by the Hon'ble Commission in the Order on business plan dated 28<sup>th</sup> dec 2015.

4.36 CED proposes to account for the same as part of employee benefits in the future years and therefore, the additional impact on the same has been considered over and above the employee cost claimed by CED as per the norm.

4.37 In this respect CED proposes the free electricity concession to its employees as per the already adopted circular of PSPCL (erstwhile PSEB, Punjab) dated 7.1.2011 (copy attached) as per follows:

Table 53: Free Electricity Concession to CED Employees as per PSPCL circular)

S.No.	Basic + Grade Pay (Rs)	Applicable Unit Concession per month	Tentative no. of employees falling in the category
1	Below Rs 13550/-	100	258
2	Between Rs 13550/- and Rs 22599/-	125	600
3	Rs 22600/- and above	155	125

Accordingly, the following table provides the break-up of the employee cost as per the norms fixed by the Commission and cost to be incurred on account of free electricity to employees.

Table 54: Break-up of Employee Cost and Cost on account of Free Electricity

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Employee Cost (As per Norms)	75.46	88.42	92.62
Cost on Account of Electricity to CED Employees	0.90	0.90	0.90
<b>Proposed Total Employee cost</b>	<b>76.36</b>	<b>89.32</b>	<b>93.52</b>

#### Administration and General Expenses

4.38 As per clause 21.3 of the MYT regulations 2014 , the Administration & general expenses shall be calculated as per the norm escalated by wholesale price index and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by distribution licensee and validated by the Commission) or other expected one-time expenses, and shall be governed by the following formula

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

Where:

$A\&G_n$ : A&G expense for the year n

$A\&G_b$ : A&G Expenses as per the norms

*WPI Inflation*: is the average increase in the wholesale price index (WPI) for immediately preceding three years

*Provision*: Cost for initiatives or other one-time expenses as proposed by the distribution licensee and validated by the Commission

4.39 The commission in its order dated 28<sup>th</sup> December 2015 has approved A&G cost norms as per the above mentioned regulation. CED has not considered any one time expenses for projecting the A&G expenses for MYT period and hence provisions are kept as NIL. The average increase in WPI for immediately three years has been 5.10% which is considered as inflation factor for escalating the estimated A&G expenses per employee and A&G expense per 1000 consumers approved by the commission for FY 2013-14. While projecting the A&G cost the consumer number has been considered as approved

by the Commission while employee strength has been considered in line with the existing and approved addition in manpower. The projected A&G expenses for MYT period is given below, the Hon'ble Commission is requested to approve the same.

Table 55: Projected A&G Expenses for the MYT Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
<b>Administration and General Expenses</b>	6.62	7.48	7.95

#### *Repair and Maintenance Expenses*

4.40 As per clause 21.2 of the MYT regulations 2014 , the Repair and Maintenance expenses shall be calculated as percentage (as per norms defined) of opening gross fixed assets for the year governed by following formula

$$R\&M_n = K_b * GFA_n * Inflation Index$$

Where:

$R\&M_n$ : R&M expense for the year n

$K_b$ : Percentage Point as per the norms

$GFA_n$ : Opening Gross Fixed Assets for nth Year

GFA: Gross Fixed Assets at the beginning of the financial year

Inflation Index is CPI : WPI :: 60 : 40

CPI is Consumer Price Index issued by Government of India & these indices are for immediately preceding three years

WPI is Wholesale Price Index issued by Government of India & these indices are for immediately preceding three years

4.41 The commission in its order dated 28<sup>th</sup> December 2015 has approved R&M norms as per the above mentioned regulation. The K factor is considered at 2.60% as approved by the commission and applied as percentage of assets for computing base R&M expenses for the year.

4.42 The average increase in WPI for immediately three years has been 5.10% and CPI for immediately three years computed as 8.80%. The inflation index is computed as 7.32% after giving weightage of 60% to CPI and 40% to WPI. The same percentage is used for



escalating the base R&M expenses computed as explained in paragraph above. The projected R&M expenses for Control Period is given below, the Hon'ble Commission is requested to approve the same.

Table 56: Projected R&M Expenses for the Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
<b>Repair and Maintenance Expenses</b>	<b>12.75</b>	<b>15.07</b>	<b>18.47</b>

4.43 Based on the above the projected O&M expenses for the control period is shown in the table below, the Hon'ble Commission is requested to approve the same.

Table 57: Projected O&M Expenses for the Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Employees' Expenses	76.36	89.32	93.52
Administration and General Expenses	6.62	7.48	7.95
Repair and Maintenance Expenses	12.75	15.07	18.47
<b>Total Operation and Maintenance Expenses</b>	<b>95.72</b>	<b>111.87</b>	<b>119.93</b>

### GFA and Depreciation

4.44 The opening assets for Control Period are projected as Rs 401.53 Crores. CED had submitted its business plan for MYT Control period which was approved by the Hon'ble Commission on 28<sup>th</sup> December 2015. The capex plan included the details of various capital expenditure schemes in the identified areas and their respective estimates for each year of the MYT Control Period from FY 2016-17 to FY 2018-19.

4.45 In the approved Business Plan for CED, the Hon'ble Commission had approved capitalization of the scheme costing less than 10 Crores. However, three schemes with capex greater than Rs. 10 Cr. each had been disallowed due to non-availability of Cost Benefit analysis and prior approval of the Commission.

4.46 In this regard CED humbly submits that the proposed schemes have high technical merits. The schemes are necessary to ensure smooth functioning of the T&D network in the concerned areas. Thus CED requests the Hon'ble Commission to approve revised proposed capitalization presented in the table which comprises of asset addition on account of these schemes as well:

Table 58: Proposed Capitalization for the Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Capitalization approved by the Commission	48.13	38.52	19.50
<b>Schemes above Rs 10 Crores (Not Approved)</b>			
Conversion of existing 33KV Sub Station Sector-18 to 66KV Sub Station Sector-18 by Providing GIS 2x20MVA, 66/11KV Power Transformer along with 66 kV associated 66 kV T/L with underground cable from 66 kV Sector-26 to 66 kV Sector 18.	0.0	0.0	27.29
Providing 2x20MVA, 66 / 11KV Gas Insulated Sub Station at Sector-26 UT Chandigarh along with 66 KV D/C line from 66 kV I.T park to 66KV Grid Sub Station Sector-26 UT Chandigarh.	0.0	0.0	36.98
Providing 66 KV Transmission Line along with associated 66 KV line bays to upcoming 66 KV Grid Substation at Raipur Kalan UT Chandigarh	0.0	0.0	11.03
<b>Proposed Capitalization for MYT Period</b>	<b>48.13</b>	<b>38.52</b>	<b>94.80</b>

4.47 It is further submitted that, in absence of the Fixed Asset Register and audited annual accounts, the Hon'ble Commission had disallowed the GFA in previous tariff order and had therefore not considered the same for ARR determination process. Now that the fixed asset register as well as audited accounts of CED has been prepared and duly submitted to the Commission along with true-up for FY 2011-12 and FY 2012-13, CED requests the Hon'ble Commission to approve the revised opening and closing balances of fixed assets based on the annual audited accounts as presented in the table below:

Table 59: Projected Fixed Assets for the MYT Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening Balance of Assets	401.53	449.66	488.18
Addition During the year	48.13	38.52	94.80
Closing balance of assets	449.66	488.18	582.98

4.48 Depreciation for the Control Period is estimated on the average rate of 5.28%. The Hon'ble Commission is requested to approve the depreciation as computed below

Table 60: Projected Depreciation for the MYT Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Average Assets	425.60	468.92	535.58
Rate of Depreciation	5.28%	5.28%	5.28%
Depreciation for the year	<b>22.47</b>	<b>24.76</b>	<b>28.28</b>

### Interest on Loan

- 4.49 As per Regulation 24 (b) of MYT Regulations, 2014, if the equity deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans. The repayment for the control period shall be deemed to be equal to the depreciation allowed for the year.
- 4.50 It is respectfully submitted that the entire capital expenditure incurred by CED had been funded through equity infusion by GOI through budgetary support without any external borrowings. For the purpose of determination of ARR, CED has considered debt equity ratio of 70:30 for estimating normative loan for MYT control period. Repayment has been considered to be equal to the depreciation amount computed as per the section on computation of depreciation above. The interest at the SBI PLR rate of 14.75% as on April 1st, 2015 has been applied on the average normative debt in order to project the amount of normative interest on normative long-term loans for entire control period.
- 4.51 The Hon'ble Commission is requested to approve the interest on normative loans as computed in the table below:-

*Table 61: Projected Interest on Loan for the Control Period*

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening Normative Loan	142.98	154.21	156.41
Add: Normative Loan during the year (70% of proposed capitalization)	33.69	26.96	66.36
Less: Normative Repayment	22.47	24.76	28.28
Closing Normative Loan	154.21	156.41	194.49
Average Normative Loan	148.60	155.31	175.45
Rate of Interest	14.75%	14.75%	14.75%
<b>Interest on Normative Loan including bank charges</b>	<b>21.92</b>	<b>22.91</b>	<b>25.88</b>

### Interest on Working Capital

- 4.52 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

The rate of interest on working capital shall be equal to the base rate for the State Bank of India on the 1<sup>st</sup> April of the relevant financial year.

4.53 CED has considered two month receivables and one month operation and maintenance expenses as part of working capital. The SBI advance rate as on 1<sup>st</sup> April 2015 is considered for computation of interest on working capital.

4.54 Based on the regulations, the working capital requirement and interest thereon is summarized in the table below :-

Table 62: Projected Interest on working Capital Period for the MYT Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Two Months Receivables	151.76	163.21	174.39
O&M Expenses for 1 months	7.98	9.32	9.99
Less:			
Power Purchase Cost of 1 month	62.47	66.31	70.33
Total Consumer Security Deposit	143.84	148.84	153.84
<b>Total Working Capital Requirement</b>	<b>(46.58)</b>	<b>(42.62)</b>	<b>(39.79)</b>
Interest Rate	14.75%	14.75%	14.75%
<b>Interest on Working Capital</b>	<b>-</b>	<b>-</b>	<b>-</b>

#### Interest on Consumer Security Deposit

4.55 Interest on consumer security deposits have been computed based on closing balance at the end of FY 2014-15 and projected increase of Rs. 5 Crores addition in consumer security deposit for each year of the Control Period. The opening closing balance and addition during the control period and claim of interest on security deposit is given in the table below, CED requests the Commission to approve the same.

Table 63: Projected Interest on Consumer Security Deposit for the Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening Consumer Security Deposit	138.84	143.84	148.84
Net Addition During the year	5.00	5.00	5.00
Closing Consumer Security Deposit	143.84	148.84	153.84
Average Deposit	141.34	146.34	151.34
Bank Rate	8.50%	8.50%	8.50%
<b>Interest on Consumer Security Deposit</b>	<b>12.01</b>	<b>12.44</b>	<b>12.86</b>

### Return on Equity

4.56 Provision of Regulation 27 of MYT Regulations 2014 provides for entitlement for Returns on 30% of Capital Base or on actual equity, whichever is lower. It is submitted that the entire capital expenditure incurred by CED had been funded through equity infusion by GOI through budgetary support without any external borrowings. Therefore, for the purpose of claiming the RoE, normative equity as 30% of its capital base has been considered.

4.57 In the past Tariff Orders, approval for opening fixed assets of the CED was not granted in the absence of the fixed asset register and audited accounts. Since the fixed asset register as well as audited accounts for FY 2011-12 to FY 2014-15 for CED are prepared, the Hon'ble Commission is requested to approve the RoE based on the equity deployed towards the total GFA as per the annual audited accounts. Rate of return on equity is considered 16% post tax as per proviso 27 of the MYT regulations 2014. The proposed RoE for the Control Period is as below:

Table 64: Projected Return on Equity for the MYT Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening Normative Equity	120.46	134.90	146.45
Addition During the year	14.44	11.56	28.44
Closing Normative Equity	134.90	146.45	174.89
Average Normative Equity	127.68	140.68	160.67
Rate of Return	16.00%	16.00%	16.00%
<b>Return on Equity</b>	<b>20.43</b>	<b>22.51</b>	<b>25.71</b>

### Provision for Bad and Doubtful Debt

4.58 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.

4.59 Hon'ble Commission is requested to adjust the provision at time of final true up of the concerned year. The projected bad and doubtful debtor is as given in the table below.

Table 65: Projected Provision for Bad and Doubtful Debt for the MYT Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Provision of Bad and Doubtful Debt	9.11	9.79	10.46

### Non- tariff Income

4.60 Average of past two year non-tariff income has been considered for projecting the non-tariff income for the control period. Projected non-tariff income for the Control Period as below:

Table 66: Projected Non-Tariff Income for the MYT Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Non-Tariff Income	20.78	20.78	20.78

### Estimated Aggregate Revenue Requirement for the Control Period

4.61 Based on the detailed projection for each parameter, the Aggregate Revenue Requirement for each year of the Control Period is as given in the table below :-

Table 67: Projected Aggregate Revenue Requirement for MYT Control Period (Rs Crores)

S. No	Particulars	FY 2016-17	FY 2017-18	FY 2018-19
1.	Cost of power purchase for full year	749.69	795.73	844.00
2.	Employee costs	76.36	89.32	93.52
3.	Administration and general expenses	6.62	7.48	7.95
4.	R&M expenses	12.75	15.07	18.47
5.	Depreciation	22.47	24.76	28.28
6.	Interest and finance charges	21.92	22.91	25.88
7.	Interest on working capital	-	-	-
8.	Interest on Security Deposit	12.01	12.44	12.86

S. No	Particulars	FY 2016-17	FY 2017-18	FY 2018-19
9.	Return on NFA /Equity	20.43	22.51	25.71
10.	Provision for Bad Debt	9.11	9.79	10.46
<b>11.</b>	<b>Total Revenue Requirement</b>	<b>931.35</b>	<b>1,000.01</b>	<b>1,067.12</b>
12.	Less: Non-Tariff Income	20.78	20.78	20.78
<b>13.</b>	<b>Net Revenue Requirement</b>	<b>910.57</b>	<b>979.23</b>	<b>1,046.35</b>

### Revenue on Current Tariff

4.62 The billed revenue on projected sales for the Control Period and prevailing tariff is projected in the table below:

Table 68: Projected Revenue at Current Tariff for each year of MYT Control Period (Rs Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Domestic	253.73	272.95	293.64
Commercial	254.64	263.91	273.54
Large Supply	61.78	61.88	61.99
Medium Supply	53.10	53.36	53.63
Small Power	9.22	9.22	9.22
Agriculture	0.40	0.43	0.47
Public Lighting	10.02	10.79	11.63
Bulk Supply	43.17	44.59	46.06
Others Temporary Supply	4.79	4.79	4.79
<b>Total</b>	<b>690.84</b>	<b>721.93</b>	<b>754.96</b>

### Revenue Surplus/ Gap for the Control Period

4.63 Based on the projected ARR and revenue for each year of the Control Period, the revenue gap is summarized in table below:

Table 69: Revenue Gap on Current Tariff for MYT Period (Rs Crores)

S No	Particulars	FY 2016-17	FY 2017-18	FY 2018-19
1.	Net Revenue Requirement	910.57	979.23	1,046.35
2.	Revenue from retail sales at Existing Tariff	690.84	721.93	754.96
3.	Revenue Surplus / (Gap) for the Year	(219.72)	(257.30)	(291.39)

4.64 The above revenue gap is for the Control Period without considering any revenue gap for the past years as detailed in chapter for true-up of FY 2013-14 and FY 2014-15 and review for FY 2015-16. The proposed tariff and proposal for treatment of the true-up gap along with carrying cost is detailed in the subsequent Chapter.

## Chapter 5: Treatment of Gap and Tariff Proposal

5.1 Based on the true-up of FY 2011-12 and FY 2012-13 submitted to the Hon'ble Commission as well as true-up for FY 2013-14 and FY 2014-15 included in the petition along with review of FY 2015-16, the consolidated revenue gap is summarized in the table below.

Table 70: Revenue gap for the Period FY 2011-12 to FY 2015-16 (Rs. Cr.)

Particular	2011-12	2012-13	2013-14	2014-15	2015-16
	Actual	Actual	Actual	Actual	Estimated
Net Revenue Requirement	715.87	760.38	696.66	823.52	860.54
Revenue on existing tariff	491.85	602.47	602.17	624.97	661.58
FPPCA Charged	-	-	78.20	16.34	1.45
<b>Revenue Gap for the year</b>	<b>224.02</b>	<b>157.91</b>	<b>16.29</b>	<b>182.21</b>	<b>197.50</b>
<b>Cumulative Revenue Gap</b>	<b>777.93</b>				

5.2 The true-up for FY 2011-12 and FY 2012-13 has already been submitted to the Hon'ble Commission as part of the compliance to the directives issued in the previous Tariff Order for FY 2015-16.

5.3 As per clause 4 of Regulation 8, Review and truing up of Tariff Regulations 2009;  
*“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.”*

5.4 It is submitted that the department was earlier working as part of the Administration of UT of Chandigarh and was therefore complying with the account preparation as that of the UT of Chandigarh. It was only post the directives of the Hon'ble Commission that the need for preparation of audited accounts on commercial principles was realized and approval for the same was provided. Therefore, CED requests the Hon'ble Commission to allow carrying cost on all the past revenue gap.

5.5 In accordance with regulations for allowance of carrying cost on revenue gap determined based on true-up, the revenue gap along with carrying cost for each year is presented in table below:



Table 71: Revenue Gap and Carrying Cost (Rs. Cr.)

Particulars	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Opening Gap	-	238.58	443.33	524.86	797.93
Addition	224.02	157.91	16.29	182.21	197.50
Closing	224.02	396.49	459.62	707.07	995.43
Interest Rate	13.00%	14.75%	14.45%	14.75%	14.75%
Carrying Cost	14.56	46.84	65.24	90.86	132.26

5.6 Based on the above computations, the total gap for the period FY12-FY16 along with carrying cost is determined at Rs 1127.69 Crores.

5.7 Since the revenue gap for previous years is substantial and may require large tariff revisions, CED requests the Hon'ble Commission to devise a suitable mechanism in order to ensure the recovery of cumulative revenue gap along with carrying cost on account of truing-up FY12-FY15 and review of FY16.

5.8 Further, as part of the projections for ARR and revenue at existing tariff for the Control Period, it is observed that the existing tariff is inadequate and shall lead to additional revenue gap during the Control Period. Therefore, CED is proposing revision in tariff across categories for meeting the revenue gap computed for FY 2016-17 as part of this MYT Petition. In line with the provisions of National Tariff Policy, CED has proposed tariff for each consumer category in a manner that average realization is +/- 20% of the average cost of supply for the FY 2016-17.

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

Table 72: Existing and Proposed Tariff

Tariff Category	EXISTING TARIFF		PROPOSED TARIFF	
	Variable Cost	Fixed Cost	Variable Cost	Fixed Cost
<b>Domestic</b>				
0-150 kWh	2.30	7.00	3.00	10.00
151-400 kWh	4.20	7.00	5.50	10.00
Above 400 kWh	4.40	7.00	5.85	10.00
<b>Commercial</b>				
0-150 kWh	4.30	10.00	5.70	15.00
151-400 kWh	4.50	75.00	5.95	100.00
Above 400 kWh	4.70	75.00	6.20	100.00
Large Supply	4.70	75.00	6.05	100.00
Medium Supply	4.50	75.00	5.85	100.00
Small Power	4.40	10.00	5.75	15.00
Agriculture	2.30	-	3.00	-

Tariff Category	EXISTING TARIFF		PROPOSED TARIFF	
	Variable Cost	Fixed Cost	Variable Cost	Fixed Cost
Public Lighting	4.30	75.00	5.70	100.00
Bulk Supply	4.50	75.00	5.95	100.00
Others Temporary Supply	6.70	-	8.85	-

5.10 Based on the proposed tariff, the table below summarizes the yearly revenue surplus or gap for the Control Period at existing and revised Tariff.

Table 73: Revenue Gap at Existing and Proposed Tariff

S. No.	Particular	2016-17	2017-18	2018-19
		Projected	Projected	Projected
<b>Existing Tariff Scenario</b>				
1.	Net Revenue Requirement	910.57	979.23	1,046.35
2.	Revenue on existing tariff	690.84	721.93	754.96
3.	Surplus/ (Gap) for the year at Existing Tariff	(219.72)	(257.30)	(291.39)
<b>Proposed Tariff Scenario</b>				
8.	Revenue on revised Tariff	911.95	953.02	996.66
9.	Surplus/ (Gap) for the year	1.38	(26.21)	(49.68)

5.11 In view of the above submission, it can be seen that the tariff structure proposed by CED for the FY 2016-17 will help it meet the revenue deficit pertaining to the first year of the Control Period. The proposed tariff will result in a marginal revenue surplus of Rs 1.38 Crore for FY16-17 which can be adjusted at the time of truing-up for the respective year.

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

### Changes to Tariff Schedule

#### Introduction of Separate Single Point Supply (SPS) tariff sub-category under Domestic Consumer Category

5.13 The petitioner humbly submits that the, Hon'ble Commission vide its tariff order dated 11.4.2014 has approved SPS category under Domestic Supply. However, no connection has been released under SPS category as the resident of such JJ Clusters/ Slum Dwellers/ Unauthorized Colonies / Resident outside lal dora belong to unorganized sector and do not possess ownership/ occupancy certificate regarding premise in question as required under JERC Electricity Supply Code Regulation. Hence, being a basic amenity,

electricity connection can be given under SPS category to a leading person/ Contractor/ firm. The applicability for a separate tariff category for SPS has been proposed in the subsequent chapter.

#### Introduction of Tariff for Pre-paid Customers

5.14 With reference to the order dated 23<sup>rd</sup> May 2015, in which Commission had directed CED to approve list of manufacturers of pre-paid meters and frame a software and policy for pre-paid meters, the CED requests the Hon'ble Commission to approve a tariff for future pre-paid customers under various consumer categories in UT Chandigarh.

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## Chapter 6: Proposed Tariff Schedule

6.1 This chapter elucidates the proposed fixed and Energy Charges for FY 2016-17 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 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 etc exclusively run/ managed by UT/State/ Central Govt to undertake research, consultancy/ training and 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.

**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/kVA/HP per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed ( All Load)	Existing	Proposed
0-150 kWh	7.0	10.00	2.30	3.00
151-400 kWh			4.20	5.50
Above 400 kWh			4.40	5.85

#### 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 Schools/colleges, coaching institutes, research institutes, (Other than those run by the Chandigarh Administration),
- c. Auditoriums, Hospitals, clinics, dispensaries, nursing homes / diagnostic centers (other than those run by the Chandigarh Administration).
- d. Railways (other than traction)
- e. Hotels, restaurants, guest houses, boarding / lodging houses, marriage houses
- f. Cinemas
- g. Banks
- h. Petrol pumps.
- i. Government / Public Sector offices and undertakings
- j. Public halls, auditoriums, exhibitions, theatres, circus, cinemas etc.
- k. All other establishments, i.e., shops, chemists, tailors, washing, dyeing etc. which do not come under the Factories Act.
- l. Cattle farms, fisheries, piggeries, poultry farms, floriculture, horticulture, plant nursery Farm houses being used for commercial activity.
- m. Ice-cream parlors, bars, coffee houses etc.
- n. 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/kVA/HP per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
0-150 kWh	*	*	4.30	5.70
151-400 kWh	*	*	4.50	5.95
Above 400 kWh	*	*	4.70	6.20

\*Proposed according to connected Load and not Consumption

Connected Load	Fixed charge (Rs. per KW/kVA/HP per Month)	
	Existing	Proposed
0-20 KW	10	15.00
Above 20 KW	75	100.00

### 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 can be given at 66/220kV depending on quantum/type of load and contract demand and availability of bus voltage and transformer winding capacity at the feeding substation wherever possible at the discretion of supplier.

For arc furnace loads and other loads of equally violent fluctuating nature, voltage of supply will be 33kV and above depending upon availability of bus voltage and transformer winding capacity at the feeding substation wherever possible, at the discretion of supplier.

#### **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/kVA/HP per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	75	100	4.70	6.05

#### 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/kVA/HP per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	75.00	100	4.50	5.85

##### 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/kVA/HP per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	10	15	4.40	5.75

**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/kVA/HP per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	0.00	0.00	2.30	3.00

**NOTE**

- Pumping sets shall be ISI marked. The responsibility for ensuring installation of ISI marked pumping sets as well as shunt capacitors shall be that of 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/kVA/HP per month		Energy charge Rs./kWh	
		Existing	Proposed	Existing	Proposed
<b>Public Lightning system -</b> Public lighting system managed by Municipal Corporation, Panchayat and Street lights maintained/ outsourced to an external agency	All Units	75.00	100.00	4.30	5.70
<b>Advertisement /Neon sign boards -</b> Advertisement boards,	All Units	75.00	100.00	6.00	7.95

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)					
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## 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/kVA/HP per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	75.00	100.00	4.50	5.95

## 9. Temporary Supply

### APPLICABILITY

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

### CHARACTER OF SERVICE

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

**TARIFF**

Consumption range	Fixed charge (Rs. Per KW/kVA/HP per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	0.00	0.00	6.70	8.85

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

10. [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 1<sup>st</sup> day of month and bill shall be issued to leading person by 5<sup>th</sup> of the every month and leading person shall make the payment of the bill 20<sup>th</sup> 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/kVA/HP per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
Predominantly domestic purpose	*	*	2.30	3.00
Predominantly commercial purpose	*	*	*	5.70

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.
- 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 ( $12000 \times 100 / 120$ ) 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 paise shall be ignored and amount of 50 paise 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 from 90%
3.	Below 85% and up to 80%	1.5 % of billed energy charges of that month for energy 1% fall in P.F from 85%

4.	Below 80% and up to 75%	2% of billed energy charges of the month for energy 1% fall in P.F from 80%
5.	Below 75%	3% of billed energy charges of that month for energy 1% fall in P.F from 75%

Should the power factor drop below 70% the licensee may disconnect supply after due notice of 15 days to any installation without prejudice to the right of the licensee to levy demand/fixed charges as applicable during the disconnection period.

### 17) Plant & Apparatus

The following features shall be installed:

a) LT installation with welding transformers will be required to have suitable shunt capacitor(s) installed so as to ensure power factor of not less than 90%.

b) Every LT consumer, including irrigation pump set consumer, whose connected load includes induction motors of 3 HP and above and other low power factor consuming appliances shall arrange to install Low tension Shunt capacitors of appropriate capacity so as to ensure power factor of not less than 90% at his cost across the terminals of his motor(s)

c) A linked switch with fuse(s) or a circuit breaker for consumer having aggregate installed transformer/apparatus capacity up to 1000 KVA if supplied at voltage of 11 KV and 2500 kVA if supplied at voltage of 33 kV.

d) A circuit breaker along with linked switch for consumer having an aggregate installed transformer apparatus capacity above 1000 kVA if supplied at 11 kV and above 2500 kVA if supplied at 33 kV.

e) In either case, suitable automatic circuit breakers shall be installed on the low tension side of each transformer or on each LT feeder emanating from the transformer.

f) Extra High Tension consumer shall install a circuit breaker on HV side of the transformer.

### 18) 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
<b>Normal period</b>	<b>6:00 a.m. to 6:00 p.m</b>	Normal Rate	Normal rate of energy charges
<b>Evening peak load period</b>	<b>6:00 p.m to 10.00 p.m</b>	Normal Rate	Normal rate of energy charges
<b>Off-peak load period</b>	<b>10:00 p.m to 6:00 a.m</b>	Normal Rate	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.

## 22) Free electricity concession to its employees

Free electricity concession to its employees shall be provided as per the already adopted circular of PSPCL (erstwhile PSEB, Punjab) dated 7.1.2011 (copy attached):-

S.No.	Basic + Grade Pay (Rs)	Applicable Unit Concession per month	Tentative no. of employees falling in the category

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1	Below Rs 13550/-	100	258
2	Between Rs 13550/- and Rs 22599/-	125	600
3	Rs 22600/- and above	155	125

The expenditure on account of above shall be charged to Employee Expenses.

**23) 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 &amp; General Charges

Sr. No	Description	Proposed
<b>A</b>	<b>Application processing charges for new connection/ enhancement of load/ reduction of load</b>	
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>B</b>	<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.)</b>	
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
<b>C</b>	<b>Meter Inspection &amp; Testing Charges</b>	
	(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.	
<b>D</b>	<b>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):</b>	
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/-
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.	
<b>E</b>	<b>Reconnection Charges</b>	

Sr.	Description	Proposed
<b>a</b>	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.	
<b>i</b>	Domestic supply	Rs 250/-
<b>ii</b>	Non-Domestic Supply	Rs 500/-
<b>iii</b>	SP, MS and street lighting supply.	Rs 500/-
<b>iv</b>	LS and bulk supply	Rs 1000/-
<b>v</b>	AP supply	Rs 250/-
<b>vi</b>	Temporary metered supply	Rs 1500/-
<b>F</b>	<b>Testing/ Inspection of Consumer's installation</b>	
<b>a</b>	Initial Test/ Inspection	Free of Cost.
<b>b</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	
<b>i</b>	Single Phase	Rs 150/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
<b>ii</b>	Three Phase	Rs 200/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
<b>iii</b>	MS/BS loads upto 100 kW	Rs 500/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
<b>iv</b>	LS/BS (loads above 100 kW)	Rs 1000/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
<b>G</b>	<b>Meter Reading Cards/ Passbook (New/ Replacement)</b>	
<b>i</b>	Provision of meter reading cards including PVC jacket	Rs 5/- per card
<b>ii</b>	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.	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
<b>H</b>	<b>Meter Rentals</b>	
<b>a</b>	(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
<b>I</b>	<b>Replacement of broken glass</b>	
<b>a</b>	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>b</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/-
<b>J</b>	<b>Supply of duplicate copies of electricity bills</b>	
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/-
<b>K</b>	<b>Review of electricity bills</b>	
<b>a</b>	(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.	

Sr.	Description	Proposed
<b>L</b>	<b>Testing and calibration including sealing of energy meter owned /supplied by the consumer</b>	
<b>i</b>	Single Phase	Rs 100/-
<b>ii</b>	Poly phase whole current meter	Rs 500/-
<b>iii</b>	Poly phase meters with CTs	Rs 1200/-
<b>iv</b>	HT and EHT metering equipment	Rs 3500/-
<b>M</b>	<b>Checking of the capacitors at the request of the consumer</b>	
<b>a</b>	Consumer receiving supply at	
<b>i</b>	230/440 V	Rs 250/- per visit
<b>ii</b>	Above 400 V and up to 11 KV	Rs 500/- per visit
<b>N</b>	<b>Rates for Security Deposit for new/extension in load only. (Rs/kW or kVA)</b>	
<b>i</b>	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/-
<b>O</b>	<b>Charges recoverable from the consumer when the meter is found damaged / burnt owing to negligence or default on the part of consumer</b>	
<b>i</b>	Single Phase Meter	Rs 700/-
<b>ii</b>	Three Phase Meter	Rs 1550/-
<b>iii</b>	LT CT operated Solid State Meter. (Without CTs)	Rs.3000/-
<b>iv</b>	LT CTs	
<b>a</b>	a) Upto 50/5A	Rs.1,580/-
<b>b</b>	b) Above 50/5 A	Rs. 600/-
<b>c</b>	Solid State HT TPT metering equipment (without CT/PT unit)	Rs.20,000/-
<b>d</b>	H.T.C.T./P.T. Unit	Rs.40,470/-
<b>Q</b>	Special Meter reading charges in case of change in occupancy/ vacation of premises for domestic consumers	Rs. 50/-
<b>R</b>	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 <b>Ordinary lamps:</b> (i) Lamps up to 150 watts :  (ii) Lamps above 150 watts :  A.2 <b>Mercury Vapour lamps:</b> (i) Lamps of 80 watts : Rs.49/- per lamp per month	Rs.16/- per lamp per month  Special quotation  Rs.49/- per lamp per month

Sr.	Description	Proposed
	(ii) Lamps of 125 watts : Rs.53/- per lamp per month	Rs.53/- per lamp per month
	(iii) Lamps of 250 watts : Rs.90/- per lamp per month	Rs.90/- per lamp per month
	(iv) Lamps of 400 watts : Rs.101/- per lamp per month	Rs.101/- per lamp per month
	<b>A.3 Fluorescent tubes:</b>	
	(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

### 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. RECOVERY OF SERVICES CONNECTION CHARGES FOR EXTENTION OF LOAD BY CONSUMERS WHO HAD PAID THE FULL COST OF THE LINE**

Industrial and Bulk supply consumers availing connection for load exceeding 1 MW have to pay the entire cost of service line laid for them. By virtue of paying the entire cost of the line involved in releasing the connection, consumer is entitled to avail within five years extension in load up to 100% of the original line for which the line had been erected provided that line so erected is capable of taking the load i.e. original load and extended load up to 100% of original load. If, however, line already erected is unable to take 100% extension of load, extension in load shall be limited to capacity of the line. In such an event, consumer is not required to pay service connection charges for the extension in load, provided the cost of line already provided by him is more than per kW charges calculated at the applicable rate from time to time on the total load including extension in load applied by the consumer.

- a. If the extension in load applied by the consumer is in excess of the capacity of line already erected or more than 100 % of the original load, consumer shall pay the service connection charges as applicable to the new applicants.
- b. If during the period of 5 Years from the date of connection some load has already been released from the line, whose entire cost has been paid by the consumer, who seeks extension in load within five years up to the extent of the capacity of the line or 100% of the original load within 5 years up to the extent of the capacity of the line or 100 % of the original load, whichever is lesser, release of additional load shall be regulated as under:

**Load released on voltage above 11 kV and loads 1MW and above on 11kV:**

Extension in load to the original consumer shall be allowed (within the contract demand for which line was originally erected for him) at the cost of the board, even if augmentation/erection of new lines is required.

**Load less than 1MW released on 11 kV**

In this case care should to taken for a period of 5 years that a margin of 100 % of the load of the original consumer is available in the capacity of the line. if other consumer(s) wants

connection(s) to be released by utilizing the available margin, new consumer(s) singly or jointly, as the case may be shall pay towards the cost of augmentation of line so that sufficient margin in capacity is available to cater to the additional requirement of the original consumer.

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

**D. RECOVERY CONNECTION CHARGES FOR AGRICULTURE POWER**

All prospective tube well consumers covered under general category shall pay Rs 3000 per BHP as service connection charges. The above charges are recoverable where total length of service line including ne 11 kV line, LT line (new/augmented) and service cable is up to 1 Km ( out of which LT line/Service cable route length should not exceed 500 meters from the common pole).Where the total length of service line is more than 1 km (out of which LT line/Service cable route length should not exceed 500 meters),applicant under this category shall be required to pay cost of new 11 kV line beyond this limit at Rs 125 per meter as additional service connection charges. However, no component of distribution substation/transmission cost would be charged.

## Chapter 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 Directives issued by the Commission in the Tariff Order for FY 2012-13](#)

### **Annual Statements of Accounts**

Commission's Comments- FY 2015-16

The matter should be pursued and the directive should be complied with by September 30th 2015 and a report submitted without any further excuses.

#### Compliance Report:-

As per the directive of the commission the annual accounts based on commercial principle has been prepared and submitted to the Commission as per following references (copies attached). :-

<b>FY 2011-2012</b>	<b>FY 2012-13</b>	<b>FY 2013-14</b>	<b>FY 2014-15</b>
Endst. No. 2287 Dated 06.08.2015	Endst no. 2831 Dated 8.09.2015	Endst no. 3019 Dated 21.12.2015	Endst No. 02 Dated 01.01.2016

However, the True up petition for FY 2011-12 & FY 2012-13 based on Commercial accounting principal was submitted to Hon'ble JERC vide Memo No. 3029 Dated 27.09.2015 (copy attached).

### **Fixed Asset and Depreciation Register**

Commission's Comments- FY 2015-16

The matter should be pursued and the directive should be complied with by September 30th 2015 and a report submitted without any further excuses.

#### Compliance Report:-

As per the directive of the commission the Fixed Asset Register has been prepared and submitted to the Commission vide Endst. No. 3192 Dated 12.10.2015 (copy attached).

### **Management Information System**

Commission's Comments- FY 2015-16

The Commission also directs that if the funds from PFC are delayed or denied, an alternate action plan be initiated not later than June 2015. Such an action plan with quarterly milestones and the completion date for the above work has to be submitted to the Commission by Sept 30<sup>th</sup>, 2015.

Compliance Report:-

It is submitted that the status report on MIS had been submitted Hon'ble JERC vide memo no. 3017 Dated 24.09.2015 (copy attached).

**Metering of consumer installations/replacement of Non-Functional or defective/ 11KV Meters**

Commission's Comments- FY 2015-16

The Petitioner is directed ensure replacement of such 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.

Compliance Report:-

In this regard, it is submitted that the Hon'ble JERC is conducting suo-moto hearing on consumer metering, reading and billing vide petition no. 77/2012 and CED has regularly submitting the status report to commission. The latest status report on the issues was submitted to Hon'ble JERC vide memo no. 3363 dated 28.10.2015(copy attached).

**Energy Audit**

Commission's Comments FY 2015-16

Action taken is noted. The Commission is of the view that it is apparent from the submissions of the Petitioner that considerable delay has occurred on the account of allotment of work to a particular agency. Further, after the Energy Audit process has been initiated, a six monthly energy audit report shall be submitted to the Commission, as per the regulation 15(4) of JERC Tariff regulations, 2009 wherein it is stated that the licensee shall conduct regular energy audit to substantiate its estimation of T&D losses. In case the PFC funding for APDRP is delayed or denied, the Commission reemphasizes its directive to the Petitioner for initiating alternate action for the award of work to specialized agencies for such work. The Petitioner shall prepare the interim energy audit

report in house and submit for review of Commission by September 30th, 2015. The Electricity meters on 66kV and 11kV be installed and information generated in this regard. This may be done with the help of NIC or NIELIT or any other organization who can support CED for Computer center or by starting the work from desktop computer stations for assessing Feeder wise /Transformer wise T&D Losses. The ED Chandigarh is directed to get an Energy Audit conducted through an accredited agency to assess actual technical and commercial losses.

Compliance Report:-

It is submitted that the status report on Energy Audit had been submitted Hon'ble JERC vide memo no. 3644 Dated 20.11.2015 (copy attached).

**Interest on Consumer Deposit**

Commission Comments FY 2015-16

The resentment of the Consumers in this regard was noticed in the Public Hearing. The Commission in its previous order has directed the Petitioner to pay the interest on security deposit to the consumers in accordance with the Electricity Act 2003. The Commission feels that enough time has been given to the Petitioner for compliance of the same and reconciliation of the security deposit. The Petitioner is directed to pay interest on consumer security deposit at the applicable bank rate by June 30th, 2015 as committed. The CED should also ensure to trace out all the consumers with missing connection dates by Sept, 2015, failing which appropriate action would be taken for non-compliance of the Commission's Directives. The Commission directs the Licensee to credit the interest to the Consumers and send the compliance report by July 15th, 2015.

Compliance Report:-

In this regard, it is submitted that the interest on consumer security deposit at the applicable bank rate has been given to the consumer and to support the fact, our billing agency M/S NIELIT vide its letter no. NIELIT/CH/UTELEC-101/2016/21772 dated 1.1.2016 has submitted the compliance report on giving interest on consumer security deposit at the applicable bank rate (copy attached).

**Demand Side Management and Energy Conservation**

Commission Comments- FY 2015-16

The Commission reiterates its direction 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. Puducherry successful model of DSM followed by other states may be examined and action taken may be intimated in the compliance report to the Commission by Sept 30th , 2015.

**Compliance Report:-**

In this regard, it is intimated that 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.

**Manpower Deployment**

Commission Comments- FY 2015-16

After the public hearing on 18 March 2015 the Commission has already written to CED's higher management for immediate implementation of induction of manpower approved by the Commission. The CED is required to follow up and keep the Commission informed of any impediments coming in the way of its implementation. Regarding utilizing Draftsman's cadre or any other cadre not effectively being utilized , CED is required to utilize their services by training them in Project Management of various Capital Investment Schemes, Project Estimation, Bill of Materials and training them on Primavera and such tools to effectively utilize their services for productive use.

**Compliance Report:-**

It is submitted that the status report on Manpower deployment had been submitted to Hon'ble JERC vide memo no. 3648 Dated 20.11.2015 (copy attached).

[Compliance of Directives issued by the Commission in the Tariff Order for FY 2012-13](#)

**Segregation of T&D losses and loss reduction trajectory**

Commission Comments FY 2015-16

Action taken is noted. The matter may be pursued. The Commission intends to see the results and accordingly the Petitioner is directed to inform the time bound action plan for the same by Sept 30<sup>th</sup>, 2015. This will help CED to have a better Business Plan and serve the stakeholders effectively.

Compliance Report:-

In this regard, it is intimated that there are around 400 nos. 66/11 kV feeders in UT Chandigarh and the it was planned to conduct of Segregation of T&D losses and loss reduction trajectory through the existing feeder meters but due to non-provision of the communication interface between meter, the same was tried to be carried out by manual readings but the whole exercise was not fruitful.

Accordingly, an estimate for the replacement of all the feeder meters (which have reliable communication interface) has been framed 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 have 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.

Further it is intimated that CED has prepared the DPR of IPDS Scheme amounting to Rs 201 Cr and DPR of Pilot Smart Grid Project amounting to Rs 49 Cr & the same has been recommended by Distribution reform Committee (DRC) headed by Advisor to Administrator, UT Chandigarh on dated 18.12.2015 and District Electricity Committee (DEC) headed by Member of Parliament – Chandigarh during the meeting held on dated 18.1.2016. The same is being sent to PFC (Nodal Agency for IPDS) for getting further approval of MoP, GOI.

**Load Forecasting study: FY 2012-13**

Commission's Comments FY 2015-16

The Petitioner 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) and report may be submitted by July 31<sup>st</sup>, 2015.

**Compliance Report:-**

In this regard, it is submitted that Lol 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 (copy attached).

**Optimization of Power Purchase from short-term sources: FY 2012-13**

Commission's Comments FY 2015-16

Action taken is noted.

**Compliance Report:-**

In this regard, it is intimated that the CED had submitted the reply on the subject cited directive in tariff petition for FY 2015-16 and at present, it is following merit order dispatch principle.

**Change of Category: FY 2012-13**

Commission Comments FY 2015-16

Action is taken is noted.

**Compliance Report:-**

The CED Chandigarh vide its memo no. 164 dated Jan 1st, 2015 has already submitted the desired analysis as directed by the Commission vide its letter no. 686 dated Sept 24<sup>th</sup>, 2014 with reference to this office memo no. 3068 dated Sept 10<sup>th</sup> 2014.

**Capital expenditure: FY 2012-13**

Commission Comments FY 2015-16

Action taken is noted. The report when submitted next should have sub totals of each quarter. Petitioner to submit a detailed statement of capital expenditure incurred and capitalization for every quarter with summary of each quarter, as per the format prescribed by the Commission, 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 including the non-consideration of capital expenditure of FY 2011-12 and FY 2012-13 for purpose of True-up in all the future Tariff Orders. The following



format on Investment Schemes including Investment on Safety of Manpower should be updated in the 1st week of July, Oct, Jan and April every year and sent to the Commission.

Compliance Report:-

It is submitted that the status report for 2nd Quarter 2015-16 on CAPEX had been submitted to Hon'ble JERC vide memo no. 3763 Dated 01.12.2015 (copy attached).

[Fresh Directives for FY 2015-16](#)

**Safety of Manpower on Work**

Commission Comments FY 2015-16

The Commission directs the Petitioner to procure Telescopic Ladders, Safety harnesses, Helmets with headlights, hand gloves, auto lift platforms and other similar equipment for Safety of men at work. The Petitioner should also ensure that the Subcontractors also provide the safety equipment to their men. The Manpower at work (Petitioner's Employees and Sub contractor's employees) needs to be skilled/ reskilled by the respective organizations once a year.

Compliance Report:-

It is submitted that the status report on Safety of Manpower on work had been submitted to Hon'ble JERC vide memo no. 3640 Dated 20.11.2015 (copy attached).

**Initiate action for Corporatization of the Electricity Department.**

Commission Comments FY 2015-16

The Petitioner 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.

Compliance Report:-

It is submitted that the DNIT for the restructuring/ corporatization has been prepared and under approval/ floating process. CED Chandigarh shall update the Hon'ble JERC in this regard from time to time.

**Repair & Maintenance of Equipment to give uninterrupted service**

Commission Comments FY 2015-16

The equipment required for preventive maintenance schedule should be drawn and action taken to ensure the equipment remains in good health to give uninterrupted service to the Consumers.

Compliance Report:-

It is submitted that the status report on Repair & Maintenance of Equipment to give uninterrupted service had been submitted to Hon'ble JERC vide memo no. 3646 Dated 20.11.2015 (copy attached).

**Strengthen Consumer Grievance Redressal forum (CGRF) and give wide publicity about it.**

Commission Comments FY 2015-16

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.

Compliance Report:-

It is submitted that the status report on Strengthening of Consumer Grievance Redressal forum (CGRF) and its wider publicity had been submitted to Hon'ble JERC vide memo no. 3642 Dated 20.11.2015 (copy attached).

**To set up a Cell making Consumer understand Electricity Regulatory Process and give wide publicity about it**

Commission Comments FY 2015-16

Such a cell will address the issues of the Consumers making them understand on the Electricity Regulatory Process including issues on FPPCA, Solar Power etc.

Compliance Report:-

The CED has set up a Consumer Awareness Cell to address the issues of consumers making them understand on Electricity Regulatory Process including issues of FPPCA, solar Power etc. and a public notice in this regard has got published in the leading newspapers of UT Chandigarh on 30th June 2015.

The compliance report in this regard has already been submitted to Hon'ble JERC vide memo no. 1920 Dated 01.07.2015

**Energy Saving, Energy Efficiency and Demand Side Management**

Commission Comments FY 2015-16

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 September 30th , 2015.

**Compliance Report:-**

In this regard, it is intimated that 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.

**Solar Power Purchase**

Commission Comment 2015-16

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.

**Compliance Report:-**

In this regard, it is intimated that the status report on compliance of RPOs up to 30.9.2016 had been submitted to Hon'ble JERC vide endst no. 3509 Dated 12.11.2015 (copy attached). However, efforts are being made to popularize Solar Power by inserting the same in the new electricity bill format.

**Levy of Service Charges**

Commission Comments FY 2015-16

The service charges, as are being levied by the CED in line with Chandigarh Administration Gazette notification no. G1/2002/4 dated 30 Sept 2002 will not be levied by the CED henceforth as these will be covered under fixed charges as are approved by the Commission in the Tariff Order for FY 2015-16

**Compliance Report:-**

It is submitted that the status report on levy of service charges had been submitted to Hon'ble JERC vide memo no. 3769 dated 1.12.2015 (copy attached).

**Connected Load (kW) wise - number of Domestic, Commercial and Agriculture consumers**

Commission Comments FY 2015-16

With the introduction of Fixed Charges per month the Petitioner is required to submit the data based on kW of connected load. The information furnished during Technical validation session on 24th -25th March 2015 on NRS (19694 number of consumers up to 20 kW for 101661.895 kW load, and 2431 nos. for 281904.594 kW also be confirmed in writing). The kWh consumption and kW profile of agriculture may also be given.

**Compliance Report:-**

It is submitted that the status report on Connected Load)(kW) wise - number of Domestic, Commercial and Agriculture consumers had been submitted to Hon'ble JERC vide memo no. 3767 Dated 1.12.2015 (copy attached).

**Filing of Petitions in time**

Commission Comments FY 2015-16

The last date of filing the ARR & Tariff Petition is November 30th every year. The Petitioner has never filed the Petition in time as seen from Table 2.1. The Commission views this as a repeated failure in filing the Petition on time. The Petitioner shall ensure filing the Petition for ARR & Tariff Petition latest by 30<sup>th</sup> November of the preceding year for which ARR and Tariff is being filed. The next petition will be filed by November 30th , 2015..

**Compliance Report:-**

As per notified JERC MYT Regulation, the MYT petition should be submitted to commission within 30 days of approved order on business plan. The same is being complied with.

**Business Plan for MYT Control Period**

Commission Comments FY 2015-16

The Petitioner is therefore directed to submit the 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, latest by July 31st, 2015.

Compliance Report:-

- 7.1 As per directives of the commission the CED has already filed the Business Plan before Hon'ble JREC and the same has been approved by the commission on dated 28.12.2015.