

**Before**

**Joint Electricity Regulatory Commission  
(For the State of Goa & Union Territories)**

Provisional True-Up Petition for FY 2011-12 & FY 2012-  
13, Review Petition for FY 2013-14 and ARR & Tariff  
Petition for FY 2014-15

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Filed by  
**Chandigarh Electricity Department**

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Date: January 21, 2014

## **BEFORE THE HON'BLE JOINT ELECTRICITY REGULATORY COMMISSION**

FILING NO.:

CASE NO.:

**IN THE MATTER OF:** Filing of Petition for Approval of the Aggregate Revenue Requirement (ARR) and Tariff Proposal for FY 2014-15 for the Chandigarh Electricity Department under Section 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003

**AND**

**IN THE MATTER OF:** Chandigarh Electricity Department  
Deluxe Building, Sector – 9D  
Chandigarh, UT  
**- PETITIONER.**

PETITIONER, UNDER SECTIONS 45, 46, 61, 62 AND 64 OF THE ELECTRICITY ACT, 2003 FILES FOR INITIATION OF PROCEEDINGS BY THE HON'BLE COMMISSION FOR DECIDING ON THE MATTERS CONCERNING THE APPROVAL OF THE ANNUAL REVENUE REQUIREMENT AND TARIFF PETITION OF CHANDIGARH ELECTRICITY DEPARTMENT (herein after referred to as "CED") FOR FY 2014-15.

The applicant respectfully submits hereunder:

- 1) The Petitioner, the Chandigarh Electricity Department (CED) has been allowed to function as an integrated Distribution licensee for the license area of Chandigarh UT.
- 2) Pursuant to the enactment of the Electricity Act, 2003, CED is required to submit its Annual Revenue Requirement (ARR) and Tariff Petition as per the procedures outlined in section 61, 62 & 64 of EA 2003, and the governing regulations thereof.
- 3) CED has submitted its ARR and Tariff petition for determination of tariff for FY 2014-15 on the basis of the principles outlined in the Tariff Regulations 2009 notified by the Hon'ble Commission.
- 4) This petition includes the Provisional True-Up Petition for FY 2011-12 & FY 2012-13, Review Petition for FY 2013-14 and ARR & Tariff Petition for FY 2014-15.
- 5) CED along with this petition is submitting the statutory formats with additional/ supplementary data & information available and shall further make available the same to the extent available with CED as may be required by the Hon'ble Commission during its processing.

**Prayers to the Commission**

- 6) CED respectfully prays that the Hon'ble Commission may:
- a. Condone the delay in filing the Petition by CED and Admit this Petition;
  - b. Examine the proposal submitted by the Petitioner for a favorable dispensation as detailed in the enclosed proposal;
  - c. Consider the submissions and allow the Provisional True-Up for FY 2011-12 and FY 2012-13, revised estimate for FY 2013-14 and approve Aggregate Revenue Requirement and Tariff for CED for FY 2014-15;
  - d. Approve Revenue Gap of Rs.149.50 Cr for FY 2011-12 and Rs. 74.26 Cr for FY 2012-13 and create Regulatory Asset for the same;
  - e. Pass suitable orders for implementation of the tariff proposals for the FY 2014-15 for making it applicable from April 1, 2014 onwards.
  - f. Approve the terms and conditions of Tariff Schedule and various other matters as proposed in this petition and the proposed changes therein.
  - g. Approve the Miscellaneous and General Charges as proposed in this petition and the proposed changes therein.
  - h. Condone any inadvertent omissions/ errors/ shortcomings and permit CED to add/ change/ modify / alter this filing and make further submissions as may be required at a future date.
  - i. Pass such orders as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case;

**Chandigarh Electricity Department**  
**Petitioner**

**Place:** .....

**Date:** .....

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## Chapter 1: Introduction

### Preamble

- 1.1 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 UT's 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 Electricity Wing of Engineering Department UT Administration of Chandigarh, is a deemed licensee under section 14 of the Electricity Act 2003, integrated utility and is carrying on the business of distribution and retail supply of electricity in Chandigarh (UT). It operates in the area of 114 sq. Km. CED, for the purpose of better electricity distribution and maintenance is divided into 4 divisions and 1 circle.
- 1.3 The Electricity Department was formed in the year 1967 under the Administration of Union Territory of Chandigarh. It is the only licensee operating in the UT of Chandigarh for transmission and distribution of Electrical Energy. The Chandigarh Electricity Department does not have its own generation. The present unrestricted demand for the UT is around 363 MW. The majority of the power requirement for the UT Chandigarh is met through its share from Central Sector Power Stations of the National Thermal Power Corporation, National Hydro Power Corporation and Nuclear Power Corporation of India Limited, BBMB, SJVNL, THDC, etc. as allocated by the Ministry of Power, Govt of India. In addition, the department also purchases power from Open market i.e. Power Exchange, Bilateral, Banking, UI, etc.
- 1.4 The Chandigarh Electricity Department caters to around 2 Lakhs consumers with an annual energy consumption of around 1400 MUs. The Consumers of the Chandigarh Electricity Department are classified as under:
  - (a) Domestic (43% of consumption)
  - (b) Commercial (29% of consumption)
  - (c) Large Supply (10% of consumption)
  - (d) Small Power (1% of consumption)
  - (e) Medium Supply (8% of consumption)
  - (f) Agriculture (0.1% of consumption)
  - (g) Public Lighting (2% of consumption)
  - (h) Bulk Supply (6% of consumption)
  - (i) Temporary Others (0.6% of consumption)
- 1.5 As can be observed from the actual consumption across categories, the energy consumption of domestic consumers contributes the highest (43%) amongst all categories.
- 1.6 All the sectors of Chandigarh are electrified and any intending consumer can avail power supply by submitting requisition in the prescribed form to the appropriate office of the Department subject to fulfilling the required conditions and payment of charges as per conditions of supply of Electrical Energy and miscellaneous charges.

- 1.7 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.

## **JERC Formation**

- 1.8 In exercise of the powers conferred by the Electricity Act 2003 the Central Government constituted a Joint Electricity Regulatory Commission for all Union Territories to be known as "Joint Electricity Regulatory Commission for Union Territories" as notified on 2nd May 2005. Later with the joining of the State of Goa, the Commission came to be known as "Joint Electricity Regulatory Commission for the State of Goa and Union Territories" as notified on 30th May 2008.
- 1.9 The Joint Electricity Regulatory Commission (hereinafter referred to as "JERC" or "the Hon'ble Commission"), an independent statutory body is vested with the authority of regulating the power sector in the State of Goa and UT's (except Delhi) inter alia including setting of tariff for electricity consumers.
- 1.10 The Hon'ble Commission is a two-member body designated to function as an autonomous authority responsible for regulation of the power sector in the State of Goa and Union Territories of Andaman & Nicobar, Lakshadweep, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry. The powers and the functions' of the Hon'ble Commission are as prescribed in the Electricity Act 2003. The Head Office of the Commission presently is located in the district town of Gurgaon, Haryana and falls in the National Capital Region.
- 1.11 The Joint Electricity Regulatory Commission for the State of Goa and Union Territories started to function with effect from August 2008 with the objectives and purposes for which the Commission has been established. Presently the Hon'ble Commission is framing various regulations as mandated in the Electricity Act 2003 to facilitate its functioning. Some of the Regulations notified by the Hon'ble Commission include the following:
- (a) JERC Conduct of Business Regulations, 2009
  - (b) JERC Establishment of Forum for Redressal of Grievances of Consumers Regulations 2009;
  - (c) JERC Appointment and Functioning of Ombudsman Regulations 2009;
  - (d) JERC Treatment of other businesses of Transmission Licensees and Distribution Licensees Regulations, 2009.
  - (e) JERC Standard of Performance Regulations, 2009.
  - (f) JERC State Advisory Committee Regulations, 2009.
  - (g) JERC Open Access in Transmission and Distribution Regulations, 2009.
  - (h) JERC Terms and Conditions for Determination of Tariff Regulation, 2009.

- 1.12 The Hon'ble Commission had issued the JERC (Terms and Conditions for Determination of Distribution Tariff) Regulations 2009 which was made effective from 08<sup>th</sup> February 2010 onwards.
- 1.13 Under section 62 of the Electricity Act, 2003 and under the JERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2009, CED had filed its first Annual Revenue Requirement and Determination of Tariff for the FY 2011-12 to the Hon'ble Commission on 13<sup>th</sup> January 2011. The Tariff Order was issued by the Hon'ble Commission on 16<sup>th</sup> July 2011 and the new tariff was made effective from 1<sup>st</sup> April 2011.
- 1.14 Post the issuance of the Tariff Order for FY 2011-12, CED filed its second Tariff Petition for 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.
- 1.15 On 7<sup>th</sup> February 2013, the Petitioner filed the 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.
- 1.16 Under section 62 of the Electricity Act, 2003 and under the subsequent JERC Regulations, CED hereby submits its petition for provisional True-up for FY 2011-12 and FY 2012-13, annual performance review for FY 2013-14 and Annual Revenue Requirement and Tariff Proposal for FY 2014-15.
- 1.17 The determination of ARR has been based on the provisions of the following Acts and Policies of the Government of India and principles outlined in the relevant regulations notified by the Joint Electricity Regulatory Commission:
- (a) Provisions of Electricity Act 2003;
  - (b) Provisions of the National Electricity Policy;
  - (c) Provisions of the National Tariff Policy;
  - (d) Principles laid down in the JERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2009;
  - (e) Principles laid down in the JERC (Conduct of Business) Regulations, 2009;
  - (f) Principles laid down in the JERC (Procurement of Renewable Energy) Regulations, 2010 ; and other relevant regulations

## Current petition

- 1.18 Section 62 of the Electricity Act 2003 requires the licensee to furnish details as may be specified by the Commission for determination of tariff. In addition, as per the regulations issued by the Hon'ble Commission, CED is required to file petition for all reasonable expenses which it believes it would incur over the next financial year and seek the approval of the Hon'ble Commission for the same. The filing is to be done based on the projections of the expected revenue and costs.
- 1.19 In compliance of this regulatory obligation, CED hereby files its Provisional True-Up petition for FY 2011-12 & FY 2012-13, Annual Review Petition for FY 2013-14 and Aggregate Revenue Requirement (ARR) & Tariff Petition for FY 2014-15.
- 1.20 The current petition has been prepared in accordance with the provisions of the following Acts/Policies/Regulations:
- a. Electricity Act 2003;
  - b. National Electricity Policy;
  - c. National Tariff Policy;
  - d. Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009
  - e. JERC (Procurement of Renewable Energy) Regulations, 2010;
- 1.21 CED has made genuine efforts for compiling all relevant information relating to the provisional True-up petition as required by the regulations issued by the Hon'ble Commission and has also made every effort to ensure that information provided to the Hon'ble Commission is accurate and free from material errors. However, there may be certain deficiencies owing to the limitations of the management information systems of the CED. Hence, CED prays to the Hon'ble Commission that the information provided be accepted for the current filing and at the same time CED assures that it is taking appropriate measures to improve its management information system for improved data collection.

## Contents of the petition

- 1.22 This petition comprises of main sections namely:
- Provisional True-Up Petition for FY 2011-12 and FY 2012-13
  - Annual Performance Review for FY 2013-14 and ARR & Tariff Petition for FY 2014-15

## Chapter 2: Provisional True-up for FY 2011-12

- 2.1 In this section, CED is submitting its Provisional True-up for FY 2011-12. In the Tariff Order for FY 2013-14 issued on 15<sup>th</sup> April 2013, the Hon'ble Commission had not undertaken provisional true up of FY 2011-12 due to non-availability of the audited accounts based on the commercial accounting principles for FY 2011-12. CED respectfully submits that it has floated the Tender (OP-4/19/2013-14) for appointment of consultant for preparation of Annual Statement of Accounts on commercial accounting principles. CED requests the Hon'ble Commission to consider the actual details as submitted in the Petition based on the Performa Accounts for FY 2011-12 audited by Comptroller & Auditor General of India (CAG) and approve the provisional true-up for FY 2011-12 until the Annual Accounts for FY 2011-12 based on the commercial accounting principles are made available to the Hon'ble Commission. The Performa Accounts for FY 2011-12 along with Audit Certificate are being submitted to the Hon'ble Commission along with this petition for the purpose of True-up (**Annexure – I**).

### Principles for True-up for the period FY 2011-12

- 2.2 The JERC (Terms and Conditions for determination of Tariff) Regulations, 2009 provides that:

*"8. Review and Truing Up*

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

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

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

*(3) The revenue gap of the ensuing year shall be adjusted as a result of review and truing up exercises.*

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

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

(7) The Commission may consider granting approval to such proposals provided the cost of additional supply is ordinarily met by the beneficiary category.”

- 2.3 In the Tariff Order for FY 2012-13 issued on 7<sup>th</sup> May 2012, the Hon'ble Commission had approved the review of ARR for FY 2011-12, based on the information submitted by CED.
- 2.4 It is thus submitted to Hon'ble Commission that the Performa Accounts of FY 2011-12 have been audited by Comptroller & Auditor General of India (CAG) and thus, in line with the provisions of JERC (Terms and Conditions for determination of Tariff) Regulations, 2009, CED is filing this true-up petition for the year FY 2011-12 based on audited Performa Accounts of FY 2011-12.

### Category wise Sales

- 2.5 The category wise actual sales for FY 2011-12 as against the approved sales in the Review of FY 2011-12 have been shown below for the consideration and approval of the Hon'ble Commission.

**Table 1: Approved vs Actual Category-wise Sales (MU) for FY 2011-12**

S. No.	Consumer Category	Approved Sales for FY 2011-12 as per Tariff Order	Actual	Variation (Approved-Actual)
1	Domestic	588.6	525.8	(62.8)
2	Commercial	466.6	417.4	(49.2)
3	Large Supply	146.5	128.7	(17.8)
4	Small Power	25.5	22.0	(3.5)
5	Medium Supply	117.5	103.7	(13.8)
6	Agriculture	1.7	1.3	(0.4)
7	Public Lighting	20	17.4	(2.6)
8	Bulk Supply	84	74.7	(9.3)
9	Others-Temporary Supply	10.5	10.5	-
	<b>Total Sales</b>	<b>1460.9</b>	<b>1,301.5</b>	<b>(159.4)</b>

- 2.6 The actual sales during FY 2011-12 have been lower than the approved sales for FY 2011-12 as per the Tariff Order issued on 7<sup>th</sup> May 2012.
- 2.7 The Hon'ble Commission is requested to approve the actual sales for FY 2011-12 and also approve the power purchase requirement accordingly.

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## Transmission & Distribution Losses

- 2.8 CED has estimated the distribution loss and energy requirement for FY 2011-12 in line with the methodology adopted by Hon'ble Commission in its previous Orders.
- 2.9 The T&D loss for FY 2011-12 has been considered based on the actual sales and energy delivered at CED periphery after accounting for inter-state losses. For arriving at the energy delivered at CED periphery the average inter-state losses of 3.53% have been considered for FY 2011-12.
- 2.10 It is pertinent to mention that UT of Chandigarh have not been provided any interstate transmission point within the boundaries of Chandigarh and the metering is being done at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB). The Hon'ble Commission in its previous Tariff Orders has disallowed the losses as submitted by CED and had asked for the basis of the losses arrived by the Petitioner. CED submits that it has taken up the matter in the Standing Committee of Northern Region for system planning on 2.1.2013, during which it was agreed by the Committee for taking up an appropriate action. CED submits that PGCIL in its letter dated 22.06.2013 have calculated the inter-state losses of 3.15% on 220 kV Nalagarh-Manimajra line for FY 2011-12. Further the losses on 66kV Mohali-CHD and 66kV Dhoolkot-CHD has also been calculated for reference. A copy of the letter received from PGCIL is attached as **Annexure-V** along with the Petition.
- 2.11 Accordingly, CED has reduced an average of additional 3.0% of the energy towards losses which are attributable towards inter-state losses and would not form part of the T&D losses of CED. Based on the computation, actual T&D loss achieved by CED during FY 2011-12 is 17.50% as against the T&D loss of 17.00% approved by the Hon'ble Commission in the Tariff Order for FY 2011-12 and review of FY 2011-12.
- 2.12 It is submitted that around 98% of the consumers in UT Chandigarh are at LT level which has an adverse effect on the loss reduction. Also, the consumption of industrial consumers have declined during FY 2011-12 due to conversion of industrial consumers into commercial category etc. resulting in increased percentage of overall consumption at LT level during FY 2011-12.
- 2.13 CED would further like to submit that it has been providing details of actual losses incurred by CED to the Hon'ble Commission against its Suo-Moto petition no.76. The hearing for the same last held on 27.12.2013.
- 2.14 Therefore, the Hon'ble Commission is requested to take a considerate view on the non-achievement of T&D losses during FY 2011-12 and allow the actual losses for FY 2011-12.
- 2.15 The table below highlights the comparison of T&D losses as per actual and approved by the Commission in its tariff order for FY 2011-12:

Table 2: Transmission &amp; Distribution Losses for FY 2011-12

Particulars	FY 2011-12		
	Approved by JERC in FY 11-12 Tariff Order	Approved as per Review of FY 11-12	Actual
<b>T&amp;D Losses (%)</b>	17.00%	17.00%	17.50%

2.16 CED requests the Hon'ble Commission to approve the actual T&D loss of 17.50% for FY 2011-12.

## Energy Balance

2.17 The Energy Balance of CED for FY 2011-12 based on the Energy Sales, T&D Loss % and Source-wise Energy purchase being approved by the Hon'ble Commission and actual figures being recorded now by CED is depicted under the table below:

Table 3: Approved &amp; Actual Energy Balance for FY 2011-12 (in MU)

S. No.	Particulars	Approved as per T.O. dated May 7, 2012	FY 2011-12 (Actual)
<b>A)</b>	<b>ENERGY REQUIREMENT</b>		
1	Energy sales within the State/UT	1,460.92	1,301.48
2	Energy sales to Agriculture consumers (included in total sales)		
<b>3</b>	<b>Total sales within the State/UT</b>	<b>1,460.92</b>	<b>1,301.48</b>
<b>4 a)</b>	<b>Distribution losses</b>		
i)	%	17.00%	17.50%
ii)	MU	299.22	276.13
<b>b)</b>	<b>Losses due to absence of interstate transmission point</b>		
i)	%		3.00%
ii)	MU		48.79
<b>5</b>	<b>Energy required at State Periphery for Sale to Retail Consumers</b>	<b>1,760.14</b>	<b>1,626.40</b>
<b>6</b>	<b>Add: Sales to common pool consumers/ UI</b>	<b>192.67</b>	<b>204.92</b>
7	Sales outside state/UT : UI/Under drawal	75.34	114.17
8	Sales		
	a) To electricity traders		
	b) Through PX	84.96	87.90
9	Sales to other distribution licensees		
	a) Bilateral Trade		
	b) Banking Arrangement*	32.37	2.85
<b>10</b>	<b>Total Energy Requirement for State (5+6)</b>	<b>1,952.81</b>	<b>1,831.33</b>
11	Inter-state Transmission losses		

S. No.	Particulars	Approved as per T.O. dated May 7, 2012	FY 2011-12 (Actual)
i)	MU	68.93	59.51
<b>12</b>	<b>Total Energy Requirement including transmission losses (10+11)</b>	<b>2,021.74</b>	<b>1,890.84</b>
<b>B)</b>	<b>ENERGY AVAILABILITY / PURCHASED</b>		
<b>1</b>	<b>Net Generation (Share from CGS &amp; shared plants) (in Mus)</b>	<b>1,611.69</b>	<b>1,633.01</b>
A	NTPC	620.48	588.16
B	NHPC	213.26	217.82
C	NPCIL	109.15	113.64
D	SJVNL/NJPC	85.93	85.51
E	BBMB (including dehar& pong)	582.87	627.88
<b>2</b>	<b>Power Purchased from (Other Sources)</b>	<b>302.25</b>	<b>257.83</b>
A	THDC	79.80	51.69
B	Jhajjar & Sewa II for 11-12 Petition	8.38	7.01
C	PXIL (Buy)	3.99	4.20
D	Bilateral Trade (Buy)	138.01	138.01
E	RPO (Buy)		
F	UI (Buy)	43.24	56.92
G	Banking Arrangements (Buy)	28.83	-
<b>3</b>	<b>Net Energy purchase (MU)</b>	<b>1,913.94</b>	<b>1,890.84</b>
H	PXIL (Buy) to match the energy requirement	107.80	-
<b>4</b>	<b>Gross Purchase including PX (MU)</b>	<b>2,021.74</b>	<b>1890.84</b>

\*Actual banking arrangement is the net figure in MUs during FY 2011-12

- 2.18 It is submitted that the above units are compiled as per the Final REA for each month of FY 2011-12 as issued by NRLDC. CED requests the Hon'ble Commission to approve the actual energy balance for FY 2011-12 as provided in the table above.

## Power Purchase

- 2.19 CED does not have own power generation. Therefore, it relies on power from various generating stations of NTPC, NHPC, NPCIL, BBMB, SJVNL, etc for meeting its power requirement. Further, any demand-supply shortfall is met through power procurement from short-term sources i.e. bilateral, exchange and UI.
- 2.20 The table below summarize the approved and actual source-wise power purchased during FY 2011-12:

Table 4: Power Purchase (MU) for FY 2011-12

S. No	Generating Company	Name of Project	Approved Units (MUs)	Actual Units (MUs)
1	NTPC	Anta	34.52	31.89
2		Auraiya	50.11	31.88
3		Dadri GPP	38.20	36.20
4		Dadri II TPP	50.45	45.32
5		Kahalgaon II	14.82	15.14
6		Rihand I	134.11	131.65
7		Rihand II	112.49	113.30
8		Singrauli	112.28	110.75
9		Unchahar I	18.94	18.75
10		Unchahar II	37.28	36.44
11		Unchahar III	17.26	16.85
12	NHPC	Chamera I	98.49	103.35
13		Chamera II	16.59	16.67
14		Dhauliganga	18.78	18.71
15		Dulhasti	29.56	29.47
16		Salal	8.37	8.73
17		Sewa II	8.80	9.23
18		Tanakpur	5.52	5.12
19	Uri	27.15	26.54	
20	NPCIL	NAPP	31.11	31.95
21		RAPP B	24.37	21.24
22		RAPP C	53.67	60.45
23	SJVNL	SJVNL/NJPC	85.93	85.51
24	BBMB*	BBMB (3.5%)	582.86	225.28
25		BBMB 1 LU		36.60
26		BBMB 10 LU		366.00
27	APCPL	IGSTPP	8.38	7.01
28	THDC	Koteshwar	5.40	4.99
29		Tehri	74.40	46.70
30	Others	Banking J &K	(3.54)	(2.85)
31		Bilateral Source	138.01	138.01
32		Power Exchange (Net)	(71.97)	(83.70)
33		UI (Buy) (Payable)	43.24	56.92
34		UI (Receivable)	(75.34)	(114.17)
		<b>Annual Total</b>	<b>1,730.27</b>	<b>1685.91</b>

\* Inclusive of Beas I & II (Dehar & Pong)

- 2.21 As actual sales within the UT of Chandigarh were lower than the approved, lower quantum of power was required by CED during FY 2011-12. Further, availability of power from NTPC and Tehri has been lower than the approved figure resulting in lower availability of power during FY 2011-12.

### Power Purchase Cost

- 2.22 For computing the power purchase cost for FY 2011-12, CED has considered the actual Power Purchase Cost borne by the CED for FY 2011-12.
- 2.23 Further the cost of Rs. 2.44 Cr towards purchase of Renewable Energy Certificates (REC) has been added in the total power purchase cost for FY 2011-12.
- 2.24 CED has not been able to meet the renewable purchase obligation (RPO) during the period FY 2011-12. However, CED had submitted to the Hon'ble Commission latest report to meet RPO Backlog for FY 2010-11, FY 2011-12, FY 2012-13 and current financial year FY 2013-14 as per Hon'ble JERC Order dated 25.10.2013. In compliance to the same, CED had purchased additional RECs during FY 2012-13 and FY 2013-14 for meeting the RPO Backlog. Therefore, CED requests the Hon'ble Commission to consider the purchase done by CED for meeting the present as well as the carry forward RPO and allow cost of the same.
- 2.25 Further as per the Hon'ble Commission direction in the previous Order, CED has started following the methodology of purchase of REC throughout the year to avoid bulk purchase of RE certificates at higher cost at the end of the year.
- 2.26 The summarized approved and actual power purchase cost for FY 2011-12 is shown below:

Table 5: Source wise Power Purchase Cost for FY 2011-12 (Rs. Cr)

Source	Approved by the Commission for FY 2011-12			Actual for FY 2011-12		
	Units (MU)	Total Charges (Rs. Cr)	Per Unit Rate (Rs./kWh)	Units (MU)	Total Charges (Rs. Cr)	Per Unit Rate (Rs./kWh)
NTPC	620.48	168.75	2.72	588.16	161.03	2.74
NHPC	213.26	68.65	3.22	217.82	49.34	2.27
NPCIL	109.15	28.85	2.64	113.64	34.49	3.03
SJVNL	85.93	15.03	1.75	85.51	18.34	2.14
BBMB	582.87	163.68	2.81	627.88	172.58	2.75
APCPL	8.38	5.77	6.89	7.01	5.09	7.25
THDC	79.80	21.58	2.70	51.69	21.31	4.12
Others	321.87	103.82	4.85	199.12	82.19	4.13
REC		2.44			2.44	
Transmission & NRLDC Charges		40.27			41.69	
Supplementary Bills & Arrears					34.51	
LC Charges					0.64	
<b>Total</b>	<b>2,021.74</b>	<b>618.84</b>	<b>3.06</b>	<b>1,890.84</b>	<b>623.65</b>	<b>3.30</b>

- 2.27 CED prays to the Hon'ble Commission to approve the power purchase cost of Rs. 623.65 Cr. as per the audited annual accounts for FY 2011-12.

### **Other Components**

- 2.28 As outlined in the regulations, the other cost incurred by CED for FY 2011- 12 has been determined under the following heads:
- Operation and Maintenance Expenses,
  - Depreciation, including Advance Against Depreciation,
  - Interest and Cost of Finance,
  - Return on Equity,
  - Income Tax
  - Provision for Bad & Doubtful Debts
- 2.29 Net Annual Revenue Requirement has been computed after netting off Non-Tariff Income of CED.

### **Operation & Maintenance Expenses**

- 2.30 Operations and Maintenance (O&M) Expenses of the company consists of the following cost elements:
- Employee Expenses
  - Repairs and Maintenance Expenses
  - Administrative and General Expenses

#### **Employee Expenses**

- 2.31 Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits i.e. pension & gratuity, leave encashment and staff welfare expenses.
- 2.32 The Employee Expenses as per the Performa Accounts for FY 2011-12 audited by Comptroller & Auditor General of India (CAG) were Rs. 47.46 Cr as against the approved employee cost of Rs. 56.07 Cr for FY 2011-12. The actual cost is lower than the approved cost due to delay in recruitment process.

#### **Repair & Maintenance Expenses**

- 2.33 Repairs and Maintenance Expenses go towards day-to-day upkeep of transmission and distribution functions of CED and form an integral part of CED's efforts towards reliable and quality power supply to its consumers and reduction of losses in its system.
- 2.34 The actual expense incurred by CED towards R&M expense for FY 2011-12 is Rs. 8.85 as against the approved Rs. 9.57 Cr by the Hon'ble Commission during the review of FY 2011-12.

2.35 The Hon'ble Commission is requested to allow the actual R&M expenses of Rs. 8.85 Cr for FY 2011-12.

### **Administrative & General Expenses**

2.36 Administrative and General expenses mainly comprise of rents, telephone and other communication expenses, regulatory expenses, professional charges, conveyance and travelling allowances, other debits.

2.37 The actual A&G expense of CED for FY 2011-12 was Rs. 1.97 Cr which is higher than the approved A&G expense of Rs. 1.45 Cr. It is submitted that the A&G expense proposed during the review of ARR for FY 2011-12 did not include the regulatory expense of Rs. 0.41 Cr towards payment of license and petition fee to the Hon'ble Commission as per the applicable Fee Regulations. The same was inadvertently not considered in the A&G expense amount submitted to the Hon'ble Commission.

2.38 Therefore, CED request the Hon'ble Commission to approve the total A&G expense of Rs. 1.97 Cr (including regulatory expense) without any disallowance for the true-up of FY 2011-12.

**Table 6: Operation & Maintenance Expenses (in Rs. Cr.) for FY 2011-12**

<b>Particulars</b>	<b>Approved (RE) by JERC as per Latest Tariff Order</b>	<b>Actual for FY 2011-12</b>
Employee Cost	56.07	47.46
R&M Expenses	9.57	8.85
A&G Expenses	1.45	1.97
<b>Total O&amp;M Cost</b>	<b>67.09</b>	<b>58.28</b>

### **Depreciation**

2.39 It is pertinent to mention here that the Hon'ble Commission has not allowed any depreciation on the assets established by CED prior to FY 2011-12 in absence of any asset register for the past period. The Hon'ble Commission has considered the capitalization during the FY 2011-12 and computed the depreciation on the capitalized assets for FY 2011-12 only.

- 2.40 It is submitted that since CED is working as a department of UT Administration, Chandigarh, appropriate accounting practices were not in place. However, CED has initiated steps for proper maintenance of records and preparation of asset register. It has floated a tender (OP-4/19/2013-14) for appointment of consultant for preparation of Asste & Depreciation Register. However, due to certain observations received from 3-4 firms and certain system constrains, the tender was cancelled. Further, the DNIT was amended and was deliberated by the Standing Committee constituted by the competent authority of Chandigarh Administration on 14.10.2013 & 31.10.2013 and later on approved by the Chief Engineer, UT Chandigarh vide his office memo no. 11891 dated 31.12.2013. The said DNIT is under process of floating on e-tender portal of Chandigarh Administration.
- 2.41 CED submits that it is making every effort to comply with the Commission's direction on preparing the Fixed Asset Register. However, due to various reasons, the process has got delayed. Therefore in the meantime, CED request the Hon'ble Commission to allow the normative depreciation of 5.28% on the assets created prior to FY 2011-12 as computed in table below:

Table 7: Calculation for normative depreciation (in Rs. Cr.) for true up of FY 2011-12

Particulars	Approved as per RE in T.O. of FY 2012-13	Depreciation computed for True-up
Opening GFA	0.00	359.74
Addition	25.00	24.14
Closing GFA	25.00	383.88
Avg Assets	12.50	371.81
Avg rate of Dep	5.28%	5.28%
<b>Depreciation</b>	<b>0.66</b>	<b>19.63</b>

- 2.42 The Hon'ble Commission is requested to allow the opening GFA of Rs. 359.74 Cr for FY 2011-12 as per the annual accounts for FY 2011-12 and approve depreciation amount of Rs. 19.63 Cr for FY 2011-12.

### Advance Against Depreciation (AAD)

- 2.43 In accordance with Clause 26 (2) of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 a licensee can claim AAD if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year. However, for FY 2011-12 CED has considered the repayment of normative loan equal to the depreciation claimed during FY 2011-12. Therefore, advance against depreciation has not been claimed by CED in the provisional true-up for FY 2011-12.

### Interest & Financial Charges

- 2.44 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. In the previous Tariff Orders the Hon'ble Commission has disallowed the GFA and depreciation in absence of the Fixed Asset Register (FAR), as a result Interest on loan was disallowed as well.

- 2.45 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 generating company / licensee*”. Therefore, for the purpose of determination of ARR, CED has considered debt equity ratio of 70:30 for projecting normative loan. CED has considered repayment to be equal to the depreciation amount. The interest at the SBI PLR rate was applied on the average normative debt in order to project the amount of normative interest on long-term loans for FY 2011-12.

**Table 8: Calculation for normative interest cost (in Rs. Cr) for true up of FY 2011-12**

Particulars	Interest expense computed for True-up
Opening balance of Normative Loans	251.82
Repayment for the Year	19.63
Add: Normative Loan against Asset Capitalized	16.90
Closing Balance of Normative Loan	249.08
Interest rate based on SBI PLR	13.25%
<b>Interest on Normative Loan</b>	<b>33.18</b>

- 2.46 CED requests the Hon’ble Commission to allow the interest based on normative loan computed in the table above.

### Interest on Working Capital

- 2.47 As per Regulation 29(3)&(4) of JERC Tariff Regulations, 2009, interest on working capital is required to be computed in the following manner for integrated utility:

*“(3) Subject to prudence check, the working capital for integrated utility shall be the sum of one month requirement for meeting:*

*(a) Power purchase cost*

*(b) Employees cost*

*(c) Administration & general expenses*

*(d) Repair & Maintenance expenses.*

*(e) Sum of two month requirement for meeting Fuel cost.*

*(4) The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures”*

- 2.48 For FY 2011-12, the Hon'ble Commission had allowed working capital requirement based on the above regulations. However, closing balance of security deposit has been deducted from the total working capital requirement considering that the security deposit available with CED can be treated as available to meet part of working capital required for FY 2011-12.
- 2.49 With regard to the treatment of security deposit to meet partial working capital requirement in the tariff order, it is submitted that the security amount received by CED from various consumers were deposited in consolidate fund of India and is therefore not available at the disposal of the CED.
- 2.50 It is submitted that CED had submitted a Review Petition no. 64 of 2012 to the Hon'ble Commission for review of order dated. 7.5.2012 on the same for reconciliation of its order.
- 2.51 It is further submitted that the interest on working capital is claimed by the Petitioner as per Clause 29 of JERC (Terms and Conditions for determination of Tariff Regulations), 2009. The Petitioner further submits that the prevailing Regulations of JERC do not provide any provision for deduction of security deposit amount from the requirement of working capital, therefore, the Petitioner request the Hon'ble Commission to allow the interest on working capital as per the methodology specified in the prevailing JERC Regulations.
- 2.52 Short-term prime lending rate of SBI as on 01/04/2011 was 13.00%. Accordingly, CED has computed allowable working capital interest which is shown below:

Table 9: Calculation of Working Capital for FY 2011-12 (Rs. Cr)

Description	Norm	Amount (Rs. Cr)
Power Purchase	1 month	51.97
Employee Cost	1 month	3.95
R&M	1 month	0.74
A&G	1 month	0.16
<b>Total Working Capital</b>		<b>56.83</b>
Interest Rate (%)		13.00%
<b>Interest on WC</b>		<b>7.39</b>

- 2.53 The Hon'ble Commission is requested to allow the interest on working capital at Rs. 7.39 Cr for FY 2011-12.

## Reasonable Return

- 2.54 The provision of Regulation 23 (2) and Regulation 24 of JERC Tariff Regulations 2009 provides for entitlement for Returns on Capital Base/ Net Fixed Assets by utility / licensee. It states that:

*“Provided that in the case of an Integrated Utility, till the time it remains Integrated Utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948.”*

- 2.55 Therefore, CED has computed the return on net fixed assets at the rate of 3% as approved by the Hon’ble Commission in the last tariff order. The table below show the details of computation of reasonable return during the FY 2011-12:

**Table 10: Proposed ROE for FY 2011-12 (Rs. Cr.)**

Particulars	FY 2011-12
Opening NFA balance	287.78
Add: Assets Capitalized during the Year	24.14
Less: Depreciation for the Year	19.63
Closing NFA	292.28
Reasonable Return (%)	3.0%
<b>Return on NFA</b>	<b>8.70</b>

### Provision for Bad Debts

- 2.56 As per the Regulation 28 of JERC Tariff Regulations, 2009, CED has considered 1% of the revenue receivable during FY 2011-12 towards provision for bad debts in the ARR for FY 2011-12 and requests the Hon’ble Commission to approve the same.

### Non-Tariff Income

- 2.57 The Non-tariff income comprises of metering, late payment charges, interest on staff loans, reconnection fee, miscellaneous revenue etc.
- 2.58 The Hon’ble had approved an amount of Rs. 10.87 Cr towards non-tariff income for FY 2011-12 in the review of FY 2011-12. The actual non-tariff income is Rs. 15.41 Cr for FY 2011-12 is higher than the approved amount of non-tariff income. CED requests the Hon’ble Commission to approve the actual non-tariff income of Rs. 15.41 Cr.

**Table 11: Non-Tariff Income (in Rs. Cr) for FY 2011-12**

Particular	Approved RE	Proposed for true-up for FY 2011-2012
Non-Tariff Income	10.87	15.41

### Revenue from Sale through UI & Power Exchange

- 2.59 During the FY 2011-12, surplus power during off-peak time was sold under UI & Exchange. Also, power under banking arrangement was returned to J&K. The details of the units and revenue from sale of power under UI, exchange and banking are detailed in table below:

Table 12: Actual Revenue from sale of power through UI &amp; Exchange (in Rs. Cr) for FY 2011-12

Particular	Units (in MUs)	Amount (Rs. Cr)
UI Sale	114.17	32.15
Exchange Sale	87.90	26.74
Banking*	2.85	-
<b>Total</b>	<b>204.93</b>	<b>58.89</b>

\*Net units banked with J&K

2.60 CED has considered the amount of Rs. 58.89 Cr towards the ARR and requests the Hon'ble Commission to consider the same.

### Aggregate Revenue Requirement for FY 2011-12

2.61 Based on the parameters discussed above, the aggregate revenue requirement for FY 2011-12 is detailed below:

Table 13: Approved and Actual ARR (in Rs. Cr) for FY 2011-12

Description	Approved RE for FY 2011-12	Actual for True-up
Cost of power purchase for full year	618.84	623.65
Employee costs	56.07	47.46
R&M expenses	9.57	8.85
Administration and general expenses	1.45	1.56
Depreciation	0.66	19.63
Interest and finance charges	2.27	33.18
Interest on working capital & Interest on Security Deposit	5.14	9.77
Return on NFA /Equity	-	8.70
Provision for Bad Debt	-	5.29
Advance Against Depreciation	-	-
<b>Total Revenue Requirement</b>	<b>693.99</b>	<b>758.52</b>
Less: Non-Tariff Income	10.87	15.41
Less: Revenue from Sale through UI & Power Exchanges	42.79	58.89
<b>Net Revenue Requirement</b>	<b>640.33</b>	<b>684.22</b>

## Revenue from Sale of Power

2.62 The revenue billed to the consumers during FY 2011-12 based on the actual sales is detailed in the table below:

**Table 14: Revenue from Sale of Power (in Rs. Cr) for FY 2011-12**

Sl. No	Consumer Category	Approved Revenue (RE) (Rs. Cr)	Actual Revenue (Rs. Cr)
1	Domestic	210.27	188.07
2	Commercial	207.46	187.35
3	Large Supply	64.06	57.51
4	Small Power	10.86	9.14
5	Medium Supply	52.5	46.67
6	Agriculture	0.28	0.27
7	Public Lighting	7.7	7.55
8	Bulk Supply	36.5	32.80
9	Others-Temporary Supply	4.77	5.36
10	<b>Total Revenue</b>	<b>594.4</b>	<b>534.71</b>

2.63 During FY 2011-12, the actual revenue is lower than the approved revenue primarily due lower actual sales across consumer categories. Therefore, CED requests the Hon'ble Commission to consider the revenue of Rs. 534.71 Cr towards computation of revenue deficit.

## Revenue Gap for FY 2011-12

2.64 In the Tariff Order for FY 2013-14, the Hon'ble Commission had approved a revenue gap of Rs. 45.93 Cr for FY 2011-12 based on the review. However, Commission also stated that actual figures will be considered once submitted along with the Audited Accounts. Therefore, considering the actual expenditure and revenue (as also detailed above), the actual revenue gap for the FY 2011-12 computes to Rs. 149.50 Cr. Comparison of the approved and actual ARR, revenue and revenue gap is summarized in table below. It is further submitted

**Table 15: Approved and Actual Revenue Gap for FY 2011-12 (in Cr)**

Description	Approved as per T.O. (RE)	Actual
Net Revenue Requirement	640.33	684.22
Revenue from sale of Power	594.40	534.71

Description	Approved as per T.O. (RE)	Actual
Revenue Surplus/ (Gap)	(45.93)	(149.50)

- 2.65 CED request the Hon'ble Commission to approve above mentioned Revenue gap of Rs. 149.50 Cr for FY 2011-12 and create a Regulatory Asset of the same.
- 2.66 CED further would further like to submit that as per Provision 4 of Regulation 8 for 'Review and Truing Up' of JERC 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/revenue. Carrying costs shall be limited to be interest rate approved for working capital borrowings.*"
- 2.67 Hence, CED request the Hon'ble Commission to allow carrying cost on the Regulatory Assets created for the revenue gap of FY 2011-12 based on interest rate approved for working capital borrowing in line with the principles defined in the tariff regulations.

## Chapter 3: Provisional True-up petition for FY 2012-13

- 3.1 In this section, CED is submitting Provisional True-up for FY 2012-13. In the Tariff Order for FY 2013-14 issued on 15<sup>th</sup> April 2013, the Hon'ble Commission had undertaken the review of ARR of FY 2012-13 based on the actual information of first 9 months and projection for the rest. CED now submits the actual details for the entire year of FY 2012-13 in the Petition. CED submits that as per the directions given by Hon'ble Commission, it has floated the Tender (OP-4/19/2013-14) for appointment of consultant for preparation of Annual Statement of Accounts on commercial accounting principles. CED requests the Commission to approve the provisional true-up for FY 2012-13 based on the Performa Accounts for FY 2012-13 as audited by Comptroller & Auditor General of India (CAG) until the Annual Accounts for FY 2012-13 based on the commercial accounting principles are made available to the Hon'ble Commission. The Performa Accounts for FY 2011-12 along with Audit Certificate are being submitted to the Hon'ble Commission along with this petition for the purpose of True-up (**Annexure – II**).

### Principles for True-up for the period FY 2012-13

- 3.2 The JERC (Terms and Conditions for determination of Tariff) Regulations, 2009 provides that:

*“8. Review and Truing Up*

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

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

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

*(3) The revenue gap of the ensuing year shall be adjusted as a result of review and truing up exercises.*

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

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

(7) The Commission may consider granting approval to such proposals provided the cost of additional supply is ordinarily met by the beneficiary category.”

- 3.3 In the Tariff Order for FY 2012-13 issued on 15<sup>th</sup> April 2013, the Hon'ble Commission had approved the review of ARR for FY 2012-13 based on the information submitted by CED.
- 3.4 It is submitted to the Hon'ble Commission that the Performa Accounts of FY 2012-13 have been audited by Comptroller & Auditor General of India (CAG) and thus, in line with the provisions of JERC (Terms and Conditions for determination of Tariff) Regulations, 2009, CED is filing this true-up petition for the year FY 2012-13 based on audited Performa Accounts of FY 2012-13.

### Category wise Sales

- 3.5 The category wise actual sales for FY 2012-13 as against the approved sales in the Review of FY 2012-13 have been shown below for the consideration and approval of the Hon'ble Commission.

**Table 16: Approved vs Actual Category-wise Sales (MU) for FY 2012-13**

S. No.	Consumer Category	Approved Sales for FY 2012-13 as per Tariff Order	Actual	Variation (Approved-Actual)
1	Domestic	638.57	586.54	(52.03)
2	Commercial	424.26	397.54	(26.72)
3	Large Supply	142.53	137.50	(5.03)
4	Small Power	21.36	20.11	(1.25)
5	Medium Supply	106.41	103.84	(2.57)
6	Agriculture	1.49	1.40	(0.09)
7	Public Lighting	21.95	21.98	0.03
8	Bulk Supply	87.03	87.34	0.31
9	Others-Temporary Supply	11.55	8.79	(2.76)
	<b>Total Sales</b>	<b>1,455.14</b>	<b>1,365.05</b>	<b>(90.10)</b>

- 3.6 The actual sales during FY 2012-13 have been lower than the approved sales for FY 2012-13 as per the Tariff Order issued on 15<sup>th</sup> April 2013. It is submitted that the sales figure for FY 2012-13 provided by CED is actual.
- 3.7 The Hon'ble Commission is requested to approve the actual sales for FY 2012-13 and also approve the power purchase requirement accordingly.

### Transmission & Distribution Losses

- 3.8 CED has estimated the distribution loss and energy requirement for FY 2012-13 in line with the methodology adopted by Hon'ble Commission in its previous Orders.
- 3.9 The T&D loss for FY 2012-13 has been considered based on the actual sales and energy delivered at CED periphery after accounting for inter-state losses. For arriving at the energy delivered at CED periphery the average inter-state losses of 3.50% have been considered based on the average actual inter-state losses for FY 2012-13.
- 3.10 It is pertinent to mention that UT of Chandigarh have not been provided any interstate transmission point within the boundaries of Chandigarh and the metering is being done at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB). The Hon'ble Commission in its previous Tariff Orders has disallowed the losses as submitted by CED and had asked for the basis of the losses arrived by the Petitioner. CED submits that it has taken up the matter in the Standing Committee of Northern Region for system planning on 2.1.2013, during which it was agreed by the Committee for taking up an appropriate action. CED submits that PGCIL in its letter dated 22.06.2013 have calculated the inter-state losses of 2.97% on 220 kV Nalagarh-Manimajra line for FY 2012-13. Further the losses on 66kV Mohali-CHD and 66kV Dhoolkot-CHD has also been calculated for reference. A copy of the letter received from PGCIL is attached as **Annexure-V** along with the Petition.
- 3.11 Accordingly, CED has reduced an average of additional 3.0% of the energy towards losses which are attributable towards inter-state losses and would not form part of the T&D losses of CED. Based on the computation, actual T&D loss achieved by CED during FY 2012-13 is 17.23% as against the T&D loss of 16.00% approved by the Hon'ble Commission in the Tariff Order for FY 2012-13 and in Review of FY 2012-13.
- 3.12 It is submitted that around 98% of the consumers in UT Chandigarh are at LT level which has an adverse effect on the loss reduction. Therefore, the Hon'ble Commission is requested to take a considerate view on the non-achievement of T&D losses during FY 2012-13 and allow the actual losses for FY 2012-13.
- 3.13 CED would further like to submit that it has been providing details of actual losses incurred by CED to the Hon'ble Commission against its Suo-Moto petition no.76. The hearing for the same last held on 27.12.2013.
- 3.14 The table below highlights the comparison of T&D losses as per actual and approved by the Commission in its tariff order for FY 2013-14:

Table 17: Transmission &amp; Distribution Losses for FY 2012-13

FY 2012-13			
Particulars	Approved by JERC in FY 12-13 Tariff order	Approved as per Review of FY 12-13	Actual
<b>T&amp;D Losses (%)</b>	16.00%	16.00%	17.23%

3.15 CED requests the Hon'ble Commission to approve the actual T&D loss of 17.20% for FY 2012-13.

## Energy Balance

3.16 The Energy Balance of CED for FY 2012-13 based on the Energy Sales, T&D Loss % and Source-wise Energy purchase being approved by the Hon'ble Commission and actual figures being recorded now by CED is depicted under the table below:

Table 18: Approved &amp; Actual Energy Balance for FY 2012-13 (in MU)

S. No.	Particulars	Approved as per T.O. dated 15 April 2013	FY 2012-13 (Actual)
<b>A)</b>	<b>ENERGY REQUIREMENT</b>		
1	Energy sales within the State/UT	1,455.14	1365.05
2	Energy sales to Agriculture consumers (included in total sales)	-	-
<b>3</b>	<b>Total sales within the State/UT</b>	<b>1,455.14</b>	<b>1365.05</b>
<b>4 a)</b>	<b>Distribution losses</b>		
i)	%	16.00%	17.23%
ii)	MU	277.17	284.07
<b>b)</b>	<b>Losses due to absence of interstate transmission point</b>		
i)	%	-	3.00%
ii)	MU	-	51.00
<b>5</b>	<b>Energy required at State Periphery for Sale to Retail Consumers</b>	<b>1,732.30</b>	<b>1700.12</b>
<b>6</b>	<b>Add: Sales to common pool consumers/ UI</b>	<b>155.67</b>	<b>162.75</b>
7	Sales outside state/UT : UI/Under drawal	83.21	100.54
8	Sales		
	a) To electricity traders	-	-
	b) Through PXIL/ Exchange	48.37	62.21
9	Sales to other distribution licensees		
	a) Bilateral Trade	-	
	b) Banking Arrangement*	24.10	
<b>10</b>	<b>Total Energy Requirement for State (5+6)</b>	<b>1,887.98</b>	<b>1862.87</b>

S. No.	Particulars	Approved as per T.O. dated 15 April 2013	FY 2012-13 (Actual)
11	Inter-state Transmission losses		
j)	MU	60.12	67.57
<b>12</b>	<b>Total Energy Requirement including transmission losses (10+11)</b>	<b>1,948.09</b>	<b>1930.43</b>
<b>13</b>	<b>ENERGY AVAILABILITY / PURCHASED</b>		
<b>1</b>	<b>Net Generation (Share from CGS &amp; shared plants) (in MUs)</b>	<b>1,694.74</b>	<b>1613.34</b>
A	NTPC	524.57	529.41
B	NHPC	260.81	216.19
C	NPCIL	116.40	120.84
D	SJVNL/NJPC	90.73	76.32
E	BBMB (including Dehar & Pong)	702.23	670.60
<b>2</b>	<b>Power Purchased from (Other Sources)</b>	<b>253.35</b>	<b>317.09</b>
A	THDC	47.36	47.28
B	Jhajjar/Sewa II for 11-12 petition)	10.76	17.60
C	PXIL/Exchange (Buy)	11.35	17.21
D	Bilateral Trade (Buy)	120.47	120.64
E	RPO (Buy)	-	-
F	UI (Buy)	41.20	84.56
G	Banking Arrangements (Buy)	22.21	29.79
<b>14</b>	<b>Net Energy purchase (MU)</b>	<b>1,948.09</b>	<b>1930.43</b>

\*Actual banking arrangement is the net figure in MUs during FY 2012-13

- 3.17 It is submitted that the above units are compiled as per the Final REA for each month of FY 2012-13 as issued by NRLDC. CED requests the Hon'ble Commission to approve the actual energy balance for FY 2012-13 as provided in the table above.

## Power Purchase

- 3.18 CED does not have own power generation. Therefore, it relies on power from various generating stations of NTPC, NHPC, NPCIL, BBMB, SJVNL, etc for meeting its power requirement. Further, any demand-supply shortfall is met through power procurement from short-term sources i.e. bilateral, exchange and UI.
- 3.19 The table below summarize the approved and actual source-wise power purchased during FY 2012-13:

Table 19: Power Purchase (MU) for FY 2012-13

S. No	Generating Company	Name of Project	Approved Units (MUs)	Actual Units (MUs)
1	NTPC	Anta	37	31.78
2		Auraiya	14	21.38
3		Dadri GPP	36	29.43

S. No	Generating Company	Name of Project	Approved Units (MUs)	Actual Units (MUs)
4		Dadri II TPP	35	34.86
5		Kahalgaon II	16	17.11
6		Rihand I	102	102.21
7		Rihand II	108	113.76
8		Rihand III	10	8.94
9		Singrauli	94	95.65
10		Unchahar I	19	19.47
11		Unchahar II	38	38.68
12		Unchahar III	16	16.13
13		Chamera I	115	95.21
14		Chamera II	29	25.01
15		Chamera III	18	10.15
16		Dhauliganga	22	18.60
17	NHPC	Dulhasti	33	27.33
18		Salal	10	8.85
19		Sewa II	8	7.81
20		Tanakpur	6	4.82
21		Uri	20	18.43
22		NAPP	41	42.26
23	NPCIL	RAPP B	21	21.69
24		RAPP C	54	56.85
25	SJVNL	SJVNL/NJPC	91	76.32
26		BBMB (3.5%)	300	266.90
27	BBMB*	BBMB 1 LU	37	36.70
28		BBMB 10 LU	366	367.00
29	APCPL	IGSTPP	11	17.60
30		Koteshwar	10	10.72
31	THDC	Tehri	37	36.57
32		RPO	-	-
33		Power Exchange (Buy)	11	17.21
34	Others	Bilateral	120	120.64
35		Banking	22	29.79
36		UI (Buy)	41	84.56
		<b>Annual Total</b>	<b>1,948.09</b>	<b>1,930.43</b>

\* Inclusive of Beas I & II (Dehar & Pong)

3.20 As actual sales within the UT of Chandigarh were lower than the approved, lower quantum of power was required by CED during FY 2012-13.

## Power Purchase Cost

- 3.21 For computing the power purchase cost for FY 2012-13, CED has considered the actual Power Purchase Cost borne for FY 2012-13.
- 3.22 It is submitted that the in addition to the capacity charges and energy charges borne by the CED, the total power purchase cost include other cost elements which includes other charges, Arrears/ supplementary charges and rebate.
- 3.23 Further the cost of Rs. 11.81 Cr. towards purchase of Renewable Energy Certificates (REC) has been added in the total power purchase cost for FY 2012-13.
- 3.24 CED has not been able to meet the renewable purchase obligation (RPO) during the period FY 2012-13. However, CED had submitted to the Hon'ble Commission the latest report to meet RPO Backlog for FY 2010-11, FY 2011-12, FY 2012-13 and current financial year FY 2013-14 as per Hon'ble JERC Order dated 25.10.2013. In compliance to the same, CED had purchased additional RECs during FY 2012-13 and FY 2013-14 for meeting the RPO Backlog. Therefore, CED requests the Hon'ble Commission to consider the purchase done by CED for meeting the present as well as the carry forward RPO and allow cost of the same.
- 3.25 Further as per the Hon'ble Commission direction in the previous Order, CED has started following the methodology of purchase of REC throughout the year to avoid bulk purchase of RE certificates at higher cost at the end of the year.
- 3.26 The summarized approved and actual power purchase cost for FY 2012-13 is shown below:

Table 20: Source wise Power Purchase Cost for FY 2012-13 (Rs. Cr)

Source	Approved by the Commission for FY 2012-13			Actual for FY 2012-13		
	Units (MU)	Total Charges (Rs. Cr)	Per Unit Rate (Rs./kWh)	Units (MU)	Total Charges (Rs. Cr)	Per Unit Rate (Rs./kWh)
NTPC	524.57	152.18	2.90	529.41	151.48	2.86
NHPC	260.81	63.84	2.45	216.22	58.37	2.70
NPCIL	116.40	34.72	2.98	120.80	38.00	3.15
SJVNL	91	21.60	2.37	76.32	19.54	2.56
BBMB	702.33	193.84	2.76	670.60	188.57	2.81
APCPL	11	8.05	7.32	17.60	10.55	5.99
THDC	47.36	20.42	4.31	47.28	21.91	4.63
Others Sources	195.23	59.85	3.07	252.20	79.06	3.13
REC		18.25			11.81	
Transmission & NRLDC Charges		43.49			35.92	
Reactive Energy Charges		0.61			0.50	
LC Charges		-			0.58	
NRPC Support		-			5.42	
<b>Total</b>	<b>1,948.09</b>	<b>616.87</b>	<b>3.17</b>	<b>1,930.43</b>	<b>621.71</b>	<b>3.22</b>

- 3.27 CED prays to the Hon'ble Commission to approve the power purchase cost of Rs. 621.71 Cr as per the audited annual accounts for FY 2012-13.

### **Other Components**

- 3.28 As outlined in the regulations, the other cost incurred by CED for FY 2012 - 13 has been determined under the following heads:
- Operation and Maintenance Expenses,
  - Depreciation, including Advance Against Depreciation,
  - Interest and Cost of Finance,
  - Return on Equity,
  - Income Tax
  - Provision for Bad & Doubtful Debts
- 3.29 Net Annual Revenue Requirement has been computed after netting off Non-Tariff Income of CED.

### **Operation & Maintenance Expenses**

- 3.30 Operations and Maintenance (O&M) Expenses of the company consists of the following cost elements:
- Employee Expenses
  - Repairs and Maintenance Expenses
  - Administrative and General Expenses

#### **Employee Expenses**

- 3.31 Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits i.e. pension & gratuity, leave encashment and staff welfare expenses.
- 3.32 The Employee Expenses as per the Performa Accounts for FY 2012-13 audited by Comptroller & Auditor General of India (CAG) were Rs. 44.61 Cr. as against the approved employee cost of Rs. 53.50 Cr for FY 2012-13. The actual cost is lower than the approved cost due to delay in recruitment process.

#### **Repair & Maintenance Expenses**

- 3.33 Repairs and Maintenance Expenses go towards day-to-day upkeep of transmission and distribution functions of CED and form an integral part of CED's efforts towards reliable and quality power supply to its consumers and reduction of losses in its system.
- 3.34 The actual expense incurred by CED towards R&M expense for FY 2012-13 is Rs. 9.30 Cr as against the approved Rs. 9.56 Cr. by the Hon'ble Commission during the review of FY 2012-13.

- 3.35 The Hon'ble Commission is requested to allow the actual R&M expenses of Rs. 9.30 Cr for FY 2012-13.

### **Administrative & General Expenses**

- 3.36 Administrative and General expenses mainly comprise of rents, telephone and other communication expenses, regulatory expenses, professional charges, conveyance and travelling allowances, other debits.
- 3.37 The actual A&G expense of CED for FY 2012-13 was Rs. 2.69 Cr which is higher than the approved A&G expense of Rs. 2.31 Cr. It is submitted that the A&G expense proposed during the review of ARR for FY 2011-12 did not include the registration charge expense of Rs. 0.42 Cr as payment made towards PGCIL.
- 3.38 Therefore, CED requests the Hon'ble Commission to approve the total A&G expense of Rs. 2.69 Cr without any disallowance for the true-up of FY 2012-13.

**Table 21: Operation & Maintenance Expenses (in Rs. Cr.) for FY 2012-13**

<b>Particulars</b>	<b>Approved (RE) by JERC as per Latest Tariff Order</b>	<b>Actual for FY 2012-13</b>
Employee Cost	53.50	44.61
R&M Expenses	9.56	9.30
A&G Expenses	2.31	2.69
<b>Total O&amp;M Cost</b>	<b>65.38</b>	<b>56.60</b>

### **Depreciation**

- 3.39 It is pertinent to mention here that the Hon'ble Commission has not allowed any depreciation on the assets established by CED prior to FY 2011-12 in absence of any asset register for the past period. The Hon'ble Commission has considered the capitalization during the FY 2011-12 and FY 2012-13 and computed the depreciation on the capitalized assets for FY 2011-12 and FY 2012-13 only, leaving the depreciation on fixed assets prior to FY 2011-12.
- 3.40 It is submitted that since CED is working as a department of UT Administration, Chandigarh, appropriate accounting practices were not in place. However, CED has initiated steps for proper maintenance of records and preparation of asset register. CED has floated a tender (OP-4/19/2013-14) for appointment of consultant for preparation of Asste & Depreciation Register. However, due to certain observations received from 3-4 firms and certain system constrains, the tender was cancelled.

- 3.41 It is submitted that the DNIT was further amended and was deliberated by the Standing Committee constituted by the competent authority of Chandigarh Administration on 14.10.2013 & 31.10.2013 and later on approved by the Chief Engineer, UT Chandigarh vide his office memo no. 11891 dated 31.12.2013. The said DNIT is under process of floating on e-tender portal of Chandigarh Administration.
- 3.42 CED submits that it is making every effort to comply with the Commission's direction on preparing the Fixed Asset Register. However, due to various reasons, the process has got delayed. Therefore in the meantime, CED request the Hon'ble Commission to allow the normative depreciation of 5.28% on the assets created prior to FY 2012-13 as computed in table below:

Table 22: Calculation for normative depreciation (in Rs. Cr.) for true up of FY 2012-13

Particulars	Approved as per RE of FY 2012-13	Depreciation computed for True-up
Opening GFA	25.00	383.88
Addition	20.50	24.68
Closing GFA	45.50	408.56
Avg Assets	35.25	396.22
Avg rate of Dep	5.28%	5.28%
<b>Depreciation</b>	<b>1.86</b>	<b>20.92</b>

- 3.43 The Hon'ble Commission is requested to allow the opening GFA of Rs. 383.88 Cr for FY 2012-13 as per the Performa Accounts for FY 2012-13 audited by Comptroller & Auditor General of India (CAG) and approve depreciation amount of Rs. 20.92 Cr for FY 2012-13.

### Advance Against Depreciation (AAD)

- 3.44 In accordance with Clause 26 (2) of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 a licensee can claim AAD if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year. However, for FY 2011-12 CED has considered the repayment of normative loan equal to the depreciation claimed during FY 2012-13. Therefore, advance against depreciation has not been claimed by CED in the provisional true-up for FY 2012 -13.

### Interest & Financial Charges

- 3.45 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. In the previous Tariff Orders the Hon'ble Commission has disallowed the GFA and depreciation in absence of the Fixed Asset Register (FAR), as a result Interest on loan was disallowed as well.

- 3.46 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 generating company / licensee*”. Therefore, for the purpose of determination of ARR, CED has considered debt equity ratio of 70:30 for projecting normative loan. CED has considered repayment to be equal to the depreciation amount. The interest at the SBI PLR rate was applied on the average normative debt in order to project the amount of normative interest on long-term loans for FY 2012-13.

**Table 23: Calculation for normative interest cost (in Rs. Cr) for true up of FY 2012-13**

Particulars	Interest expense computed for True-up
Opening balance of Normative Loans	249.08
Repayment for the Year	20.92
Add: Normative Loan against Asset Capitalized	17.28
Closing Balance of Normative Loan	245.44
Average Normative Loans	247.26
Interest rate based on SBI PLR	14.75%
<b>Interest on Normative Loan</b>	<b>36.47</b>

- 3.47 CED requests the Hon’ble Commission to allow the interest based on normative loan computed in the table above.

### Interest on Working Capital

- 3.48 As per Regulation 29(3)&(4) of JERC Tariff Regulations, 2009, interest on working capital is required to be computed in the following manner for integrated utility:

*“(3) Subject to prudence check, the working capital for integrated utility shall be the sum of one month requirement for meeting:*

*(a) Power purchase cost*

*(b) Employees cost*

*(c) Administration & general expenses*

*(d) Repair & Maintenance expenses.*

*(e) Sum of two month requirement for meeting Fuel cost.*

*(4) The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures”*

- 3.49 For FY 2012-13, the Hon'ble Commission had allowed working capital requirement based on the above regulations. However, closing balance of security deposit has been deducted from the total working capital requirement considering that the security deposit available with CED can be treated as available to meet part of working capital required for FY 2012-13.
- 3.50 With regard to the treatment of security deposit to meet partial working capital requirement in the tariff order, it is submitted that the security amount received by CED from various consumers were deposited in consolidate fund of India and is therefore not available at the disposal of the CED.
- 3.51 It is submitted that CED had submitted a Review Petition no. 64 of 2012 to the Hon'ble Commission for review of order dated. 7.5.2012 on the same for reconciliation of its order.
- 3.52 It is further submitted that the interest on working capital is claimed by the Petitioner as per Clause 29 of JERC (Terms and Conditions for determination of Tariff Regulations), 2009. The Petitioner further submits that the prevailing Regulations of JERC do not provide any provision for deduction of security deposit amount from the requirement of working capital, therefore, the Petitioner request the Hon'ble Commission to allow the interest on working capital as per the methodology specified in the prevailing JERC Regulations.
- 3.53 Short-term prime lending rate of SBI as on 01/04/2012 was 14.75%. Accordingly, CED has computed allowable working capital interest which is shown below:

Table 24: Calculation of Working Capital for FY 2012-13 (Rs. Cr)

Description	Norm	Amount (Rs. Cr)
Power Purchase	1 month	48.17
Employee Cost	1 month	3.72
R&M	1 month	0.77
A&G	1 month	0.22
<b>Total Working Capital</b>		<b>52.88</b>
Interest Rate (%)		14.75
<b>Interest on WC</b>		<b>7.80</b>

- 3.54 The Hon'ble Commission is requested to allow the interest on working capital at Rs. 7.80 Cr for FY 2012-13.

### Reasonable Return

- 3.55 The provision of Regulation 23 (2) and Regulation 24 of JERC Tariff Regulations 2009 provides for entitlement for Returns on Capital Base/ Net Fixed Assets by utility / licensee. It states that:

*“Provided that in the case of an Integrated Utility, till the time it remains Integrated Utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948.”*

- 3.56 Therefore, CED has computed the return on net fixed assets at the rate of 3% as approved by the Hon’ble Commission in the last tariff order. The table below show the details of computation of reasonable return during the FY 2012-13:

**Table 25: Proposed ROE for FY 2012-13 (Rs. Cr.)**

Particulars	FY 2012-13
Opening NFA balance	292.28
Add: Assets Capitalized during the Year	24.68
Less: Depreciation for the Year	20.92
Closing NFA	296.04
Reasonable Return (%)	3%
<b>Return on NFA</b>	<b>8.88</b>

### Provision for Bad Debts

- 3.57 As per the Regulation 28 of JERC Tariff Regulations, 2009, CED has considered 1% of the revenue receivable during FY 2012-13 towards provision for bad debts in the ARR for FY 2012-13 and requests the Hon’ble Commission to approve the same.

### Non-Tariff Income

- 3.58 The Non-tariff income comprises of metering, late payment charges, interest on staff loans, reconnection fee, miscellaneous revenue etc.
- 3.59 The Hon’ble had approved an amount of Rs. 14.63 Cr towards non-tariff income for FY 2012-13 in the review of FY 2012-13. The actual non-tariff income is Rs. 16.98 Cr for FY 2012-13 is higher than the approved amount of non-tariff income. CED requests the Hon’ble Commission to approve the actual non-tariff income of Rs. 16.98 Cr.

**Table 26: Non-Tariff Income (in Rs. Cr) for FY 2012-13**

Particular	Approved as per RE	As per Actuals
Sale proceeds of dead stock, waste paper etc	1.94	-
Receipt from state electrical Inspectorate	-	-
Meter/Service rent	3.58	5.41
Late Payment Surcharge	1.12	1.86
Theft/Pilferage of Energy	1.10	1.14
Wheeling Charges under Open Access	0.36	-
Interest on staff Loans and advance	0.03	-
Income from trading	-	-

Income staff welfare activities	-	-
Investment & bank balances	-	-
Misc receipts/Income	6.51	8.57
<b>Total Income</b>	<b>14.63</b>	<b>16.98</b>

### Revenue from Sale through UI & Power Exchange

3.60 During the FY 2012-13, surplus power during off-peak time was sold under UI & Exchange. The details the units and revenue from sale of power under UI, exchange and banking are detailed in table below:

Table 27: Actual Revenue from sale of power through UI & Exchange (in Rs. Cr) for FY 2011-12

Particular	Units (in MUs)	Amount (Rs. Cr)	Per Unit (Rs. Per kWh)
UI Sale	100.54	24.68	2.55
Exchange Sale	62.21	19.02	3.06
<b>Total</b>	<b>162.75</b>	<b>44.70</b>	<b>2.75</b>

*\*Net units banked with J&K*

3.61 CED has considered the amount of Rs. 44.70 Cr towards the ARR and requests the Hon'ble Commission to consider the same.

### Aggregate Revenue Requirement for FY 2012-13

3.62 Based on the parameters discussed above, the aggregate revenue requirement for FY 2012-13 is detailed below:

Table 28: Approved and Actual ARR (in Rs. Cr) for FY 2012-13

Description	Approved RE for FY 2012-13	Actual for True-up
Cost of power purchase for full year	616.87	621.71
Employee costs	53.50	44.61
R&M expenses	9.56	9.30
Administration and general expenses	2.31	2.69
Depreciation	1.86	20.92
Interest and finance charges	4.56	36.47
Interest on working capital & Interest on Security Deposit	6.14	13.12
Return on NFA /Equity	0.69	8.88
Provision for Bad Debt	3.28	6.09

Description	Approved RE for FY 2012-13	Actual for True-up
Advance Against Depreciation	-	-
<b>Total Revenue Requirement</b>	<b>698.78</b>	<b>763.79</b>
Less: Non-Tariff Income	14.63	16.98
Less: Revenue from Sale through UI	14.75	24.68
Less: Revenue from Sale through Power Exchanges	21.56	19.02
<b>Net Revenue Requirement</b>	<b>647.84</b>	<b>703.11</b>

### Revenue from Sale of Power

3.63 The revenue billed to the consumers during FY 2012-13 based on the actual sales is detailed in the table below:

Table 29: Revenue from Sale of Power (in Rs. Cr) for FY 2012-13

Sl. No	Consumer Category	Approved Revenue (RE) (Rs. Cr)	Actual Revenue (Rs. Cr)	Average Billing Rate (Rs./kWh)
1	Domestic	264.11	209.60	3.57
2	Commercial	205.63	209.99	5.28
3	Large Supply	68.84	70.00	5.09
4	Small Power	9.45	8.98	4.47
5	Medium Supply	49.56	51.75	4.98
6	Agriculture	0.34	0.32	2.30
7	Public Lighting	9.61	9.92	4.51
8	Bulk Supply	40.05	42.77	4.90
9	Others-Temporary Supply	7.77	5.89	6.70
10	<b>Total Revenue</b>	<b>655.36</b>	<b>609.23</b>	<b>4.46</b>

3.64 During FY 2012-13, the actual revenue is lower than the approved revenue primarily due to lower actual sales across consumer categories.

3.65 Since the actual revenue realized is Rs. 609.23 Cr, CED requests the Hon'ble Commission to consider the revenue of Rs. 609.23 Cr. towards computation of revenue deficit for FY 2012-13.

3.66 In addition, CED would further like to submit that the loss of revenue due to 99% of collection efficiency has been computed in the section Bad and Doubtful debt.

### FPPCA billed during the year

3.67 The Petitioner submits that during FY 2012-13 it has billed FPPCA of Rs. 19.82 Cr. based on the actual sales as detailed in the table below:

Table 30: FPPCA billed (in Rs. Cr) for FY 2012-13

Sl. No	Consumer Category	Approved FPPCA (RE) (Rs. Cr)	Actual FPPCA (Rs. Cr)
1	Domestic		5.17
2	Commercial		5.65
3	Large Supply		3.96
4	Small Power		0.41
5	Medium Supply		2.39
6	Agriculture		-
7	Public Lighting		0.56
8	Bulk Supply		1.68
9	Others-Temporary Supply		-
10	<b>Total FPPCA</b>	<b>5.54</b>	<b>19.82</b>

### Revenue Gap for FY 2012-13

3.68 In the Tariff Order for FY 2013-14, the Hon'ble Commission had approved a revenue gap of Rs. 32.87 Cr for FY 2012-13 based on the review. However, considering the actual expenditure and revenue (as also detailed above), the actual revenue gap for the FY 2012-13 computes to Rs. 74.26 Cr. Comparison of the approved and actual ARR, revenue and revenue gap for FY 2012-13 is summarized in table below:

Table 31: Approved and Actual Revenue Gap for FY 2012-13 (in Rs. Cr.)

Description	Approved as per T.O. (RE)	As per Actual of FY 2012-13
Net Revenue Requirement	647.84	703.11
Revenue from retail sale of existing tariff	655.36	609.23
FPPCA billed during the year	5.54	19.82
Net Gap	(13.06)	(74.26)

- 3.69 CED request the Hon'ble Commission to approve above mentioned Revenue gap of Rs. 74.26 Cr for FY 2012-13 and create a **Regulatory Asset** of the same.
- 3.70 CED further would like to submit that as per Provision 4 of Regulation 8 for 'Review and Truing Up' of JERC 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."*
- 3.71 Hence, CED request the Hon'ble Commission to allow carrying cost on the Regulatory Assets created for the revenue gap of FY 2012-13 based on interest rate approved for working capital borrowing in line with the principles defined in the Tariff Regulations.

## Chapter 4: Annual Performance Revised for FY 2013-14 and ARR Projection for FY 2014-15

4.1 In this section, CED has outlined its performance for FY 2013-14 for eight months (upto November 2013) against the Tariff Order for FY 2013-14 issued by the Hon'ble Commission on 15<sup>th</sup> April 2013 and also have proposed review of ARR for FY 2013-14 based on the eight month actual figures. Further, CED is submitting the projections of ARR for FY 2014-15 as per the methodology defined in the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

### Consumers and Connected Load

4.2 The category wise connected load (in kW) for FY 2007-08 to FY 2012-13 of CED are shown in the following table:

Table 32: Category-wise connected load (in KW)

Category	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Domestic	539,862	588,925	609,933	609,926	658,690	731,236
Commercial	252,872	260,796	274,628	301,758	318,272	326,156
Large Supply	67,049	64,321	65,937	65,026	65,763	64,023
Small Power	15,452	17,398	18,484	18,500	18,652	18,754
Medium Supply	40,631	51,222	53,566	55,564	57,603	59,811
Agriculture	987	986	1,006	737	675	707
Public Lighting	3,540	3,845	2,966	5,039	5,455	5,583
Bulk Supply	11,659	27,119	42,977	28,745	30,378	41,303
Others-Temporary Supply	-	8,654	8,763	24,741	27,840	5,672
<b>Total</b>	<b>932,052</b>	<b>1,023,266</b>	<b>1,078,260</b>	<b>1,110,035</b>	<b>1,183,329</b>	<b>1,253,245</b>

4.3 The category wise number of consumers for the period FY 2007-08 to FY 2012-13 for CED are shown in the table below:

Table 33: Category-wise number of consumers

Category	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Domestic	162,105	165,121	167,208	168,429	170,364	172,549
Commercial	23,536	24,066	24,420	24,837	25,359	20,309
Large Supply	102	103	102	102	104	101
Small Power	1,359	1,371	1,409	1,286	1,291	1,285
Medium Supply	865	879	884	1,042	1,076	1,116
Agriculture	163	163	167	133	122	123
Public Lighting	546	554	568	678	775	807
Bulk Supply	190	219	258	286	348	503
Others-Temporary Supply	261	265	266	751	903	922

Category	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
<b>Total</b>	<b>189,127</b>	<b>192,741</b>	<b>195,282</b>	<b>197,544</b>	<b>200,342</b>	<b>197,715</b>

4.4 Based on the past growth trends and actual number of consumers and load addition during the eight months of FY 2013-14, the category-wise number of consumers and connected load projections for FY 2013-14 and FY 2014-15 is summarized in table below:

Table 34: Projected Category-wise Number of consumers & Connected Load for FY 2013-14 & FY 2014-15

Category	Number of Consumers		Connected Load (KW)	
	FY 2013-14	FY 2014-15	FY 2013-14	FY 2014-15
Domestic	174,717	176,913	771,893	814,810
Commercial	21,324	22,391	348,987	373,416
Large Supply	103	105	68,825	73,986
Small Power	1,298	1,311	19,110	19,472
Medium Supply	1,174	1,236	62,050	64,373
Agriculture	124	125	714	721
Public Lighting	873	944	6,116	6,699
Bulk Supply	518	534	41,716	42,133
Others-Temporary Supply	931	941	5,729	5,786
<b>Total</b>	<b>201,063</b>	<b>204,498</b>	<b>1,325,139</b>	<b>1,401,397</b>

### Revised estimate of sales for FY 2013-14

4.5 The category-wise actual sales for FY 2007-08 to FY 2012-13 for CED were as follows:

Table 35: Category wise Sales in MUs

Category	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Domestic	450.00	433.00	471.90	518.00	525.79	586.54
Commercial	313.00	318.00	440.50	398.00	417.36	397.54
Large Supply	142.00	145.00	141.40	140.00	128.72	137.50
Small Power	16.00	17.00	20.70	21.00	22.02	20.11
Medium Supply	91.00	101.00	116.50	89.00	103.71	103.84
Agriculture	1.00	1.00	1.00	2.00	1.27	1.40
Public Lighting	15.00	14.00	15.10	17.00	17.45	21.98
Bulk Supply	33.00	39.00	57.70	73.00	74.67	87.34
Others-Temporary Supply	95.00	124.00	10.50	27.00	10.50	8.79
<b>Total</b>	<b>1,156.00</b>	<b>1,192.00</b>	<b>1,275.30</b>	<b>1,285.00</b>	<b>1,301.47</b>	<b>1,365.05</b>

4.6 Sales projections for FY 2013-14 and FY 2014-15 across various consumer categories have been arrived at based on historic sales data in the respective category, increase in number of consumers, demand in previous years, present economic condition and anticipated growth in the region.

- 4.7 As also detailed above in the chapter for provisional true-up for ARR for FY 2011-12 and FY 2012-13, the actual sales have been different from the approved sales in the various categories. Therefore, revised growth rate have been calculated considering the actual sales in each of the categories.
- 4.8 For estimation of sales for FY 2013-14 and FY 2014-15, CED presently has the actual energy sales information for April'12 to November'12 and April'13 to November'13 and the same has been summarized below:

**Table 36: Category wise sales from April to November for FY 2012-13 and FY 2013-14 (MU)**

<b>Consumer Category</b>	<b>FY 2012-13 (April-Nov)</b>	<b>FY 2012-13 (Actual)</b>	<b>FY 2013-14 (April-Nov)</b>
Domestic	425.71	586.54	447.02
Commercial	282.83	397.54	299.95
Large Supply	95.02	137.50	80.81
Small Power	14.24	20.11	12.66
Medium Supply	70.94	103.84	62.91
Agriculture	0.99	1.40	0.97
Public Lighting	14.63	21.98	11.81
Bulk Supply	58.02	87.34	53.37
Others-Temporary Supply	NA	8.79	4.02
<b>Total</b>	<b>962.38</b>	<b>1365.08</b>	<b>973.53</b>

- 4.9 The Since, the Petitioner already has actual sales for first 8 months of FY 2013-14, sales for last 4 months (Except, large industrial supply, public lightning and temporary supply) for FY 2013-14 has been estimated based on the proportion of sales for last 4 months (Dec to March) of FY 2012-13 to the sales for first eight months (April to Nov) of FY 2013-13.
- 4.10 For Industrial supply, applying the above discussed methodology resulted in the sales for FY 2013-14 lower than the than for FY 2012-13. Moreover, also this category has shown the negative CAGR over the years. Thus, energy sale in large industrial supply has been taken same as that of the corresponding sales for FY 2012-13.
- 4.11 For Public Lightning, it has been observed that this category has witnessed lower sales in first eight months of FY 2013-14 and thus applying the above discussed methodology, sales in FY 2013-14 comes out to be lower than the sales for FY 2012-13 which is 21.98 MU. However, historically this category has witness robust growth as per the CAGR of historical sales. Thus, a nominal growth rate of 5% has been considered for this category.
- 4.12 As it can be seen that specific trend was observed in the sales to temporary supply in the past 5 years. Also, the 3-year, 4-year and 5-year CAGR recorded under this category shows a negative trend. Therefore, energy sale in temporary category for FY 2013-14 has been considered same as that of the corresponding sales for FY 2012-13.

- 4.13 Based on the above, consolidated sales for FY 2013-14 is estimated to be 1,398.57 MU details of which are presented below:

Table 37: Estimated sales for FY 2013-14 (MU)

Category	FY 2013-14 (Approved)	FY 2013-14 (Apr to Nov)	FY 2013-14 (RE)
Domestic	663.90	447.02	615.90
Commercial	455.90	299.95	421.61
Large Supply	142.53	80.81	137.50
Small Power	23.14	12.66	17.89
Medium Supply	109.94	62.91	92.09
Agriculture	1.58	0.97	1.37
Public Lighting	22.79	11.81	23.07
Bulk Supply	106.74	53.37	80.35
Others-Temporary Supply	11.55	4.02	8.79
<b>Total</b>	<b>1,538.08</b>	<b>973.53</b>	<b>1,398.57</b>

- 4.14 CED submits that the growth in sales for FY 2013-14 have been quite low i.e. 2.46%. This has mainly on account of lower than expected growth in consumers (1.69%) and connected load (5.64%) for FY 2012-13 thereby restricting the expected growth in sales for FY 2013-14.
- 4.15 The Petitioner requests the Hon'ble Commission to approve the above requested energy sales for FY 2013-14 as the revised estimate.

### Sales projection for FY 2014-15

- 4.16 CED submits that in FY 2013-14, growth in sales have been much lower due to lower than expected growth in consumers and connected load for FY 2013-14. This trend is also expected to continue in FY 2014-15 and thus, the growth in sales for FY 2014-15 is similar to that in FY 2013-14.
- 4.17 In FY 2014-15, growth in consumer and connected load has been projected to be 1.71% and 5.75% respectively and based on this along with the expected growth in sales for FY 2013-14, the Petitioner the growth in sales for FY 2014-15 to be 3.31%.
- 4.18 The assumptions and methodology adopted in estimating the sales under different categories has been detailed in the following paragraphs:

### Domestic Sales

- 4.19 Sales to domestic consumers form more than 40% of the total CED sales. The growth in sales to domestic consumers during FY 2013-14 was expected to be 5.01%. It is assumed that the growth of sales in domestic category would continue in the subsequent years. The increase in domestic consumers would largely come from the addition in consumers during FY 2014-15. Therefore, a growth of 5% i.e. similar to that of FY 2013-14 has been considered for projecting sales to domestic consumers for FY 2014-15.

### **Commercial Sales**

- 4.20 Commercial category forms more than 30% of the total CED sales. This category has witnessed uneven growth in the sales over the few years. CED has considered a growth rate of 3% for sales projection in commercial category of consumers for FY 2014-15.

### **Large Industrial Supply**

- 4.21 Consumers in this category have remained mostly stagnant during the previous few years. Also, the sales have shown the negative CAGR in the past few years. Therefore, no growth in the sales in this category has been projected projection of sales for FY 2014-15.

### **Small Industrial Power**

- 4.22 This category of consumers comprise of small power industries with connected load not exceeding 20 KW. Energy sale in this category has remained quite unpredictable in the past few years. Also in FY 2012-13, sale has reduced as compared to FY 2011-12. Even in FY 2013-14, energy sale in this category is expected to fall. Thus, for projection of energy sale to small industries for FY 2014-15, no growth has been considered.

### **Medium Industrial Supply**

- 4.23 The medium industrial supply applies to industrial consumers having connected load ranging from 21 kW to 100 kW. The growth of sales in this category has almost remained stagnant in FY 2012-13 as compared to sales in FY 2011-12 with a nominal increase of 0.13 MU. However, in FY 2013-14, the sale is estimated to reduce. Thus, for projection of sale to medium industries for FY 2014-15, a nominal growth rate of 1% over the estimated sales of FY 2013-14 has been considered.

### **Agriculture**

- 4.24 Share of sales to agriculture category forms a miniscule part of CED sales. For FY 2013-14, energy sale in this category was estimated to reduce by around 2%. Thus, for projecting energy sale for FY 2014-15, a nominal growth rate of 1% has been used.

### **Street Light**

- 4.25 The street light category comprises of Street Lighting system, including signaling system and road and park lighting in municipality, panchayats, institutions (at the discretion of the supplier) etc. In FY 2013-14, energy sale in this category is expected to grow by 5% and the same growth rate has been used for the projection of sale to street light for FY 2014-15.

### **Bulk Supply**

- 4.26 The bulk supply tariff is applicable to general /mixed loads exceeding 10 kW to MES, Defense establishments, Railways, Central PWD, institutions, Hospitals, Departmental

Colonies and other similar establishments.

- 4.27 CED submits that as detailed in the previous sections, energy sale in this category for FY 2013-14 is expected to reduce by over 8.00%. Thus, a nominal growth rate of 1% has been considered for projection the sale to bulk supply for FY 2014-15.

### Temporary Supply

- 4.28 The Petitioner submits that there is no specific trend in sales to temporary supply in the past 5 years. Also, the 3-year, 4-year and 5-year CAGR recorded under this category shows a negative trend. Also, the energy sale in this category declined during FY 2012-13 and was estimated to remain same for FY 2013-14.
- 4.29 It is also submitted that the consumption in this category cannot be projected with certainty owing to the nature of the category. Therefore, energy sale in temporary category for FY 2014-15 has been taken same as that estimated for FY 2013-14.

### Consolidated Sales Forecast for FY 2014-15

- 4.30 The category-wise projected sales for FY 2014-15 is summarized in table below:

Table 38: Projected Sales for FY 2014-15 (in MUs)

Category	2014-15 (Projected)
Domestic	646.70
Commercial	434.26
Large Supply	137.50
Small Power	17.89
Medium Supply	93.01
Agriculture	1.39
Public Lighting	24.23
Bulk Supply	81.15
Others-Temporary Supply	8.79
<b>Total Sales</b>	<b>1,444.91</b>

- 4.31 CED submits to the Hon'ble Commission to approve the projected energy sales for FY 2014-15 as discussed above.

### Transmission & Distribution Losses

- 4.32 The Hon'ble Commission had approved T&D loss level of 15.00% for FY 2013-14 for CED in the Tariff Order for FY 2013-14 issued on 15<sup>th</sup> April 2013. While approving the T&D loss level for FY 2013-14, the approved loss of 16.00% for FY 2012-13 was considered and 1% reduction as per the recommendations of the Abraham Committee report was considered.

- 4.33 However, CED would like to bring to the notice of the Hon'ble Commission that the

actual distribution loss for FY 2013-14 are higher than the approved losses as UT of Chandigarh has not been provided any interstate transmission point within the boundaries of Chandigarh and the metering is being done at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB). This results in higher T&D losses for CED.

- 4.34 With regard to the interconnection and metering point, CED has made representation to the CEA which has been deliberated and agreed by CEA. During the discussion, it was agreed by the Committee that appropriate actions would be taken in this matter. In addition, CED further submits that PGCIL in its letter dated 22.06.2013 have calculated the inter-state losses of around 3.0% on 220 kV Nalagarh-Manimajra line. Further the losses on 66kV Mohali-CHD and 66kV Dhoolkot-CHD has also been calculated for reference. A copy of the letter received from PGCIL is attached as **Annexure-V** along with the Petition.
- 4.35 Accordingly, CED has reduced additional 3.0% of the energy towards losses which are attributable towards inter-state losses and would not form part of the T&D losses of CED. Based on the computation, the T&D losses to be achieved by CED during FY 2013-14 is 15.50% as against the T&D loss of 15.00% approved by the Hon'ble Commission in the Tariff Order for FY 2013-14 dated 15<sup>th</sup> April 2013.
- 4.36 It is submitted that around 98% of the consumers in UT Chandigarh are at LT level which has an adverse effect on the loss reduction. However, CED is making all efforts for reducing its T&D losses by undertaking various measures i.e. HVDS, replacement of electromechanical meter to static meters, replacement of bare LT conductors with LT ABC in theft prone areas and accordingly proposes to achieve a loss of 15.00% for FY 2013-14 and 15.50% for FY 2014-15.
- 4.37 CED would further like to submit that it has been providing details of actual losses incurred by CED to the Hon'ble Commission against its Suo-Moto petition no.76. The hearing for the same last held on 27.12.2013.
- 4.38 CED requests the Hon'ble Commission to consider the T&D loss of FY 2013-14 as submitted by the Petitioner for approving the target T&D loss for FY 2013-14 and FY 2014-15.

### **Power Purchase Quantum**

- 4.39 The Petitioner 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.
- 4.40 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.

- 4.41 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 and UI. Also, for meeting the peak demand CED is required to procure power from short-term sources. However, it is submitted that strict care is taken to limit the amount of UI drawals.
- 4.42 For estimation of quantum of power purchase for FY 2013-14, actual power available during the first eight months (April '13 - Nov '13), have been considered as per REA. For the estimation of quantum of power to be available from various sources during the balance four months (i.e. Dec'13 to Mar'14), CED has considered the actual power available during last four months of FY 2012-13 (Dec'12-March'13).
- 4.43 Actual power procured under short-term has also been considered. This includes power procured through competitive bidding under bilateral means, UI power and power exchange has been considered.
- 4.44 Considering the energy balance for FY 2013-14, CED would be required to source power from short-term sources. CED requests the Hon'ble Commission to approve the quantum of power proposed to be purchased from short-term sources i.e. power exchange.
- 4.45 For projection of power available for FY 2014-15, CED has considered the following methodology:
- Average plant wise power purchase of last 24 months for computing the power purchase quantum from various sources for FY 2014-15.
  - For Uri II, normative PLF of 75% has been considered on the allocated share of Chandigarh. Auxiliary Consumption has been considered on normative basis as per CERC norms.
  - For BBMB (including Dehar & Pong), the total units estimated (eight months actual and four months projected) for FY 2013-14 has been projected for FY 2014-15.
  - For Rihand-III, the total quantum of purchase as estimated for FY 2013-14 has been considered for FY 2014-15 projections.
- 4.46 In view of the computed energy balance, there would be a demand-supply gap during FY 2014-15 which would be required to be met through purchase of power from short-term sources. The deficit power has been considered to be purchased from power exchange.

### **Inter-State Transmission Losses**

- 4.47 Inter-State transmission losses of 3.37% and 3.00% have been considered for FY 2013-14 and FY 2014-15 respectively based on the actual transmission losses for FY 2012-13.

## Energy Availability during FY 2013-14 & FY 2014-15

- 4.48 Based on the availability of power from various sources including NTPC, NHPC, NPCIL, BBMB, SJVN, etc. and other short term sources, the total energy available to CED is summarized in table below:

Table 39: Power Purchase in MUs for FY 2013-14 & FY 2014-15

Particulars	FY 2013-14 (Approved)	FY 2013-14 (RE)	FY 2014-15 (Projected)
NTPC	583.43	491.63	524.60
NHPC	212.12	202.85	219.23
NPCIL	97.03	123.90	124.25
SJVNL	69.80	76.48	76.48
BBMB	702.23	702.88	702.88
APCPL	23.35	20.69	20.69
THDC	43.41	62.92	62.92
Others	140.90	150.79	75.62
<b>Total</b>	<b>1,872.27</b>	<b>1,832.14</b>	<b>1806.67</b>

- 4.49 The Petitioner requests the Hon'ble Commission to approve the quantum of power purchase for FY 2013-14 and FY 2014-15 as estimated in the table above.

## Energy Balance

- 4.50 Based on the data on projected sales and power purchase obtained, a revised energy balance has been prepared for FY 2013-14 and projected energy balance for FY 2014-15:

Table 40: Energy Balance in MUs for FY 2013-14 & FY 2014-15

S. No.	Particulars	FY 2013-14 Approved	FY 2013-14 RE	FY 2014-15 Projected
<b>A)</b>	<b>ENERGY REQUIREMENT</b>			
1	Energy sales within the State/UT	1,538.08	1398.57	1444.91
2	Energy sales to Agriculture consumers (included in total sales)			
<b>3</b>	<b><u>Total sales within the State/UT</u></b>	<b>1,538.08</b>	<b>1398.57</b>	<b>1444.91</b>
<b>4 a)</b>	<b>Distribution losses</b>			
i)	%	15.00%	15.50%	15.00%
ii)	MU	271.43	256.54	254.98
<b>b)</b>	<b>Losses due to absence of interstate transmission point</b>			
i)	%	-	3.00%	3.00%
ii)	MU	-	51.19	52.57
<b>5</b>	<b>Energy required at State Periphery for Sale to Retail Consumers</b>	<b>1,809.50</b>	<b>1706.31</b>	<b>1752.47</b>

S. No.	Particulars	FY 2013-14	FY 2013-14	FY 2014-15
<b>6</b>	<b>Add: Sales to common pool consumers/ UI</b>		<b>64.09</b>	<b>-</b>
7	Sales outside state/UT : UI/Under drawal		39.64	
8	Sales			
	a) To electricity traders			
	b) Through PXIL/Exchange		24.45	
9	Sales to other distribution licensees			
	a) Bilateral Trade			
	b) Banking Arrangement			
<b>10</b>	<b>Total Energy Requirement for State (5+6)</b>	<b>1,809.50</b>	<b>1770.40</b>	<b>1752.47</b>
11	Inter-state Transmission losses			
i)	%	3.35%	3.37%	3.00%
j)	MU	62.77	61.74	54.20
<b>12</b>	<b>Total Energy Requirement including transmission losses (10+11)</b>	<b>1,872.27</b>	<b>1832.14</b>	<b>1806.67</b>
<b>B)</b>	<b>ENERGY AVAILABILITY / PURCHASED</b>			
<b>1</b>	<b>Net Generation ((Share from CGS &amp; shared plants) (in Mus)</b>	<b>1,664.61</b>	<b>1,597.75</b>	<b>1,647.44</b>
A	NTPC	583.43	491.63	524.60
B	NHPC	212.12	202.85	219.23
C	NPCIL	97.03	123.90	124.25
D	SJVNL/NJPC	69.80	76.48	76.48
E	BBMB (including dehar& pong)	702.33	702.88	702.88
<b>2</b>	<b>Power Purchased from (Other Sources)</b>	<b>207.66</b>	<b>234.39</b>	<b>159.23</b>
A	THDC	43.41	62.92	62.92
B	Jhajjar	23.35	20.69	20.69
C	Power Exchange (Buy)	-	44.46	
D	Bilateral Trade (Buy) / Short term power purchase	140.90	24.55	-
E	RPO (Buy)		-	-
F	UI (Buy)		81.78	
G	Banking Arrangements (Buy)		-	-
<b>3</b>	<b>Net Energy purchase (MU)</b>	<b>1,872.27</b>	<b>1832.14</b>	<b>1806.67</b>
H	PXIL (Buy) to match the energy requirement			75.62
<b>4</b>	<b>Gross Purchase including PX (MU)</b>	<b>1872.27</b>	<b>1832.14</b>	<b>1806.67</b>

### Power Purchase Cost for FY 2013-14

4.51 The cost of purchase from the various sources during FY 2013-14 has been projected based on the following assumptions:

- Actual power purchase cost for the first eight months of FY 2013-14 has been considered based on the invoices received from various generating stations,

short-term sources, etc.

- The estimation of power purchase cost for balance four months from various stations have been considered based on the actual fixed, energy and other charges from the respective generating stations during the first eight months of the FY 2013-14.
- The supplementary and arrear amount for the eight months has been considered based on actual invoices. The additional charges as borne by the CED have been incorporated in the total power purchase cost against respective stations. It is further submitted that the revised estimate on cumulative power purchase cost for FY 2013-14 is on a high side as it includes various additional charges, arrears/ supplementary charges which CED has received during April'13-Nov'13. It is further submitted that the cost due to additional charges and arrears for the next four months of FY 2013-14 i.e. Dec'13-March'14 has not been considered by CED for projections and requests the Hon'ble Commission to approve the same at the time of true-up of FY 2013-14.
- UI charges for the first eight months have been considered for energy drawn within the specified frequency as per the prevailing UI Regulations notified by CERC.
- The proposed shortage during the balance four months of FY 2013-14 has been considered to be met through PXIL. The rate has been considered similar to the actual average PXIL rate of CED during the first eight months of FY 2013-14.
- The transmission, NRLDC and reactive energy charges for FY 2013-14 has been considered based on the actual invoices received during the first eight months of FY 2013-14, and for the next four months pro-rata of the actual has been considered.
- CED has also included the LC charges incurred towards power purchase in the total power purchase cost for FY 2013-14.
- BBMB ULDC charges: With effect from 1 November, 2011, the Ministry of Power has allocated 3.50% firm share to UT Chandigarh from BBMB power projects as per the decision of Hon'ble Supreme Court. Accordingly, all the capital cost after 1<sup>st</sup> November, 2011 pertaining to BBMB power projects is required to be borne by UT Capital. The BBMB is implementing the ULDC scheme for which the ULDC charges along with AMC, Microwave etc. charges are to be borne by UT Chandigarh. The bills of ULDC charges with effect from 1<sup>st</sup> November, 2011 to 31<sup>st</sup> October, 2013 have been received amounting to Rs. 18.43 lakhs for which the payments are likely to be made during this financial year i.e. FY 2013-14. CED submits that the cost amounting Rs. 18.43 lakhs has been considered in the power purchase cost projections for FY 2013-14.

4.52 The estimated power purchase quantum and cost for FY 2013-14 is tabulated below:

Table 41: Estimated Power purchase Cost for FY 2013-14 (Rs. Cr)

S. No	Generating Company	Name of Project	Units (MU)	Capacity Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Other Charges (Rs. Cr)	Arrears / Supplementary Charges (Rs. Cr)	Rebate (Rs. Cr)	Total Charges (Rs. Cr)	Total Charges (Rs/kWh)
1	NTPC	Anta	35.51	4.83	10.38	0.01	-	-	15.22	4.29
2		Auraiya	21.77	4.25	6.92	(0.01)	-	-	11.16	5.13
3		Dadri GPP	28.70	3.79	9.27	(0.07)	-	-	12.98	4.52
4		Dadri II TPP	26.56	6.76	7.49	0.00	-	-	14.25	5.37
5		Kahalgaon II	18.42	2.66	4.56	0.00	-	-	7.22	3.92
6		Rihand I	103.97	9.37	13.01	0.03	-	-	22.41	2.16
7		Rihand II	90.01	9.34	11.05	0.01	-	-	20.40	2.27
8		Rihand III	32.04	5.98	3.95	0.00	-	-	9.94	3.10
9		Singrauli	73.03	4.09	6.74	0.01	-	-	10.84	1.49
10		Unchahar I	16.75	2.08	3.80	0.01	-	-	5.89	3.52
11		Unchahar II	32.36	4.06	7.27	0.01	-	-	11.33	3.50
12		Unchahar III	12.50	2.25	2.80	0.00	-	-	5.05	4.04
		<b>Total</b>	<b>491.63</b>	<b>59.46</b>	<b>87.24</b>	<b>0.01</b>	<b>5.35</b>	<b>-</b>	<b>152.07</b>	<b>3.09</b>
13	NHPC	Chamera I	89.76	5.61	8.52	0.03	-	-	14.16	1.58
14		Chamera II	24.94	3.03	3.46	0.01	-	-	6.50	2.61
15		Chamera III	14.73	2.49	2.88	0.01	-	-	5.38	3.65
16		Dhauliganga	6.20	0.89	0.86	0.01	-	-	1.76	2.84
17		Dulhasti	27.54	6.49	7.85	0.01	-	-	14.35	5.21
18		Salal	8.82	0.43	0.43	0.00	-	-	0.87	0.98
19		Sewa II	6.33	0.81	0.74	0.00	-	-	1.55	2.45
20		Tanakpur	6.58	1.87	1.57	0.01	-	-	3.45	5.24
21		Uri	16.26	1.52	1.38	0.00	-	-	2.91	1.79
22		Uri II	1.69	0.50	0.46	-	-	-	0.96	5.24
		<b>Total</b>	<b>202.85</b>	<b>23.65</b>	<b>28.16</b>	<b>0.08</b>	<b>9.07</b>	<b>(1.30)</b>	<b>59.66</b>	<b>2.94</b>
22	NPCIL	NAPP	43.69	-	10.37	0.31	0.17	(0.15)	10.69	2.45
23		RAPP B	19.56	-	9.22	0.05	0.08	(0.16)	9.20	4.70
24		RAPP C	60.66	-	20.68	0.27	(0.00)	(0.00)	20.95	3.45
		<b>Total</b>	<b>123.90</b>	<b>-</b>	<b>40.27</b>	<b>0.63</b>	<b>0.25</b>	<b>(0.31)</b>	<b>40.84</b>	<b>3.30</b>
25	SJVNL	SJVNL/NJPC	76.48	7.78	9.43	0.95	0.02	(0.32)	17.86	2.34
26	BBMB	BBMB 3.5 %	295.88	13.27	-	-	-	-	13.27	0.45
27		BBMB 1 LU	37.00	-	11.93	-	-	(0.21)	11.71	3.22
28		BBMB 10 LU	370.00	-	166.13	5.78	-	-	171.90	4.49
		<b>Total</b>	<b>702.88</b>	<b>14.79</b>	<b>168.50</b>	<b>5.78</b>	<b>0.18</b>	<b>(0.21)</b>	<b>189.04</b>	<b>2.69</b>
29	APCPL	IGSTPP	20.69	7.62	7.43	(0.19)	-	(0.20)	14.66	7.09
30	THDC	Koteshwar	14.85	1.99	2.97	0.03	0.01	(0.08)	4.91	3.31
31		Tehri	48.07	6.94	10.26	0.90	2.26	(0.33)	20.03	4.17

S. No	Generating Company	Name of Project	Units (MU)	Capacity Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Other Charges (Rs. Cr)	Arrears / Supplementary Charges (Rs. Cr)	Rebate (Rs. Cr)	Total Charges (Rs. Cr)	Total Charges (Rs/kWh)
32	Others	Bilateral Source	24.55	-	10.06	-	2.46	(0.20)	12.31	5.02
33		Power Exchange(Buy)	44.46		15.28				15.28	3.44
34		UI (Buy)	81.78		13.84				13.84	1.72
35		PGCIL Transmission Charges				38.45			38.87	
36		NRLDC F & C				0.63			0.63	
37		Reactive Energy Charges				0.75			0.75	
38		LC Charges				0.72			0.72	
<b>Total Power Purchase Cost</b>			<b>1832.14</b>	<b>122.23</b>	<b>393.44</b>	<b>48.74</b>	<b>19.60</b>	<b>(2.95)</b>	<b>581.06</b>	<b>3.17</b>

4.53 The Hon'ble Commission is requested to approve the revised power purchase cost (excluding cost of REC) of Rs 581.06 Cr including transmission charges for FY 2013-14 as shown in table above.

### Power Purchase Cost for FY 2014-15

4.54 The Power purchase cost for FY 2014-15 has been projected based on the following assumptions:

- For Coal and Gas based Power Plants, an escalation rate of 6.62% is considered over the per unit actual cost for FY 2013-14. The escalation rate is considered as per the escalation rate for domestic coal notified by CERC in its 'Annual Escalation Rates for Bid Evaluation' dated 07-Oct-2013.
- For Hydro Power Stations, an escalation of only 5% is considered for estimation of costs for FY 2014-15.
- For Nuclear Power Plants, the tariff as given in 'Tariff for sale of power from various Atomic Power Stations of NPCIL' compiled by CEA (based on the DAE notifications dated 08-Feb-2012, 25-May-2012 and 22-06-2012) is considered for FY 2014-15.
- Other charges (including cess, electricity duty, etc.) for FY 2014-15 have not been considered while determining the power purchase cost. It is requested that the actual power purchase cost for FY 2014-15 will be true-up once the actual accounts for FY 2014-15 will be made available to the Hon'ble Commission.

- In case of BBMB 3.5%, the per unit rate of FY 2013-14 has been considered for projecting power purchase cost for FY 2014-15;
- In case of BBMB 1 LU, an escalation of 10% is considered on per unit cost arrived for power purchase during FY 2013-14 for estimating the power purchase cost during FY 2014-15;
- In case of BBMN 10 LU, an escalation of 6% is considered on per unit cost arrived for power purchase during FY 2013-14 for estimating the power purchase cost during FY 2014-15;
- In case of Uri-II (Hydro) (Commissioned in October'13), the rates have not been approved by CERC till date and the Petition is pending before them. As such Uri-II is not raising the energy bills. However, the units as per REA have been considered. The rates for arriving at power purchase cost for Uri-II have been considered same as that of Sewa-II (Hydro).
- BBMB ULDC charges: With effect from 1 November, 2011, the Ministry of Power has allocated 3.50% firm share to UT Chandigarh from BBMB power projects as per the decision of Hon'ble Supreme Court. Accordingly, all the capital cost after 1<sup>st</sup> November, 2011 pertaining to BBMB power projects is required to be borne by UT Capital. The BBMB is implementing the ULDC scheme for which the ULDC charges along with AMC, Microwave etc. charges are to be borne by UT Chandigarh. The bills of ULDC charges with effect from 1<sup>st</sup> November, 2011 to 31<sup>st</sup> October, 2013 have been received amounting to Rs. 18 lakhs. For which the payments are likely to be made during this financial year i.e. FY 2013-14. CED submits that the cost amounting Rs. 10 lakhs has been considered in the power purchase cost projections for FY 2014-15.
- For power procured through power exchanges, an escalation rate of 5% over the average rate of FY 2013-14 is considered.
- Transmission charges payable to PGCIL are based on the total capacity allocation in the transmission network. CED has considered an escalation of 10% over transmission charges, NRLDC and LC charges payable during FY 2014-15 in its power purchase projections. CED request the Hon'ble Commission to consider the actual power purchase cost for FY 2014-15 once the audited figures for FY 2014-15 will be made available to the Commission.

4.55 The estimated power purchase quantum and cost for FY 2014-15 is tabulated below:

**Table 42: Projected Power Purchase Cost for FY 2014-15 (Rs. Cr)**

S. No	Generating Company	Name of Project	Units (MU)	Capacity Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Total Charges (Rs. Cr)	Total Charges (Rs/kWh)
1	NTPC	Anta	35.51	5.15	11.07	16.22	4.57
2		Auraiya	21.58	4.49	7.31	11.80	5.47
3		Dadri GPP	29.07	4.10	10.01	14.10	4.85

S. No	Generating Company	Name of Project	Units (MU)	Capacity Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Total Charges (Rs. Cr)	Total Charges (Rs/kWh)	
4		Dadri II TPP	30.71	8.33	9.23	17.56	5.72	
5		Kahalgaon II	18.42	2.84	4.86	7.70	4.18	
6		Rihand I	103.09	9.91	13.75	23.66	2.30	
7		Rihand II	101.89	11.27	13.33	24.61	2.42	
8		Rihand III	32.04	6.38	4.21	10.59	3.31	
9		Singrauli	84.34	5.04	8.30	13.34	1.58	
10		Unchahar I	18.11	2.40	4.38	6.78	3.74	
11		Unchahar II	35.52	4.75	8.50	13.25	3.73	
12		Unchahar III	14.31	2.74	3.42	6.16	4.31	
		<b>Total</b>	<b>524.60</b>	<b>67.39</b>	<b>98.39</b>	<b>165.78</b>	<b>3.16</b>	
13		NHPC	Chamera I	92.48	6.07	9.21	15.28	1.65
14			Chamera II	24.97	3.19	3.64	6.83	2.73
15	Chamera III		14.73	2.62	3.03	5.65	3.83	
16	Dhauliganga		12.40	1.88	1.80	3.68	2.97	
17	Dulhasti		27.43	6.79	8.21	15.00	5.47	
18	Salal		8.84	0.45	0.46	0.91	1.03	
19	Sewa II		7.07	0.95	0.87	1.82	2.57	
20	Tanakpur		6.58	1.96	1.65	3.62	5.49	
21	Uri		17.35	1.70	1.55	3.25	1.87	
22	Uri II		7.37	0.72	0.66	1.38	1.87	
	<b>Total</b>		<b>219.23</b>	<b>26.34</b>	<b>31.07</b>	<b>57.41</b>	<b>2.62</b>	
22	NPCIL	NAPP	42.97	-	10.42	10.42	2.43	
23		RAPP B	20.62	-	7.03	7.03	3.41	
24		RAPP C	60.66	-	20.68	20.68	3.41	
		<b>Total</b>	<b>124.25</b>	<b>-</b>	<b>38.14</b>	<b>38.14</b>	<b>3.07</b>	
25	SJVNL	SJVNL/NJPC	76.48	8.16	9.90	18.07	2.36	
26	BBMB	BBMB 3.5 %	295.88	13.27	-	14.79	0.45	
27		BBMB 1 LU	37.00	-	13.12	13.12	3.55	
28		BBMB 10 LU	370.00	-	176.09	176.09	4.76	
		<b>Total</b>	<b>702.88</b>	<b>14.79</b>	<b>189.21</b>	<b>204.10</b>	<b>2.90</b>	
29	APCPL	IGSTPP	20.69	8.12	7.80	15.92	7.69	
30	THDC	Koteshwar	14.85	2.09	3.12	5.20	3.50	
31		Tehri	48.07	7.29	10.77	18.05	3.76	
32		Bilateral	-	-	-	-	-	
33		Power Exchange (Buy)	75.62		34.03	34.03	4.50	
34		UI (Buy)	-	-	-	-	-	
35	Others	PGCIL Charges			42.76	42.29		
36		NRLDC F&C			0.70	0.70		
37		Reactive Energy			0.50	0.50		

S. No	Generating Company	Name of Project	Units (MU)	Capacity Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Total Charges (Rs. Cr)	Total Charges (Rs/kWh)
		Charges					
38		LC Charges			0.80	0.80	
<b>Total Power Purchase Cost</b>			<b>1,806.67</b>	<b>132.65</b>	<b>467.17</b>	<b>600.99</b>	<b>3.33</b>

- 4.56 CED further submits an issue related to long pending payment of Rs. 123.55 Cr towards energy supplied of UT Chandigarh against its 3.5% share out of the share of composite Punjab for the period 2.5.1967 to 31.03.2006. BBMB has been raising bills at the rate varying from 10 paisa/kWh to 34 paisa/kWh from May 1967 to May 2006 for the energy supplied to UT Chandigarh but CED had been releasing payment @ 5.63 Paisa/kWh which is the cost of energy from Bhakra worked out in the year 1972. Hence Rs 123.55 Cr is the difference of bill raised by BBMB and payment made by UT Chandigarh against energy supplied to UT Chandigarh. The matter is still under conciliation in BBMB.
- 4.57 CED requests the Hon'ble Commission to approve the total power purchase cost (excluding purchase of REC) of Rs. 600.99 Cr including transmission charges for FY 2014-15.

## Renewable Purchase Obligation

- 4.58 As per Section 1 of JERC (Procurement of Renewable Energy) Regulations 2010:

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

*The defined minimum percentages are given below in the Table - 1.*

Financial Year	Minimum quantum of purchase (in %) from renewable energy sources (in kWh)		
	Solar	Non Solar	Total
2010-11	0.25%	0.75%	1.00%
2011-12	0.30%	1.70%	2.00%
2012-13	0.40%	2.60%	3.00%

*(1.2) The RPO specified in the financial year 2012-13 shall be continued beyond 2012-13 till any revision is effected by the Commission in this regard."*

- 4.59 It is submitted that CED has purchased solar and non-solar REC for FY 2013-14 to meet its RPO as specified in the Regulations. Further, it is submitted that CED has purchased additional REC during FY 2013-14 to make good for the shortfall in purchase of REC for FY 2012-13.
- 4.60 In absence of any RPO specified for FY 2013-14 and FY 2014-15, CED has considered the RPO as per FY 2012-13 in line with the Clause 1.2 of RPO Regulations. It is submitted that the RPO purchase obligation may vary in case any change in the

prevailing regulations will be made by the Hon'ble Commission.

- 4.61 The computation of RPO requirement for FY 2013-14 & FY 2014-15 and actual REC purchased during FY 2013-14 is summarized in table below:

**Table 43: Actual and Proposed RECs for FY 2012-13 & FY 2013-14 (in MU)**

Particulars	Unit	FY 2013-14 (RE)	FY 2014-15 (Projected)
Consumption of Energy	MU	1,398.57	1,444.91
RPO	%	3.00%	3.00%
<b>As per Regulations</b>			
Solar RECs (0.40%)	MU	5.59	5.78
Non Solar RECs (2.60%)	MU	36.36	37.57
<b>Actual REC Purchased</b>			
Solar RECs Purchased	MU	15.89	5.78
Non Solar RECs Purchased	MU	43.29	37.57

- 4.62 During FY 2012-13, CED was unable to meet the total RPO as the REC market was under evolving process and availability of REC was inadequate. However, it is submitted that CED has met its consolidated carry forward RPO of FY 2011-12 and FY 2012-13 by purchasing additional REC during FY 2013-14. CED requests the Hon'ble Commission to approve the same and allow the cost of additional REC purchased during FY 2013-14.
- 4.63 Further it is submitted that the CED is procuring RECs as per the consumption approved by the Hon'ble Commission for FY 2013-14. Since CED has proposed revision in sales projection for FY 2013-14 as per the actual sales of FY 2012-13, the revised RPO has been computed. As per the revised requirement, CED has procured higher quantum of non-solar RECs while there is a shortfall in the solar RECs. The shortfall in the solar RECs would be procured by the CED during the balance months. However, it is brought to the notice of the Hon'ble Commission that the availability of Solar RECs is limited on the exchange. Though CED is making all possible efforts to cover the shortfall in the RPO for FY 2013-14, the Hon'ble Commission is requested to allow carry forward of RPO to the following years.
- 4.64 CED submits that it has met almost its entire RPO obligation for FY 2013-14 during the first nine months of FY 2013-14 (up to Dec'13). The details of RECs purchased and cost occurred thereof for meeting the RPO obligation is summarized in the table below:

**Table 44: Details of RECs for FY 2013-14 (upto Dec'13)**

Particulars	Nos.	Cost (Rs. Cr)
Solar RECs Purchased	15890	14.78
Non Solar RECs Purchased	43290	6.49
<b>Actual REC Purchased (upto Dec'13)</b>	<b>59180</b>	<b>21.27</b>

- 4.65 For FY 2013-14, CED has met its almost entire RPO obligation through purchase of Renewable Energy Certificates (RECs). The rate of REC for solar and non-solar has been considered as per the latest CERC order dated 23<sup>rd</sup> August 2011 on "Determination of Forbearance and Floor Price for REC Framework" to be applicable from April 1<sup>st</sup>, 2012. CED requests the Hon'ble Commission for approval of Rs. 21.27 Cr for the purchase of RECs during FY 2013-14.
- 4.66 The revised total power purchase cost for FY 2013-14 & projected power purchase cost for FY 2014-15 is summarized in the table below:

**Table 45: Power Purchase Cost for FY 2013-14 (RE) & FY 2014-15 (Projections) (Rs. Cr)**

Particulars	FY 2013-14 (RE)			FY 2014-15 (Projected)		
	Units (MUs)	Cost (Rs. Cr)	Per Unit (Rs. Per unit)	Units (MUs)	Cost (Rs. Cr)	Per Unit (Rs. Per unit)
Gross Power Purchase	1832.14	581.06	3.17	1806.67	600.99	3.33
Cost of REC		21.27	-		11.01	
<b>Total Power Purchase</b>	<b>1832.14</b>	<b>602.33</b>	<b>3.29</b>	<b>1806.67</b>	<b>612.00</b>	<b>3.39</b>

- 4.67 CED requests the Hon'ble Commission to approve the total power purchase cost for FY 2013-14 and FY 2014-15 as proposed in the table above and consider the same for the purpose of ARR determination for FY 2014-15. Also, the Hon'ble Commission is requested to approve the average power purchase cost as per the table above which will enable CED to compute FPPCA charges (as per the formula approved by the Hon'ble Commission) in case of any variation in actual and approved power purchase cost.

### Operation and Maintenance Cost

- 4.68 Operation and Maintenance expenses typically comprise of following constituents:
- Employees Expenses** includes the wages, pension & terminal benefits and other remunerations apart from salaries and allowances paid to the workforce;
  - Repair and Maintenance (R&M) Expenses** include all expenditure incurred on the maintenance and upkeep of assets; and
  - Administrative and General Expenses** include all expenditure incurred in operating a business such as rent, conveyance, telephone charges, etc.

- 4.69 As per the regulation 27 (3) of JERC tariff regulations 2009

*"b) Base O&M expenses as above shall be adjusted according to variation in the rate of WPI per annum to determine the O&M expenses for subsequent year, where WPI is the Wholesale Price Index on April 1 of the relevant year;"*

- 4.70 CED has considered an escalation of 7.35% p.a. based on the increase in Wholesale Price Index as on 1<sup>st</sup> April, 2013 over the same as on 1<sup>st</sup> April 2012. The WPI data has

been considered as available on the website of Economic Advisor, Ministry of Commerce and Industry.

### Employee Cost

- 4.71 Employee expense estimated by CED comprises cost incurred on present employees as well as on the retired employees. The cost of present employees includes salary, dearness allowance payable to employees and other allowances such as bonus, HRA, LTC, and medical reimbursement etc. The employees who retire are eligible for terminal benefits of Leave Encashment, Pension and Gratuity.
- 4.72 Actual employee expense for FY 2013-14 (up to October'13) is Rs. 30.99 Cr, breakup for which is provided in the enclosed formats. For projecting the employee cost for the entire year of FY 2013-14, CED has considered the actual expense occurred during seven months of FY 2013-14 and projected the employee expense for full year of FY 2013-14 on pro-rata bases. Further employee cost for FY 2014-15 has been projected based on the estimated employee expense for FY 2013-14 and an increase of 7.35% based on the average increase in WPI Index as detailed above.
- 4.73 In addition, CED submits that it has planned to hire 42 nos. of LDC's in FY 2014-15 for IT and administrative section. CED requests the Hon'ble Commission to allow addition of employees towards positions proposed to be hired during FY 2014-15. The Hon'ble Commission is requested to true-up the actual employee cost of CED based on actual at the end of the year.
- 4.74 The projected employee cost for FY 2013-14 and FY 2014-15 is provided in the table below:

Table 46: Employee Expenses for FY 2013-14 and FY 2014-15 (Rs. Cr)

Particulars	FY 2013-14 (Approved)	FY 2013-14 (Actual upto Oct)	FY 2013-14 (RE)	FY 2014-15 (Projected)
Employee Expenses	58.28	31.56	54.11	57.46
Less: Capitalization	-	13.09	13.09	-
Net Amount	58.28	18.48	41.02	57.46
Add: Prior Period Expenses	-	12.51	12.51	-
<b>Total Employee Expenses</b>	<b>58.28</b>	<b>30.99</b>	<b>53.53</b>	<b>57.46</b>

- 4.75 It is submitted that CED has considered only actual amount capitalized and the prior period expenses occurred for FY 2013-14 available upto October, 2013. It is requested that the entire expenses are to be considered for true-up once the actual audited accounts for FY 2013-14 are made available to the Hon'ble Commission.
- 4.76 The Hon'ble Commission is requested to approve the employee costs for FY 2013-14 and FY 2014-15 as proposed by CED.

### Repair and Maintenance Cost

- 4.77 Repairs and Maintenance Expenses go towards the day-to-day upkeep of the network of the licensee and form an integral part of the utilities efforts towards reliable and quality power supply as also in the reduction of losses in the system.
- 4.78 R&M expenses are dependent on various factors. The assets of CED are old and require regular maintenance to ensure uninterrupted operations. Further, due to increase in load and number of consumers, further infrastructure is required to be built which would also require appropriate maintenance.
- 4.79 The CED has considered an escalation of 7.35% p.a. based on the increase in Wholesale Price Index as on 1<sup>st</sup> April, 2013 over the same as on 1<sup>st</sup> April 2012 for projecting the R&M cost for FY 2014-15 over FY 2013-14. The WPI data has been considered as available on the website of Economic Advisor, Ministry of Commerce and Industry.

Table 47: R&M Expenses for FY 2013-14 and FY 2014-15 (Rs. Cr)

Particulars	FY 2013-14 (Approved)	FY 2013-14 (Actual upto Oct)	FY 2013-14 (RE)	FY 2014-15 (Projected)
R&M Expenses	10.42	5.14	9.98	10.72

- 4.80 CED submits to the Commission that it is important for any utility to incur the R&M expense as mentioned above for the smooth operation and to achieve the target level of efficiency. Keeping in mind the above, CED requests the Hon'ble Commission to approve these costs, without any disallowance.

### Administrative and General Expenses

- 4.81 Administration and General expenses mainly comprise of rents, telephone and other communication expenses, regulatory expense, professional charges, conveyance and travelling allowances and other expenses.
- 4.82 For projecting the A&G expense for FY 2013-14, the actual A&G expense Rs.1.66 Cr for up to October, 2013 has been considered. This amount is inclusive of Rs. 0.48 Cr expensed against license and petition fee. The A&G expense for balance four months have been computed on pro-rata basis considering the actual of eight months of FY 2012-13.
- 4.83 For projecting the A&G expense of FY 2013-14, an annual inflation rate of 9.69% per annum based on the WPI increase has been applied on the same.
- 4.84 The approved and proposed A&G cost for FY 2012-13 and FY 2013-14 is shown below:

Table 48: A&amp;G expenses for FY 2013-14 and FY 2014-15 (Rs. Cr)

Particulars	FY 2013-14 (Approved)	FY 2013-14 (Actual upto Oct)	FY 2013-14 (RE)	FY 2014-15 (Projected)
A&G Expenses	2.52	1.37	2.36	2.53

4.85 CED requests the Commission to approve the cost as projected above.

### Total Operations and Maintenance Expenses

4.86 The revised estimates of total O&M expenses for FY 2013-14 and the projected O&M expenses for FY 2014-15 have been calculated by summing up corresponding employee cost, R&M cost and A&G cost.

4.87 CED further submits to the Commission to approve the O&M costs estimated herein without any disallowance, subject to truing up of these costs on actuals (based on audited accounts) at the end of the respective year.

4.88 The table below summarizes the O&M expenses submitted by the Petitioner:

Table 49: O&amp;M Costs in Rs Cr. projected for FY 2013-14 and FY 2014-15

Particulars	FY 2013-14 (Approved)	FY 2013-14 (Actual upto Oct)	FY 2013-14 (RE)	FY 2014-15 (Projected)
Employee Expenses	58.28	30.99	53.53	57.46
R&M Expenses	10.42	5.14	9.98	10.72
A&G Expenses	2.52	1.37	2.36	2.53
<b>Total O&amp;M Expenses</b>	<b>71.22</b>	<b>37.50</b>	<b>65.87</b>	<b>71.71</b>

### Capital Investment Plan

4.89 The prevailing infrastructure of CED is insufficient to cater to the present load and hence to meet the increasing demand from different categories of Consumers, it is absolutely necessary to undertake significant capital expenditure.

4.90 The objective of incurring the capital expenditure is also to upgrade and strengthen the distribution network to meet the desirable standards of performance and provide better network reliability and sustainable performance to the consumers of UT Chandigarh.

4.91 In the Petition for FY 2013-14, CED had proposed a capital expenditure of Rs. 22.50 Cr for FY 2013-14 which was also approved by the Hon'ble Commission in the tariff order for FY 2013-14. However, it is submitted that upto December'13 of FY 2013-14, CED

has incurred most of its capital expenditure planned for the year and estimate a total of Rs. 12.50 Cr as capital expenditure for the full year of FY 2013-14.

- 4.92 Further for FY 2014-15, CED proposes a Capital Investment Plan of Rs. 39.59 Cr during FY 2014-15. Funding for the capital expenditure works would be entirely from equity.
- 4.93 Majority of CED capex schemes are on annual ongoing basis. The details of the capital expenditure and capitalization of major schemes as proposed by CED for FY 2014-15 is summarized below:

**Table 50: Schemes proposed for FY 2014-15 for Capital Expenditure (in Lacs)**

S. No.	Details of Schemes	Amount (Rs. lacs)
<b>A.</b>	<b>220 KV WORKS</b>	<b>200</b>
1.	Prov. 1x100 MVA 220/66KV power transformer at 220KV Sub-Station Kishangarh Manimajra. (5696-97 / 18 Mar 2011) (W1/2011/10349)	100
2.	Prov. O&M of 220/66 KV Kishangarh- Manimajra Transmission Line. (1286 / 18 Jan 2011) (W1/2011/10355)	100
<b>B.</b>	<b>(a) 66 KV WORKS</b>	<b>2909</b>
1.	Turnkey execution of 02 Nos. Line Bays at 66/11KV Grid Substation, village - Sarangpur, UT Chandigarh. (SFC vNo-8/1/26-UT – F(10) -2012/11096 Dt-07/12/12)	50
2.	Providing double circuit 66 KV over head transmission line on tubular monopoles from T-off point to proposed 66KV Grid Sub station, village Sarangpur, UT Chandigarh (SFC No-4/2/3-UT – F(10) -2012 /429 Dt-11/01/13)	150
3.	Providing 66 KV Transmission Line from 66 KV Substation Industrial Area, Phase – 1 to proposed 66 KV Substation Raipur Kalan, Chandigarh.	200
4.	Provid. 1x30 MVA 66/11 KV addl. transformer at 66 KV Grid Sub Station, S/39, Chd.	100
5.	Conversion of existing 66KV S/C Transmission Line and underground cable from 220KV S/Stn, Kishangarh to Sec.12, Chd. to D/C Transmission Line.	100
6.	Providing 2x20MVA, 66/11KV Gas Insulated Sub Station at Sector-26 UT Chandigarh alongwith 66 KV D/C line from 220KV Grid Sub Station Kishangarh to 66KV Grid Sub Station Sector-26 UT Chandigarh	925
7.	Conversion of existing 33KV Sub Station Sector-18 to 66KV Sub Station Sector-18 by Providing GIS 2x20MVA, 66/11KV Power Transformer alongwith Conversion of existing 33KV line to 66KV Underground cable from 66KV BBMB I/A Phase-I Chandigarh to 33KV Sector-18 UT Chd.	682
8.	Providing 66 KV Transmission Line from 66 KV Substation Industrial Area, Phase – 1 to proposed 66 KV Substation Raipur Kalan, Chandigarh.	276
9.	Execution of laying of 66 KV U/G Cable from Sector 32 Grid Sub Station to Sector 34 Grid Sub Station, Chandigarh.	427
	<b>STRENGTHENING OF POWER SUPPLY SYSTEM</b>	<b>150</b>
1.	Replacement of MOCB with SF 6 breakers and replacement of old 11 KV OCB with 11 KV VCB at 66 KV Grid Sub Station, Sector 52 and 12, Chandigarh.	50
2.	Replacement of outlived/defective OCB Panel under Jurisdiction of Electy.'OP' Divn.No.3, Chandigarh.	50

S. No.	Details of Schemes	Amount (Rs. lacs)
3.	Study of AT&C loss reduction and feasibility of providing HVDS system in Bhaskar Colony, Sector 25, Chandigarh as remedial measures for loss reduction/avoiding kundi connections	50
C.	<b>11KV &amp; BELOW WORKS</b>	<b>700</b>
	<b>TOTAL CAPITAL EXPENDITURE FOR FY 2013-14</b>	<b>3959.42</b>

### Capitalization schedule

- 4.94 CED proposes to capitalize the total capital expenditure during the respective years. The works proposed in each year would be initiated and completed during the year i.e. fully capitalized by the end of the year and transferred to GFA leaving no balance under CWIP.

Table 51: Details of CWIP for FY 2013-14 and FY 2014-15 (Rs Cr.)

Particulars	FY 2013-14 (Approved)	FY 2013-14 (RE)	FY 2014-15
Opening CWIP	0	0	0
Add: Capital Expenditure during the Year	20.50	12.50	39.59
Less: Capitalization	20.50	12.50	39.59
Closing CWIP	0	0	0

- 4.95 The Hon'ble Commission is requested to approve the capital expenditure and capitalization of Rs. 39.59 Cr for FY 2014-15. The details of the Investment Plan/ Capital Expenditure are also provided in enclosed Format of the Tariff Filing Formats.

### Funding of Capital Investment Plan

- 4.96 The entire capital expenditure proposed by CED for FY 2013-14 and FY 2014-15 is proposed to be funded through equity infusion by Government of India.

### Gross Fixed Assets

- 4.97 It is submitted that the Gross Fixed Assets at the end of FY 2012-13 is Rs. 408.56 Cr. The same is considered for the purpose of projection for FY 2013-14 and FY 2014-15.

- 4.98 The Regulation 22 (2) of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 reads as follows:

*“Investments made prior to and up to 31st March immediately preceding the date of the notification of these regulations or date of receipt of a petition of tariff determination whichever is earlier shall be considered on the basis of audited accounts or approvals already granted by the Commission”.*

- 4.99 In absence of the Fixed Asset Register and audited annual accounts, the Hon'ble

Commission had disallowed the GFA prior to FY 2011-12 and has therefore not considered the same for ARR determination process.

- 4.100 It is submitted that since CED is working as a department of UT Administration, Chandigarh, appropriate accounting practices were not in place. However, CED has initiated steps for proper maintenance of records and preparation of asset register. CED has floated a tender (OP-4/19/2013-14) for appointment of consultant for preparation of Assets & Depreciation Register. However, due to certain observations received from 3-4 firms and certain system constrains, the tender was cancelled. It is submitted that the DNIT was further amended and was deliberated by the Standing Committee constituted by the competent authority of Chandigarh Administration on 14.10.2013 & 31.10.2013 and later on approved by the Chief Engineer, UT Chandigarh vide his office memo no. 11891 dated 31.12.2013. The said DNIT is under process of floating on e-tender portal of Chandigarh Administration.
- 4.101 CED submits that it is making every effort to comply with the Commission's direction on preparing the Fixed Asset Register. However, due to various reasons, the process has got delayed.
- 4.102 In the meanwhile, CED requests the Commission to approve the old assets on a provisional basis till the time such accounts / asset register is made available to the Commission and approve depreciation, return on equity and interest cost in the ARR for FY 2013-14 and FY 2014-15.
- 4.103 The Hon'ble Commission may true-up these components based on the audited accounts / fixed asset register at the end of the respective year. The details of Opening and closing GFA and addition during FY 2013-14 and FY 2014-15 is summarized in table below:

Table 52: GFA and CWIP for FY 2013-14 and FY 2014-15 (in Rs Cr.)

Particulars	FY 2012-13 (Actual)	FY 2013-14 (RE)	FY 2014-15
Opening GFA	383.88	408.56	421.06
Add: Capitalization during the Year	24.68	12.50	39.59
Closing GFA	408.56	421.06	460.65

## Depreciation

- 4.104 It is submitted that since CED is working as a department of UT Administration, Chandigarh, appropriate accounting practices were not in place. However, CED has initiated steps for proper maintenance of records and preparation of asset register. CED has floated a tender (OP-4/19/2013-14) for appointment of consultant for preparation of Assets & Depreciation Register. However, due to certain observations received from 3-4 firms and certain system constrains, the tender was cancelled. It is submitted that the DNIT was further amended and was deliberated by the Standing Committee constituted by the competent authority of Chandigarh Administration on 14.10.2013 & 31.10.2013 and later on approved by the Chief Engineer, UT Chandigarh vide his office memo no. 11891 dated 31.12.2013. The said DNIT is under process of floating on e-tender portal of Chandigarh Administration.
- 4.105 CED submits that it is making every effort to comply with the Commission's direction on preparing the Fixed Asset Register. However, due to various reasons, the process has got delayed. It is further submitted that the Performa Accounts as prepared by CED are being audited by Comptroller & Auditor General of India (CAG) and reflects the correct position of assets accumulated till date.
- 4.106 CED submit that for the purpose of projections of depreciation for FY 2013-14 and FY 2014-15 the average of opening and closing assets have been considered for the respective years and an effective depreciation rate for distribution assets of 5.28% as per Appendix-III (Depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009 has been utilized.
- 4.107 The computation of depreciation is based on Straight Line Method of computation. Further it is confirmed that the depreciation on assets beyond 90% of the assets value is not provided / claimed by CED. The computation of depreciation for the FY 2013-14 & FY 2014-15 is summarized in table below:

**Table 53: Depreciation for FY 2013-14 and FY 2014-15 (Rs Cr.)**

Particulars	FY 2013-14 (Approved)	FY 2013-14 (RE)	FY 2014-15
Opening GFA	45.50	408.56	421.06
Addition during the Year	22.50	12.50	39.59
Closing GFA	68.00	421.06	460.65
Average GFA	56.75	414.81	440.86
Rate of Depreciation	5.28%	5.28%	5.28%
Depreciation for the Year	3.00	21.90	23.28

## Interest and Finance Charges

- 4.108 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. In the previous Tariff Orders the Hon'ble Commission has disallowed the GFA and depreciation in absence of the Fixed Asset Register (FAR), as a result Interest on loan was disallowed as well.
- 4.109 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 generating company / 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 and FY 2014-15.
- 4.110 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 14.50% as on April 1st, 2013 has been applied on the average normative debt in order to project the amount of normative interest on long-term loans for FY 2013-14 and FY 2014-15

**Table 54: Interest and Finance charges for Distribution functions for FY 2013-14 and FY 2014-15 (Rs Cr.)**

Particulars	FY 2013-14 (Approved)	FY 2013-14 (RE)	FY 2014-15
Opening balance of Normative Loans	36.85	245.44	232.29
Repayment for the Year	3.69	21.90	23.28
Add: Normative Loan against Asset Capitalized during the year	15.75	8.75	27.72
Closing Balance of Normative Loan	48.92	232.29	236.73
Average Normative Loans	42.88	238.86	234.51
<i>Interest rate based on SBI PLR</i>	14.45%	14.45%	14.45%
<b>Interest on Normative Loan</b>	<b>6.20</b>	<b>34.52</b>	<b>33.89</b>

- 4.111 CED prays the Hon'ble Commission to approve the Interest on normative loans for capital expenditure for FY 2013-14 (RE) and FY 2014-15 as proposed in the above table.

## Interest on Working Capital

- 4.112 CED has proposed interest on working capital in accordance with the applicable regulations notified by the Hon'ble Commission. The considerations for the purpose of calculation of working capital and thereon along with references are summarized in the table below:

Table 55: Summary of Norms for Working Capital requirement for Integrated Utility

Description	Distribution
Power Purchase Cost	One month
Employees cost	One month
Administration & general expenses	One month
Repair & Maintenance expenses.	One month
Fuel cost.	Two months of requirement

- 4.113 Further as per JERC Tariff Regulations, 2009, *“The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures.”*
- 4.114 It is submitted that the Hon’ble Commission had allowed working capital requirement based on the above regulations. However, closing balance of security deposit has been deducted from the total working capital requirement considering that the security deposit available with CED can be treated as available to meet part of working capital required for FY 2013-14.
- 4.115 With regard to the treatment of security deposit to meet partial working capital requirement in the tariff order, it is submitted that the security amount received from various consumers were deposited in the consolidated fund of India and is therefore not available at the disposal of the CED.
- 4.116 It is submitted that CED had submitted a Review Petition no. 64 of 2012 to the Hon’ble Commission for review of order dated. 7.5.2012 on the same for reconciliation of its order.
- 4.117 It is further submitted that the interest on working capital is claimed by the Petitioner as per Clause 29 of JERC (Terms and Conditions for determination of Tariff Regulations), 2009. The Petitioner further submits that the prevailing Regulations of JERC do not provide any provision for deduction of security deposit amount from the requirement of working capital, therefore, the Petitioner request the Hon’ble Commission to allow the interest on working capital as per the methodology specified in the prevailing JERC Regulations.
- 4.118 CED in its petition has considered an interest rate of 14.45% has been considered as per short-term SBI PLR as on April 1<sup>st</sup>, 2013 for calculating Interest on working Capital for the FY 2013-14 and FY 2014-15.
- 4.119 In accordance with above, the working capital and the interest thereon proposed for FY 2013-14 (RE) and FY 2014-15 is provided in the table below:

Table 56: Interest on Working capital for FY 2013-14 and FY 2014-15 (Rs. Cr)

Particulars	FY 2013-14 (RE)	FY 2014-15
Power Purchase	50.40	50.71
Employee Cost	4.46	4.79
R&M	0.83	0.89
A&G	0.20	0.21
<b>Total Working Capital</b>	<b>55.89</b>	<b>56.60</b>
<i>Interest Rate</i>	14.45%	14.45%
<b>Interest on WC</b>	<b>8.08</b>	<b>8.18</b>

### Interest on Consumer Security Deposit

- 4.120 The provision of Regulation 25 (4) of Tariff Regulations 2009 & in accordance with Clause 47(4) of Electricity Act 2003, the distribution licenses shall pay interest on security deposit collected from the consumers, equivalent to the bank rate or more as may be specified by the commission.
- 4.121 CED has proposed addition in consumer security deposit during FY 2013-14 & FY 2014-15 equivalent to average addition during FY 2012-13 and FY 2011-12. Further bank rate of 8.50% as on 1<sup>st</sup> April, 2013 has been applied for computation of interest on consumer security deposits.

Table 57: Interest on Consumer Security Deposit for FY 2013-14 and FY 2014-15 (Rs. Cr)

Particulars	FY 2013-14 (RE)	FY 2014-15 (Projected)
Security Deposit	61.92	62.97
<i>Bank Rate</i>	8.50%	8.50%
<b>Interest on Security Deposit</b>	<b>5.26</b>	<b>5.35</b>

- 4.122 CED request the Hon'ble Commission to approve the amount for interest on consumer deposit as proposed in the table above.

### Return on Equity

- 4.123 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.
- 4.124 In absence of fixed asset register, the Hon'ble Commission has not considered any GFA of the petitioner prior to FY 2011-12. GFA approved by the Hon'ble Commission during FY 2012-13 were considered for the purpose of computation of reasonable return.
- 4.125 The Petitioner submits that as per the provisions of the National Tariff Policy, 2006

notified by the Central Government, “The rate of return should be such that it allows generation of reasonable surplus for growth of the sector”. In view of the same, the Petitioner submits to the Hon’ble Commission that due to non-consideration of capital assets prior to FY 2011-12 for the purpose of computation of reasonable return in the Tariff Orders, the surplus allowed in the ARR for the previous year is negligible. This disallowance not only restricts internal surplus generation but also adversely impacts the financial position of the Petitioner to operate as a commercial entity. Also, it is requested that the Hon’ble Commission may consider true-up of the same at the end of the year based on availability of annual accounts/ asset register.

- 4.126 CED humbly requests the Hon’ble Commission to consider the proposal with regard to return on capital employed as submitted in the table below:

**Table 58: Proposed Return for FY 2013-14 & FY 2014-15 (Rs. Cr)**

Particulars	FY 2013-14 (Approved)	FY 2013-14 (RE)	FY 2014-15 (Projected)
Opening NFA balance	45.50	296.04	286.64
Add: Assets Capitalized during the Year	-	12.50	39.59
Less: Depreciation for the Year	1.86	21.90	23.28
<b>Closing NFA</b>	<b>43.64</b>	<b>286.64</b>	<b>302.95</b>
Reasonable Return (%)	3.0%	3.0%	3.0%
<b>Return on NFA</b>	<b>1.31</b>	<b>8.76</b>	<b>9.09</b>

### Provision for Bad & Doubtful Debts

- 4.127 In accordance with Clause 28 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009:As per Regulation 28 of JERC:

*“The Commission may, 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 generating company / licensee.”*

- 4.128 CED has proposed the provision for bad and doubtful debts on 1% of the receivables for FY 2013-14 and FY 2014-15.

4.129 CED requests the Hon'ble Commission to approve the provision for bad & doubtful debts as proposed as CED has considered the entire projected revenue (assessed) from sale of power as revenue from sale of power in FY 2013-14 and FY 2014-15 without considering 99% of collection efficiency. Hence, CED request the commission to approve the projections made by CED for loss under provision for bad and doubtful debt as summarized in the Table below:

**Table 59:Provision for Bad Debts for FY 2013-14 and FY 2014-15 (Rs. Cr)**

Particulars	FY 2013-14 (Approved)	FY 2013-14 (RE)	FY 2014-15 (Projected)
Provision for Bad & Doubtful Debt	3.58	6.86	6.47

## Non-Tariff Income

4.130 The Hon'ble Commission had approved a non-tariff income of Rs. 14.63 Cr for FY 2013-14 in the tariff order for FY 2013-14. For the purposes of projections of NTI for FY 2013-14, CED has considered actual non-tariff income for seven months of FY 2013-14 and projected for balance five months of FY 2013-14. For the FY 2014-15, CED has considered similar level of NTI as estimated for FY 2013-14.

Table 60: Non-tariff Income for FY 2013-14 and FY 2014-15 (Rs. Cr)

Particulars	FY 2013-14 (Actual upto Nov)	FY 2013-14 (RE)	FY 2014-15
Meter/Service rent	3.38	5.80	5.80
Late Payment Surcharge	0.99	1.70	1.70
Theft/Pilferage of Energy	0.46	0.46	0.46
Misc receipts/Income	4.40	7.54	7.54
<b>Total Income</b>	<b>9.23</b>	<b>15.50</b>	<b>15.50</b>

4.131 The petitioner prays to the Hon'ble Commission to allow the non-tariff income for FY 2013-14 (RE) and the FY 2014-15 as per the submission made by CED.

## Revenue from Sale of Power from Bilateral, UI, Exchange, etc.

4.132 For the purpose of determination of revenue from sale of surplus power for FY 2013-14, CED has considered actual eight months power sold under exchange and UI. For the balance months, CED is required to procure additional power from short-term sources to meet the demand-supply gap. Therefore, no additional surplus sale of power is estimated for the balance four months of FY 2013-14.

4.133 Further, as per the energy balance for FY 2014-15 CED would be in deficit energy situation and would therefore be required to purchase power from short-term sources i.e. Bilateral, Exchange, UI, etc. Therefore, no revenue from surplus power is estimated for FY 2014-15.

Table 61: Revenue from sale of Surplus Power for FY 2014-15 (Rs. Cr)

Particulars	FY 2013-14 (Approved)	FY 2013-14 (Actual upto Nov)	FY 2013-14 (RE)	FY 2014-15 (Projected)
Revenue from Exchange (Sale)	0.0	4.77	4.77	-
Revenue from UI (Sale)	0.0	4.76	4.76	-
<b>Total Revenue from Sale of Surplus Power</b>	<b>0.0</b>	<b>9.53</b>	<b>9.53</b>	<b>-</b>

4.134 It is further submitted that the revenue from sale of surplus power has already factored in in the power purchase cost estimation as illustrated in the relevant section on power purchase quantum/cost.

## APR for FY 2012-13 and Projected ARR for FY 2013-14

4.135 Based on the assumptions for various parameters as detailed above, the Revised ARR for FY 2012-13 and Projected ARR for FY 2013-14 is summarized in table below:

Table 62: Comparison of Approved ARR and Revised estimates for FY 2012-13 (Rs. Cr)

Particulars	FY 2013-14		FY 2014-15
	Approved as per T.O.	Revised Estimate	Projected
Cost of fuel	-	-	-
Cost of power purchase for full year	605.34	602.33	612.00
Employee costs	58.28	53.53	58.46
R&M expenses	10.42	9.98	10.72
Administration and general expenses	2.52	2.36	2.53
Depreciation	3.00	21.90	23.28
Interest and finance charges	6.20	34.52	33.89
Interest on working capital & Interest on Security Deposit	6.10	13.34	13.53
Return on NFA /Equity	1.31	8.60	9.09
Provision for Bad Debt	3.58	6.86	6.47
Advance Against Depreciation	-	-	-
<b>Total Revenue Requirement</b>	<b>696.75</b>	<b>753.42</b>	<b>769.97</b>
Less: Non-Tariff Income	14.63	15.50	15.50
Less: Revenue from Sale through UI/ Exchange	-	9.53	-
<b>Net Revenue Requirement</b>	<b>682.11</b>	<b>728.39</b>	<b>754.47</b>

## Revenue at Existing Tariff for FY 2013-14 & FY 2014-15

4.136 The Hon'ble Commission issued the Tariff Order for FY 2013-14 on 15<sup>th</sup> April 2013. Thus, the CED has computed the revenue at existing tariff for FY 2013-14 and FY 2014-15 as per Tariff Order for FY 2013-14. Sales for FY 2013-14 and FY 2014-15 have been considered as detailed earlier in this chapter.

4.137 The category-wise revenue computed for FY 2013-14 & FY 2014-15 is summarized in table below:

Table 63: Revenue at Existing Tariff for FY 2013-14 (RE) & FY 2014-15 (Rs. Cr)

Particulars	FY 2013-14 (Approved)	FY 2013-14 (RE)	FY 2013-14 (Projected)
Domestic	274.61	221.24	233.46
Commercial	234.28	222.54	229.82
Large Supply	72.47	70.06	70.11

Particulars	FY 2013-14 (Approved)	FY 2013-14 (RE)	FY 2013-14 (Projected)
Small Power	10.32	8.01	8.01
Medium Supply	54.93	46.65	47.26
Agriculture	0.36	0.32	0.32
Public Lighting	10.33	10.44	10.98
Bulk Supply	51.28	40.01	40.80
Others-Temporary Supply	7.74	5.89	5.89
<b>Total Revenue</b>	<b>716.43</b>	<b>625.16</b>	<b>647.49</b>

4.138 It is submitted that for FY 2013-14, the Hon'ble Commission had projected revenue of Rs. 716.43 Cr. However, based on the revised estimated sales, the revenue from existing retail tariff for FY 2013-14 is Rs. 625.16 Cr only which is lower than what was approved by the Hon'ble Commission for FY 2013-14. Further, the projected revenue with existing tariff for FY 2014-15 is Rs. 647.49 Cr.

### FPPCA billed during the year

4.139 The Petitioner submits that during FY 2013-14 it has billed FPPCA of Rs. 71.38 Cr till October'13 based on the actual sales. However, CED would further like to submit that for the next five months, a negative FSA will be recovered from the consumers. Hence, CED has projected an FPPCA recovery of Rs. 60 Cr in FY 2013-14 and requests the Hon'ble Commission to consider the same.

### Revenue Surplus/ (Deficit)

4.140 Based on the ARR and Revenue computed above, the revenue gap proposed for FY 2013-14 & FY 2014-15 is as given in table below:

Table 64: Revenue Deficit at Existing Tariff for FY 2013-14 & FY 2014-15 (Rs. Cr)

Particulars	FY 2013-14 (RE)	FY 2014-15
Net Aggregate Revenue Requirement	<b>728.39</b>	<b>754.47</b>
Revenue at Existing Tariff	625.55	647.49
FPPCA Billed during the Year	60.00	
<b>Revenue Surplus / (Gap) for the Financial Year</b>	<b>(42.84)</b>	<b>(106.98)</b>

4.141 CED requests the Hon'ble Commission to approve the revenue gap of Rs. 42.84 Cr and Rs. 106.98 Cr for FY 2013-14 and FY 2014-15 respectively as proposed in the table above.

### Consolidate Revenue Surplus/ (Deficit)

4.142 In the Tariff Order issued on 15<sup>th</sup> April, 2013 the Hon'ble Commission had undertaken review of FY 2012-13 and projected ARR for FY 2014-15. Based on the ARR and revenue projected for the respective years, total revenue surplus of Rs. 1.45 Cr was

approved for FY 2011-12, FY 2012-13 & FY 2013-14. Since, the Hon'ble Commission had projected the revenue surplus, the Hon'ble Commission had not revised tariff for FY 2013-14.

- 4.143 CED is now filing this petition for provisional true-up of FY 2011-12 & FY 2012-13, revised ARR for FY 2013-14 and ARR projection for FY 2014-15. CED in section 2.65 and 3.69 has proposed to create Regulatory Assets for the revenue gap for FY 2011-12 and FY 2012-13. For revenue gap for FY 2013-14 and FY 2014-15, CED requests the Commission to approve the tariff proposal as submitted by CED for recovering the gap of FY 2013-14 and FY 2014-15 as submitted in the petition.
- 4.144 Further, as per Provision 4 of Regulation 8 for 'Review and Truing Up' of JERC 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."*
- 4.145 CED has computed the interest on the average gap in the respective year considering the applicable interest rate as per SBI PLR considered for working capital borrowings. CED requests the Hon'ble Commission to allow carrying cost on revenue gap for FY 2011-12, FY 2012-13 and FY 2013-14.
- 4.146 The computation of revised cumulative deficit at the end of FY 2014-15 (including carrying cost) is summarized in the table below:

**Table 65: Consolidated Revenue Deficit for FY 2011-12, FY 2012-13, FY 2013-14 and FY 2014-15 (Rs. Cr)**

Particulars	FY 2011-12 (Actual)	FY 2012-13 (Actual)	FY 2013-14 (RE)	FY 2014-15 (Projected)
Net Aggregate Revenue Requirement	684.21	703.31	728.39	754.47
Revenue at Existing Tariff (Including FPPCA billed)	534.71	629.06	685.94	647.49
<b>Revenue Surplus / (Gap) for the Financial Year</b>	<b>(149.50)</b>	<b>(74.26)</b>	<b>(42.84)</b>	<b>(106.98)</b>
Surplus / (Gap) Carried Forward (FY14)				(42.84)
Carrying Cost of Revenue Gap (FY13-14)				(6.19)
<b>Cumulative Surplus/(Deficit) at the end of the year (Including Carrying Cost)</b>				<b>(156.01)</b>

4.147 Considering the Existing tariff and carry-forward of Revenue Gap of FY 2013-14 (along with the carrying cost), the total revenue gap by the end of FY 2014-15 based on existing tariff structure estimated to be around Rs 156.01 Cr.

4.148 CED request the Commission to consider the Revenue gap of FY 2011-12 and FY 2012-13 (along with carrying cost) as Regulatory Assets as mentioned in Section 2.65 and 3.69 and consider the revenue gap of Rs. 42.84 Cr and 106.98 Cr for FY 2013-14 and FY 2014-15 respectively along with the carrying cost of Rs. 6.19 Cr for FY 2013-14 for consideration of gap to be recovered in FY 2014-15.

## Chapter 5: Proposed Tariff for FY 2014-15

- 5.1 The computed revenue at existing tariff for FY 2014-15 is not adequate to cover the actual revenue gap for FY 2013-14 and FY 2014-15 (at existing tariff). In order to cover the revenue gap and carrying cost ascertained in the previous Chapter, CED has proposed revision in retail tariff for various categories.
- 5.2 While proposing the revised retail tariff for FY 2014-15, CED is guided by the provisions of the Electricity Act, 2003, the National Tariff Policy (NTP), Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission (CERC) and Regulations on Terms and Conditions of Tariff notified by the JERC.
- 5.3 Further, the following have been the main considerations while proposing the revised tariff:
- Ensure availability of electricity to all the consumers at reasonable and competitive rates as per the objectives of the National Tariff Policy.
  - Follow tariff guidelines provided in Section 61 of the Electricity Act 2003
  - Reduce the cross subsidies and move progressively towards cost to serve as per directions under para 8.3 of the National Tariff Policy.
  - Avoid any tariff shock due to full cost recovery from economically weaker sections of consumer categories like low consumption domestic consumers and agriculture consumers.
  - Cross subsidy guidelines as per Section 6 of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009 which states that:

### *“6. Cross-Subsidy*

*(1) “Cross-subsidy for a consumer category” in the first phase (as defined in sub-regulation 2 below) means the difference between the average realization per unit from that category and the combined average cost of supply per unit expressed in percentage terms as a proportion of the combined average cost of supply. In the second phase (as defined in sub-regulation 2 below) means the difference between the average realization per unit from that category and the combined per unit cost of supply for that category expressed in percentage terms as a proportion of the combined cost of supply of that category.*

*(2) The Commission shall determine the tariff to progressively reflect the cost of supply of electricity and also reduce cross subsidies within a reasonable period. To this purpose, in the first phase the Commission shall determine tariff so that it progressively reflects combined average unit cost of supply in accordance with National Tariff Policy. In the second phase, the Commission shall consider moving towards the category-wise cost of supply as a basis for determination of tariff.”*

- 5.4 Keeping view of the above, CED has proposed the tariff in such a way that cross subsidy between different categories of consumers remains within + / - 20% limit.
- 5.5 Some of the salient changes in the proposed tariff structure are as summarized below:
- a) Creation of a separate category as Single Point Delivery (SPD) exclusively for JJ cluster/unauthorized colonies/ slum dwellers. Currently these consumers are being charged on Domestic tariff and it is observed that a number of inconsistencies are prevalent leading to disputes in billing and defaulting payment of dues. Therefore, CED proposes a separate category for these consumers which will be charged at a rate equivalent to the variable charge of first slab of domestic category i.e. 0-150 kWh.
  - b) Introduction of fixed charges for domestic consumers. It is submitted that a fixed component of the ARR should also be recoverable from the domestic consumers irrespective of the units drawn by this category. In most of the States like Delhi, Himachal Pradesh, Rajasthan , Uttar Pradesh, etc, these consumers are levied a fixed charge. Therefore, CED has proposed introduction of fixed charge for domestic consumers for FY 2014-15.
- 5.6 CED requests the Hon'ble Commission to approve the above changes in the tariff schedule. Apart from the structural changes in the current tariff schedule, CED has proposed increase in retail tariff of all consumer categories in order to meet the revenue deficit completely. While proposing increased tariffs, CED has tried to maintain the level of cross subsidy as far as possible in the range of +/- 20% as per the National Tariff Policy and JERC Tariff Regulations.
- 5.7 The average cost of supply of CED for FY 2014-15 (including past revenue gap of FY 2013-14) is computed in the table below:

**Table 66: Average Cost of Supply for FY 2014-15 (Rs. Cr)**

Particulars	Unit	Amount (Rs. Cr)
Aggregate Revenue Requirement for FY 2014-15	Rs. Cr	756.08
Add: Revenue Gap / (Surplus) for Past Year		
- APR for FY 2013-14	Rs. Cr	42.31
Add: Carrying Cost	Rs. Cr.	6.11
Total ARR required for FY 2014-15 (including revenue gap for past years)	Rs. Cr	<b>804.50</b>
Sales Projected for FY 2014-15	MUs	1,444.91

Particulars	Unit	Amount (Rs. Cr)
<b>Average Cost of Supply</b>	<b>Rs. Per Unit</b>	<b>5.57</b>

5.8 As per the existing tariff, the category-wise average tariff as percentage of average cost of supply for FY 2014-15 is summarized in table below:

Table 67: Average Category-wise Tariff (Existing) Vs Average Cost of Supply for FY 2014-15

Category	Average unit rate as per existing tariff (Rs/Kwh)	Avg Cos (Rs/Kwh)	Tariff as a percentage of average cost of supply %	Under/(Over) Recovery (Rs/Kwh)
Domestic	3.66	5.57	66%	34%
Commercial	5.26	5.57	94%	6%
Large Supply	5.15	5.57	92%	8%
Small Power	4.47	5.57	80%	20%
Medium Supply	5.04	5.57	90%	10%
Agriculture	2.30	5.57	41%	59%
Public Lighting System	4.55	5.57	82%	18%
Advertisement /Neon sign boards	-	-		
Bulk Supply	5.08	5.57	91%	9%
Others-Temporary Supply	6.70	5.57	120%	(-20%)

5.9 As can be observed in the table above, the tariff across the categories do not reflect the average cost of supply of CED. Therefore, CED has proposed revised tariff to as per the applicable regulations, for recovery of the revenue gap. The existing and proposed category-wise retail tariff for FY 2014-15 is as given in the table below:

Table 68: Existing and Proposed Tariff for FY 2014-15

S. No.	Category/ Consumption Slab	Existing		Proposed	
		Fixed Charges (Rs. Per kVA/KW/HP per month)	Variable Charges (Rs. per KWh)	Fixed Charges (Rs. Per kVA/KW/HP per month)	Variable Charges (Rs. per KWh)
A	<b>Domestic</b>				
1	0-150 kWh	-	2.30	-	2.78
2	150-400 kWh	-	4.20	20.00	4.60
3	Above 400 kWh	-	4.40	50.00	4.95
B	<b>Commercial</b>				
1	0-150 kWh	6.00	4.30	30	4.70
2	150-400 kWh	70.00	4.50	100	5.30
3	Above 400 kWh	70.00	4.70	100	5.70
C	<b>Large Supply</b>	70.00	4.70	100	5.75
D	<b>Small Power</b>	6.00	4.40	30	5.25

E	<b>Medium Supply</b>	70.00	4.50	100	5.60
F	<b>Agriculture</b>	-	2.30		2.78
G	<b>Public Lighting</b>				
	<i>Public Lighting System</i>	70.00	4.30	100	5.60
	<i>Advertisement /Neon sign boards*</i>	70.00	6.00	100	7.00
H	<b>Bulk Supply</b>	70.00	4.50	100	5.75
I	<b>Others-Temporary Supply</b>	-	6.70	-	6.70
J	<b>SPD (JJ cluster/ unauthorized colonies)</b>	-	-	-	2.78

5.10 Considering the proposed tariff revision to be applicable from 1<sup>st</sup> April 2014, the projected revenue for FY 2014-15 from various categories is as summarized in table below:

Table 69: Revenue at Proposed Tariff for FY 2014-15 (Rs. Cr)

Particulars	Sales	Revenue
Domestic	646.70	289.29
Commercial	434.26	284.96
Large Supply	137.50	87.94
Small Power	17.89	10.09
Medium Supply	93.01	59.81
Agriculture	1.39	0.39
Public Lighting	24.23	14.37
Advertisement /Neon sign boards	-	-
Bulk Supply	81.15	51.72
Others-Temporary Supply	8.79	5.89
<b>Total Revenue</b>	<b>1,444.91</b>	<b>804.46</b>

5.11 Based on the proposed tariff of CED, the revised category-wise average tariff as percentage of average cost of supply for FY 2014-15 is summarized in table below:

Table 70: Average Category-wise Tariff (Proposed) Vs Average Cost of Supply for FY 2014-15

Category	Average unit rate as per Proposed tariff (Rs/Kwh)	Avg Cos (Rs/Kwh)	Tariff as a percentage of average cost of supply %
Domestic	4.47	5.57	80%
Commercial	6.56	5.57	118%
Large Supply	6.40	5.57	115%
Small Power	5.64	5.57	101%
Medium Supply	6.43	5.57	115%
Agriculture	2.78	5.57	50%

Category	Average unit rate as per Proposed tariff (Rs/Kwh)	Avg Cos (Rs/Kwh)	Tariff as a percentage of average cost of supply %
Public Lighting System	5.93	5.57	106%
Advertisement /Neon sign boards	-	5.57	-
Bulk Supply	6.37	5.57	114%
Others-Temporary Supply	6.70	5.57	120%

- 5.12 Based on the proposed changes in retail tariff, CED would be able to recover the cumulative revenue deficit of Rs. 156.01 Cr projected above.
- 5.13 Therefore, CED humbly requests the Hon'ble Commission to approve the proposed changes in the retail tariff structure for FY 2014-15.

## Chapter 6: Proposed Tariff Schedule

### 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) Supply to Govt. Hospitals, Dispensary and Hospitals run by charitable institutions approved under section 80 (G) of the income tax Act.
- h) Dispensary / Hospitals / Public Libraries / School / College / Working Women"s Hostel / run or approved by the Chandigarh Administration.
- i) Recognized Center/ societies for welfare of blind, deaf and dumb, spastic children, physically handicapped persons, mentally retarded persons, as approved by the Chandigarh Administration.
- j) 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.
- k) 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
- l) Shelter Homes (including Night Shelters) run or approved by Chandigarh Administration.
- m) Electric crematoriums.

#### NOTES:

- i. 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.

- ii. STD/PCO, shops attached to Religious Institutions will be billed under Non-Domestic Tariff.
- iii. 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.
- 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 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 upto 5 KW supply shall be given on single phase 230 volts and above 5 KW upto 99 KW supply shall be given on three phase 400 volts. For loads above 100 KW, 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	Existing	Proposed
0-150 kWh	0.00	-	2.30	2.78
151-400 kWh	0.00	20.00	4.20	4.60
Above 400 kWh	0.00	50.00	4.40	4.95

### 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 250 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.

**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. Pvt 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	6.00	30.00	4.30	4.70
151-400 kWh	70.00	100.00	4.50	5.30
Above 400 kWh	70.00	100.00	4.70	5.70

### 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 250 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

### **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 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 leviable for all the existing consumers which are being given supply at 400 volts.

- ii. Surcharge at 17.5% on the tariff shall be leviable for all the arc furnace consumers which are being given supply at 11 kV. This surcharge at 17.5% shall also be leviable on other industrial consumers having contract demand exceeding 5000 kVA and running at 11kV.
- iii. In case of steel rolling mills having supply at 400 volts, an additional surcharge of 5% shall be leviable.
- iv. In case of HT consumers (11kV and above) where maximum demand and energy consumption is recorded on 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	70.00	100.00	4.70

## POINT OF SUPPLY

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

## 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. If the consumer in a month exceeds the contract demand, such excess shall be charged at an additional rate of Rs 250/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

#### 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	70.00	100.00	4.50	5.60

##### 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	6.00	30.00	4.40	5.25

**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 upto 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

**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.
- 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.
- 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, signals, 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		Energy charge	
		Rs. per KW/kVA/HP per month		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	70.00	100.00	4.30	5.60
<b>Advertisement /Neon sign boards -</b> Advertisement boards, bill boards, sign boards, passenger information system installed on bus queue shelter/ bus stand (apart from advertisement boards installed on the commercial establishments & charged under commercial tariff)	All Units	70.00	100.00	6.00	7.00

## 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		Energy charge	
	(Rs. Per KW/kVA/HP per Month)		(Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	70.00	100.00	4.50	5.75

## 9. TEMPORARY SUPPLY

### APPLICABILITY

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

### 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	6.70

Note- No FPPCA shall be levied on Temporary Supply consumers

## 10. SINGLE POINT SUPPLY (SPS)

### APPLICABILITY

This tariff schedule shall apply to JJ cluster/ unauthorized colonies/ slum dwellers/ outside lal dora at single supply point.

### CHARACTER OF SERVICE

AC,50 cycles, Single phase 230 volts or three 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	-	0.00	-	2.78

Note- No FPPCA shall be levied on Single Point Supply consumers.

## 11. SERVICE CHARACTERS OF SUPPLY FOR LOAD ABOVE 5000 KW

Supply to any category of consumers above 5000 KW 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 categories of consumers.

### **1) Additional charges for exceeding contracted load/contracted maximum demand,**

If in any month the consumer exceeds his contracted load/contracted demand the portion of the load/demand in excess of the contracted load/demand will be dealt as per the provisions made in JERC (Electricity Supply Code), 2010.

This will not be applicable to the consumers who has self-declared their connected load as the provision under regulation 4.13 (2) of Supply Code Regulations, 2010 as amended from time to time.

### **2) 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.

### **3) Power Factor Incentive**

The monthly average power factor of the plant and apparatus installed by the consumer should be maintained at better than 90% lagging. 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.

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 (lagging).

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

#### 4) Late Payment Surcharge

For the existing connections, if the payment is made after the due date (as mentioned on the bill), the consumer is liable to pay additional charges on delayed amount at the rate of 2% per month. However for disconnected consumers, additional amount at the rate of 10% per annum on the outstanding amount shall be charged.

#### 5) 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 upto 85%	1% of billed energy charges of that month for every 1% fall in power factor from 90%
3.	Below 85% and upto 80%	1.5 % of billed energy charges of that month for energy 1% fall in P.F from 85%
4.	Below 80% and upto 75%	2% of billed energy charges of the month for energy 1% fall in P.F from 80%

5.	Below 75%	3% of billed energy charges of that month for energy 1% fall in P.F from 75%
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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.

## 6) 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.

## 7) 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.

**MISCELLANEOUS AND GENERAL CHARGES**

S. 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.	

S. No	Description	Proposed
<b>E</b>	<b>Reconnection Charges</b>	
<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
	MS	Rs 25/- per card

S. No	Description	Proposed
	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.	
<b>L</b>	<b>Testing and calibration including sealing of energy meter owned /supplied by the consumer</b>	

S. No	Description	Proposed
i	Single Phase	Rs 100/-
ii	Poly phase whole current meter	Rs 500/-
iii	Poly phase meters with CTs	Rs 1200/-
iv	HT and EHT metering equipment	Rs 3500/-
<b>M</b>	<b>Checking of the capacitors at the request of the consumer</b>	
<b>a</b>	Consumer receiving supply at	
i	230/440 V	Rs 250/- per visit
ii	Above 400 V and up to 11 KV	Rs 500/- per visit
<b>N</b>	<b>Rates for Security Deposit for new/extension in load only.</b>	
i	The amount of Security deposit for new/ extension of load shall be calculated as per the procedure prescribed in clause 6.10 of the JERC Electricity Supply Code Regulation 2010.	
<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>	
i	Single Phase Meter	Rs 700/-
ii	Three Phase Meter	Rs 1550/-
iii	LT CT operated Solid State Meter. (Without CTs)	Rs.3000/-
iv	LT CTs	
<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>P</b>	Special Meter reading charges in case of change in occupancy/ vacation of premises for domestic consumers	Rs. 50/-
<b>Q</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:-  <b>A.1 Ordinary lamps:</b> (i) Lamps up to 150 watts :  (ii) Lamps above 150 watts :  <b>A.2 Mercury Vapour lamps:</b> (i) Lamps of 80 watts : Rs.49/- per lamp per month (ii) Lamps of 125 watts : Rs.53/- per lamp per month (iii) Lamps of 250 watts : Rs.90/- per lamp per month (iv) Lamps of 400 watts : 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.16/- per lamp per month  Special quotation  Rs.49/- per lamp per month Rs.53/- per lamp per month Rs.90/- per lamp per month Rs.101/- per lamp per month  Rs.26/- per lamp per month Rs.43/- per lamp per month

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S. No	Description	Proposed
	(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.68/- per lamp per month
	(iv) Double 4 ft 40 watts : Rs.68/- per point per month	

## Chapter 7: Proposal on Prepaid Tariff

The Petitioner along with the Tariff Petition would like to submit a proposal for prepaid metering in its area of supply in compliance of Hon'ble Joint Electricity Regulatory Commission's order dated 20 November 2013 vide which the Petitioner was directed to install prepaid meters.

The Petitioner wishes to provide this facility of prepaid metering system to all its interested single phase and three phase whole current supply consumers having sanctioned LT load less than 50 kW. However, prepaid metering will be mandatory for consumers of temporary category with sanctioned load less than 50 kW. In the first phase of its implementation on pilot basis, the consumers who opt for pre-paid metering have to purchase to their own prepaid meter from a vendor approved/ empanelled by CED and submit to CED along with a written request. Some of the existing manufacturers of prepaid meters in India are: Secure Meters Ltd., L&T and Genus Meters.

Following should be ensured by the Consumers while submitting their pre-paid meter and written request:-

1. Pre-paid meter should be properly sealed by the manufacturer.
2. Routine type test certificate by the manufacturer of the pre-paid meter should be attached.
3. Original cash memo/receipt of pre paid meter should be attached.
4. Following certificates from the manufacturer needs to be attached, that:-
  - a) It shall provide recharge facility for at least 2 years.
  - b) It shall reimburse the charges to Chandigarh Electricity Department with a certificate that the pre paid meter issued to consumer has been charged with an amount equal to Rs\_\_\_\_\_
  - c) It will ensure that pre paid meter software shall be amended as per approved tariff from time to time.
  - d) It will provide MRI software to the Chandigarh Electricity Department.
  - e) It will provide at least 5 years of warranty for pre paid meter purchased by the consumer.
  - f) It has charged the pre paid meter as per approved tariff of department including quarterly FPPCA as applicable from time to time.
  - g) Chandigarh Electricity Department shall have the authority to black-list the manufacturer in case of any variation found in charging the pre paid meter at a later stage.
  - h) It has vending set up for recharge in UT Chandigarh.

CED is in the process of floating RFP/DNIT in this regard.

Based on the success of the pilot project, a go-ahead can be given to the vendor for complete roll-out of the end-to-end complete prepaid metering solution for the envisaged categories of consumers in entire operational jurisdiction of CED.

**The benefits of pre-paid metering for the consumer are:**

- Pre-paid metering ensures that the consumer regularly monitors and controls his consumption on daily basis leading to reduction in unnecessary electricity consumption and monthly electricity bills.
- The consumer is empowered to regulate his electricity buying behavior as per his budgetary cycle and not as per the customary utility billing cycle.
- Pre-paid metering eliminates the contemporary meter reading and billing cycles thereby ensuring that the consumers
- Enjoy minimum interface with the Department people (meter readers, bill distributors etc.);
- do not need to abide by the periodic bill due dates and waste long hours in payment queues.
- Reduction of bill related complaints due to elimination of human interface from the revenue cycle.

**Following benefits will be accrued by the CED through introduction of prepaid metering:**

- **Improved operational efficiencies:** The prepaid meters are likely to cut the cost of meter reading, billing, bill distribution and money collection as these processes are eliminated. In addition, they eliminate administrative hassles associated with disconnection and reconnection. Prepaid meters could help control appropriation of electricity in a better way than conventional meters.
- **Reduced financial risks:** Since the payment is up-front, it reduces the financial risk by improving the cash flows and necessitates an improved revenue management system.
- **Better customer service:** The system eliminates billing delay, complaints related to billing, removes cost involved in disconnection/reconnection, enables controlled use of energy, and helps customers to save money through better energy management.
- **Controlling non-technical losses:** Metering errors, tampering with meters leading to low registration and calibration related frauds are some of the key components of non-technical losses. It has been reported that prepaid meters control non-technical losses better than conventional ones.
- **Better load management:** With consumer initiated consumption monitoring and control there is overall improvement in load management.

**Technology**

The prepaid meters will have a common operating platform for usage and recharge of tokens. A certain payment system will have to be developed for physical vending of recharge tokens and recharging of dispensed tokens. Token vending and recharge booths will have to be setup as well as an online recharge portal will have to be developed. The token and recharge denomination will be between 50 units to 1000 units or Rs 200 to Rs 5000 for various categories of consumers which can be either color coded or provided a numerical code.

## Tariff Structure

The Petitioner proposes to recover the fuel surcharge adjustment charge of Rs 0.50/ kWh (average FSA for FY 2013-14) over and above the energy charge for various consumers in the form of prepaid tariff. The consumer will also be required to pay fixed charges, if any, in the form of prepaid charges.

## Case Study

**MSEDCL:** It is submitted that West Bengal Electricity Distribution Limited (WBSEDCL), Maharashtra State Electricity Distribution Company (MSEDCL), Delhi Discoms (Tata Power Delhi Distribution Ltd and BSES Yamuna & Rajdhani) and Punjab State Power Corporation Ltd (PSPCL) are some of the leading electricity distribution utilities in India which have implemented prepaid metering system for its consumers.

The Petitioner is submitting the order of Maharashtra Electricity Regulatory Commission (MERC) on the petition of MSEDCL for implementation of prepaid meters (**Annexure VI**). The order contains the benefits cited by MSEDCL, the provisions of prepaid metering and the financial implications related to it. Considering the above, MSEDCL has mentioned that an ambitious plan for prepaid metering has been formulated and a detailed proposal along with a roadmap for implementation has been submitted.

MSEDCL has proposed an incentive of 5% on Tariff to promote use of prepaid metering. MSEDCL further claimed that prepaid metering would help it to ensure no defaults in payment as well as to control its arrears. The Petitioner also pointed out the difficulty of incorporating the FAC component in tariff, as in the case of Prepaid metering, once the card is logged in and vending is done, no adjustment can be done for that particular amount till the amount on that card gets over. MSEDCL had proposed a Normative FIXED FAC charge of Rs.0.20 per kWh for this pilot project of Prepaid Metering.

MSEDCL submitted that in case of pre-payment where the information on credit balance for utilization is available to the consumer, there is a normal tendency to conserve the balance, which results in conservation of energy.

**WBSEDCL:** The Petitioner is also submitting the tariff schedule of WBSEDCL for low and medium voltage consumers (**Annexure VII**). The tariff schedule has different tariff structure for consumers under normal metering system and prepaid metering system. A consumer opting for pre-paid meter shall not be required to make any security deposit for the energy charge. An applicant for short term supplies through pre-paid meter shall have to comply with all necessary formalities for obtaining supply including payment in accordance with the Regulations made by the Commission. The same will be subject to the following conditions:

- Provision of requisite meter security deposit to be kept with licensee,
- Provision of space for installing weather-proof, safe and secure terminal services apparatus to protect sophisticated meter; and
- Availability of prepaid-meter of appropriate capacity.

## Chapter 8: Compliance to directives issued by Hon'ble Commission

8.1 It is submitted that the CED has made concerted efforts to comply with the various directives given by the Hon'ble Commission in the Tariff Order for the FY 2013-14. The status of the compliance against each of the directives is provided in this chapter.

### Compliance to Directives issued in Tariff Order of FY 2011-12

Reference	Directive	Compliance
<b>Directive 1 -</b> Preparation of Annual Statement of Accounts on commercial accounting principles and submit to JERC by 30.9.2013.	<p>Accounts of the licensee need to be prepared on commercial account principles for regulated business of electricity as per regulatory requirement by 30th September, each year. The Hon'ble Commission in its previous order had also directed the petitioner to comply with the directives and file the true up accordingly.</p> <p>The Hon'ble Commission directed the petitioner to file the true up for FY 2011-12 by October 31, 2013, failing which the Hon'ble Commission would be constraint to take action according to the JERC Regulations and the Electricity Act, 2003.</p>	<p>CED submits that Tender (OP-4/19/2013-14) for appointment of consultant for (i) preparation of Annual Statement of Accounts on commercial accounting principles and (ii) Asset &amp; Depreciation Register was floated on 23.8.2013 with opening date of 17.3.2013. However, due to some observations raised by 3-4 firms, the date of opening of tender is further extended upto 11.10.2013. As no any EMD was received from any firm till 11.10.2013 and due to system constraints, the tender was made cancelled.</p> <p>The DNIT said was got amended by including comments/ suggestions furnished by various firms including M/S Deloitte Touche Tohmatsu India Pvt Ltd , M/S Feedback Infra and M/S S.K. Bhasin &amp; Associates. The amended DNIT was deliberated by the Standing Committee constituted by the competent authority of Chandigarh Administration on 14.10.2013 &amp; 31.10.2013 and later on approved by the Chief Engineer, UT Chandigarh vide his office memo no. 11891 dated 31.12.2013. <b>The said DNIT has been refloated on 17.1.2014 at e-tender portal of Chandigarh Administration.</b></p> <p>In view of above cited constraints, CED kindly request Hon'ble JERC to further extend the submission date of Annual statement of account on commercial accounting principles as CED is sincerely putting its best to comply with the directive of Hon'ble Commission.</p>
<b>Directive 2-</b> Preparation of Asset and Depreciation Register	The Hon'ble Commission directed the Petitioner to file a monthly progress report in this regard.	
<b>Directive-3:</b> Management Information System	The Hon'ble Commission directed the Petitioner to submit quarterly progress report and the final completion date.	CED submits that M/S NIELIT has been entrusted the work of computerized billing and accordingly MIS reports are being generated on regular basis regarding units billed, no. of consumers, sanctioned load, defaulting amount, exception list and other

Reference	Directive	Compliance
		<p>ARR related reports.</p> <p>However, the implementation of Part-A of R-APDRP is under process and recently a meeting of Distribution Reform Committee (DRC) in the chairmanship of Advisor to Administrator, UT Chandigarh was held on 20.9.2013 in which it was principally decided that the work of allotment of M/S SPANCO (ITIA of PSPCL, Punjab) would be put up before the Standing Financial Committee, Chandigarh Administration (Upper) for its financial approval.</p> <p>However, the DPR of SCADA and Part-B of R-APDRP have already been prepared by the respective consultants viz M/S Reliance Infrastructure and M/S Feedback Infra. The same would be forwarded to M/S PFC after approval of the competent authority of the Chandigarh Administration.</p>
<p><b>Directive-4:</b> Metering of consumer installations / replacement of Non-Functional or defective Meters</p>	<p>The Hon'ble Commission directed the Petitioner to expedite the Procurement process and complete the work of installation of such meters by 30.09.13, through owned staff / outsourced staff / EPC contractor, without fail.</p>	<p>In order to replace the non functional / defective meters, CED has placed order on DGS&amp;D for Single phase meters (Qty 15000 Nos) and almost same has been received in Store and the due date of delivery is around end of January, 2014. Besides this matter has also been taken up for allocation of 15000 single phase meters with UHBVN/DHBVN.</p> <p>This office has placed order on DGS&amp;D for three phase meters (Qty 3500 Nos) and same will be received in Store soon.</p> <p>The current non-functional/ defective meters as identified shall be replaced within this financial year. However, it is submitted that the replacement of defective meters is a continuous process.</p> <p>However, as per this office memo no. 5982 dated 9.12.2013 to Hon'ble commission regarding pending complaints for the month of Oct 2013, 1900 nos. of meters are defective/ burnt which shall be replaced in regular exercise. However, such no. of defective/ burnt meters is approx 1% which is much lesser than standard 3%.</p>
<p><b>Directive-5:</b> Energy Audit</p>	<p>The Hon'ble Commission directed the Petitioner to expedite the Procurement process and submit quarterly progress report and the final completion date.</p>	<p>Energy Audit of Chandigarh Electricity Department to assess actual technical and commercial losses shall be covered in Part-A (IT Implementation) of R-APDRP</p>

Reference	Directive	Compliance
		project and allotment of work of IT Implementation to the M/S SPANCO (ITIA of Punjab) is under process.
<b>Directives-6:</b> Interest on Security Deposit	The Hon'ble Commission directed the petitioner is directed to pay interest on consumer security deposit at the applicable bank rate by September 30, 2013 failing which appropriate action would be taken for non-compliance of the Commission's Directives.	The interest on consumer security has been given in consumer bills and the compliance report of the same has already been provided to Hon'ble JERC vide memo no. 4997 dated 4.10.2013.  However, additional consumption security has also been demanded in the above cited bills in compliance to the clause 6.10(3) of JERC Electricity Supply Code Regulation 2010.
<b>Directive-7:</b> Demand Side Management and Energy Conservation	The Hon'ble Commission directed the Petitioner to inform the time bound action plan for installation of TOD meters.	1. DNIT for appointment of consultant for demand side management and energy conservation shall be prepared after receiving the approved regulation on DSM from Hon'ble commission. Hon'ble JERC has already invited suggestions/ comments on above cited draft regulation and CED has also submitted its comments to JERC vide memo no. 4047 dated 14.8.13.  2. CED has started the process of procurement of Trivector DLMS meters which have multiple function capability and ToD feature. However the whole project covers under R-APDRP which is under process. After the procurement, these meters shall be installed.
<b>Directive-8:</b> Time bound action plan for installation of ToD meters.		
<b>Directive -9:</b> Manpower Study	The Hon'ble Commission directed the Petitioner to report the Compliance of Manpower Study by 30-9-2013 and incorporate the outcome of the study in the ARR of FY 2014-15 to be submitted before 30.11.2013.	The Manpower Study has been conducted by the Consultant M/S Deloitte and has also recently been approved by the competent authority of Chandigarh Administration vide his office memo no. 8 dated 1.1.2014. The petition in this regard has already been submitted to Hon'ble JERC vide memo no. 75 dated 14.01.2014 for its acceptance and implementation, very shortly.

### Compliance to Directives issued in Tariff Order of FY 2012-13

Reference No.	Directive	Compliance
<b>Directive 1:</b> Segregation of T&D losses and loss reduction trajectory	The Hon'ble Commission directed the Petitioner inform the time bound action plan for the same by 30.09.13	The interstate losses of these interstate points of Nalagarh, Dhulkot etc. were not included in the approved target by Hon'ble commission while these losses are contributed in the T&D losses of CED . The interstate losses of Nalagarh - Kishangarh line is 2.97 % for the FY-2012-13 as intimated by PGCIL authorities. Moreover the T&D losses (un-audited) of CED for the FY-2012-13 are 19.21 %. If total average interstate T&D losses of CED in respect of Nalagarh- Kishangarh and Dhulkot-Chandigarh line are assumed to be 3%, the actual T&D losses of CED will become 16% (as per unaudited data) which is very near to the targets as fixed by Hon'ble JERC for the FY-2012-13.
<b>Directive 2:</b> Load Forecasting study	The Hon'ble Commission directed the Petitioner inform the time bound action plan for the same by 30.09.13	The scope of work of previous DNIT for appointment of consultant for load forecasting has been amended in view of the draft JERC regulations of Multi Year Distribution Tariff (MYT) Regulation 2013 and Demand Side Management Regulation 2013 and accordingly, amended DNIT has been put up to competent authority for approval.

### Compliance to Directives issued in Tariff Order of FY 2013-14

Reference No.	Directive	Compliance
<b>Directive 1:</b> new Category for JJ Cluster / Unauthorized colonies.	The Petitioner had proposed a new Category for JJ Cluster / Unauthorized colonies. The Hon'ble Commission directed the petitioner to submit the number of consumers, load, consumption and status of metering for such consumers before the same is considered for the Tariff categorization. The same be submitted along with the next ARR & tariff filing before the Hon'ble Commission.	CED has prepared the information regarding number of consumers, load, consumption and status of metering for JJ Cluster / Unauthorized colonies for the proposal of new tariff category and placed as <b>Annexure III</b> for kind consideration. The same is being submitted along with ARR & tariff petition for FY 2014-15.

### Compliance to other JERC Directions as per Tariff Order of FY 2013-14

Page No. in tariff order for FY 2013-14	Direction Particulars	Present Status
26- 27	Commission directed the	<u>Regarding procurement of meters, cables etc</u>

Page No. in tariff order for FY 2013-14	Direction Particulars	Present Status
	CED to submit present facts, reason for delay in procurement of meters & cables and action plan before the Commission on or before May 30'2013.	<ol style="list-style-type: none"> <li>1. In this regard, it is submitted that from year 2012 to till date, CED has procured 23,050 Nos Single phase meters and 9,050 Nos Three phase meters through DGS&amp;D rate contract.</li> <li>2. In addition, the CED has also floated tender of Single phase meters for Qty-35,000 Nos &amp; Three phase meters for Qty-8000 Nos but these tenders could not get matured.</li> <li>3. Also this office has procured the following cables from the year 2012 to till date:-               <ol style="list-style-type: none"> <li>A. <u>PVC Cables</u> <ol style="list-style-type: none"> <li>i. 2 Core 10mm<sup>2</sup> cable =35KM</li> <li>ii. 2 Core 16mm<sup>2</sup> cable=74KM</li> <li>iii. 4 Core 25mm<sup>2</sup> cable=50KM</li> <li>iv. 4 Core 50mm<sup>2</sup> cable=25KM</li> </ol> </li> <li>B. <u>LT Cable 400 mm<sup>2</sup></u> = 12 KM</li> <li>C. <u>LT Cable 120 mm<sup>2</sup></u>= 16 KM</li> </ol> </li> </ol> <p>In addition, the CED has also floated tender of 11 KV HT cable for Qty 20 Km which is under process.</p>
44	Commission directs the CED to devise a methodology and give a detailed action plan for category wise phased implementation of meters having multiple reading capability.	<ol style="list-style-type: none"> <li>1. As per clause 7.2. of JERC Electricity Supply Code Regulation 2010, For LT (contracted load &gt; 50 KW) / HT / EHT consumers, meters should have facilities regarding MDI, "Time of the Day" etc.</li> <li>2. As per Draft MYT Regulation 2013, the Time of Day tariff shall be introduced in a phased manner, wherein in phase 1 it would be compulsory for HT Consumers, in phase 2 – compulsory for LT consumers consuming more than 25 KW and in phase 3 compulsory for LT consumers consuming more than 10 KW.</li> </ol> <p>Both the above provisions are in contrary to each other, which needs review at the level of Hon'ble commission. However, all the aspects as directed by commission shall be covered in R-APDRP Project. Hon'ble Commission is requested to issue uniform directions on implementation of meters having multiple reading capabilities in view of above.</p>



## **Chapter 9: Annexures**

### **Annexure I: Copy of Performa Accounts for FY 2011-12**

**Annexure II: Copy of Performa Accounts for FY 2012-13**

## Annexure III: Details of consumers of JJ Cluster

S No.		Name of JJ Clusters/ Unauthorized Colonies	Sector Village	Total No. of Consumer	Sanctioned Load in KW	Consumption (kWH) in the FY 2011-12	Consumption (kWH) in the FY 2012-13	Consumption (kWH) in the FY 2013-14 (Upto Oct-13)	Status of Metering
1	S/Div No.1	Rehabilitation Colony, Sec 25	25	3000	250	4276000	4995991	4609460	Metered
2	S/Div No.2	Madras Colony	Bapu Dham, Sec 26	1500	70	2191462	2209356	1229598	Metered
3	S/Div No.4	Kalyan Colony	Vill Khuda Lahora	31	10.6	24875	29830	20435	Metered
4	S/Div No.5	Colony No. 4	Indl. Area Phase-I	1400	224	266214	362781	88738	Account Closed.
5	S/Div No.5	Colony No. 4	do	701	112	198372	250370	66124	Account Closed.
6	S/Div No.5	Colony No. 4	do	1236	198	178086	178086	59362	Account Closed.
7	S/Div No.8	Shastri Nagar	Manimajra	310	70	412478	703400	705791	Metered
8	S/Div No.9	Adarsh Colony	Sector 54	695	36	491152	442000	286880	Metered
9	S/Div No.9	Kuldeep Colony	Sec 52/Kajheri	630	16	363394	1019845	492933	Metered
10	S/Div No.9	Nehru Colony	Sector 52/53	490	50	518590	497215	345009	Metered
11	S/Div No.9	Chd Electy& Co	Colony No.5	335	27.2	383073	868612	400791	Metered
12	S/Div No.9	Chd Electy& Co	Colony No.5	475	42	614014	955959	448688	Metered
13	S/Div No.9	Prag Satija B/ Block	Colony No.5	1300	50	829222	1048128	684906	Metered
14	S/Div No.9	Chd Electy& Co	Colony No.5	563	48	722084	1141314	520111	Metered
15	S/Div No.9	Chd Electy& Co	Colony No.5	1147	48	1304028	1486648	1017940	Metered
16	S/Div No.9	Nehru Colony	Sector 52/53	530	50	302486	377951	305275	Metered
17	S/Div No.9	Chd Electy& Co	Colony No.5	380	10.4	405652	612077	419296	Metered
18	S/Div No.10	Rajiv Colony Dadumajra	Dadumajra	13	20	141811	62640	120060	Metered
19	S/Div No.10	L B S Colony Sec.56	Sector 56	73	40	43080	133560	159720	Metered
20	S/Div No.10	Maloya	Maloya	26	15.7		23295	75636	Metered
21	S/Div No.10	C-82, LBS Colony	Sector 56	13	11.52		17747	23684	Metered
22	S/Div No.10	1279, LBS Colony	Sector 56	27	9.22		16863	26085	Metered

S No.		Name of JJ Clusters/ Unauthorized Colonies	Sector Village	Total No. of Consumer	Sanctioned Load in KW	Consumption (kWH) in the FY 2011-12	Consumption (kWH) in the FY 2012-13	Consumption (kWH) in the FY 2013-14 (Upto Oct-13)	Status of Metering
23	S/Div No.10	F-810, LBS Colony	Sector 56	10	4.00		1503	15013	Metered
24	S/Div No.10	F-192, LBS Colony	Sector 56	8	4.82		37	22785	Metered
	<b>TOTAL</b>			<b>14893</b>	<b>1417.46</b>	<b>13666073</b>	<b>17435208</b>	<b>12144320</b>	

## **Annexure IV: Formats**

**Annexure V: Letter received from PGCIL on additional inter-state losses borne by CED dated 22.06.2013**

**Annexure VI: Order of Maharashtra Electricity Regulatory Commission (MERC) on the petition of MSEDCL for implementation of prepaid meters**

**Annexure VII: Tariff schedule of WBSEDCL for low and medium voltage consumers**

**Annexure VIII: Detailed statement of capital expenditure incurred in 3<sup>rd</sup>  
Quarter of FY 2013-14**