



Before

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

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

Filed by
**Chandigarh Electricity Department, UT
Chandigarh**

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A1: 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. A very striking feature of Chandigarh is the harmonious relationship among various religious communities, who have lived together peacefully for generations. 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 more than 2 Lakhs consumers with an annual energy consumption of approx 1300 MUs. The Consumers of the Chandigarh Electricity Department are classified as under:
 - (a) Domestic (40% of consumption)
 - (b) Commercial (32% of consumption)
 - (c) Large Supply (10% of consumption)
 - (d) Small Power (2% of Consumers)
 - (e) Medium Supply (8% of Consumers)
 - (f) Agriculture (0.1% of consumption)
 - (g) Public Lighting (1% of consumption)
 - (h) Bulk Supply (6% of consumption)
 - (i) Temporary Others (1% of consumption)
- 1.5 As can be observed from the actual consumption across categories, the energy consumption of domestic consumers contributes the highest (40%) 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 08th 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 13.1.2011. After deliberations, the Tariff Order was issued by the Hon'ble Commission on 16th July 2011 and the new tariff was made effective from 1st April 2011.
- 1.14 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 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 May 7th, 2012 which included review for FY 2011-12. The tariff was made applicable from May 1st, 2012.
- 1.15 Under section 62 of the Electricity Act, 2003 and under the subsequent JERC Regulations, CED is required to file for true-up for FY 2011-12, annual performance review for FY 2012-13 and Annual Revenue Requirement and Tariff Proposal for FY 2013-14.
- 1.16 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

- 1.17 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.
- 1.18 In compliance of this regulatory obligation, CED hereby files it's Provisional True-Up petition for FY 2011-12, review petition for FY 2012-13 and Aggregate Revenue Requirement (ARR) & Tariff Petition for FY 2013-14
- 1.19 The current petition has been prepared in accordance with the provisions of the following Acts/Policies/Regulations:
- Electricity Act 2003;
 - National Electricity Policy;
 - National Tariff Policy;
 - Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009
- 1.20 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

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



A2: Chapter 2: Provisional True-up petition for FY 2011-12

- 2.1 In this section, CED is submitting Provisional True-up for FY 2011-12. In the Tariff Order for FY 2012-13 issued on May 7th, 2012, the Hon'ble Commission had undertaken review of FY 2011-12 as per the actual information submitted by CED for 10 months. The annual accounts for FY 2011-12 are under audit by Indian Audit & Accounts Department, Office of Principal Director of Audit (Central), Chandigarh and certificate of audit is still awaited. Therefore, CED has filed for provisional true-up for FY 2011-12 in this Petition. The annual accounts for the period FY 2011-12 are also being submitted to the Hon'ble Commission along with this petition for the purpose of provisional true-up (**Annexure – I**).

Principles for provisional 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 7th May 2012, the Hon'ble Commission had approved the review of ARR for FY 2011-12 based on the information submitted by CED. The revenue gap thus computed was adjusted in the ARR for FY 2012-13.
- 2.4 It is submitted that the entire year of FY 2011-12 is complete and the final accounts for the same have been prepared and are under audit. The audit certificate is awaited from the Indian Audit & Accounts Department. In line with the provisions of JERC (Terms and Conditions for determination of Tariff) Regulations, 2009, CED has filed this provisional true-up petition for the year FY 2011-12 based on annual accounts for the financial year.

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	-
	Total Sales	1460.9	1,301.5	(159.4)

- 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 May 7th, 2012. It is submitted that the sales figure for FY 2011-12 provided by CED is actual.



- 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.

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 3.30% have been considered based on the average actual inter-state losses for FY 2011-12.
- 2.10 It is pertinent to mention that 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). As such, nominal 2-3% loss in addition to the approved T&D losses should be allowed by the Hon'ble Commission. Further, it is submitted that the case for providing an inter-state point within the boundaries of Chandigarh has already been taken up by CED in the Standing Committee of Northern Region for system planning on dated 2.1.2013. During the discussion, it was agreed by the Committee and appropriate actions would be taken by the CEA in this matter.
- 2.11 Accordingly, CED has reduced additional 2% 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 18.50% 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 majority of the consumption is at LT level which has an adverse effect on the loss reduction. Also, the consumption of large industrial consumers has declined during FY 2011-12 resulting in increased percentage of overall consumption at LT level during FY 2011-12.
- 2.13 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.
- 2.14 The table below highlights the comparison of T&D losses as per actual and approved by the Commission in its tariff order for FY 2011-12:



Table 2: Transmission & 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
T&D Losses (%)	17.00%	17.00%	18.50%

- 2.15 CED requests the Hon'ble Commission to approve the actual T&D loss of 18.50% for FY 2011-12.

Energy Balance

- 2.16 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 & Actual Energy Balance for FY 2011-12

S. No.	Particulars	Approved as per T.O. dated May 7, 2012	FY 2011-12 (Actual)
A)	ENERGY REQUIREMENT		
1	Energy sales within the State/UT	1,460.92	1,301.47
2	Energy sales to Agriculture consumers (included in total sales)		
3	<u>Total sales within the State/UT</u>	1,460.92	1,301.47
4 a)	Distribution losses		
i)	%	17.00%	18.50%
ii)	MU	299.22	295.33
b)	Losses due to absence of interstate transmission point		
i)	%		2.00%
ii)	MU		32.59
5	Energy required at State Periphery for Sale to Retail Consumers	1,760.14	1,629.39
6	Add: Sales to common pool consumers/ UI	192.67	204.93
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		



S. No.	Particulars	Approved as per T.O. dated May 7, 2012	FY 2011-12 (Actual)
	b) Banking Arrangement*	32.37	2.85
10	Total Energy Requirement for State (5+6)	1,952.81	1,834.32
11	Inter-state Transmission losses		
i)	MU	68.93	56.52
12	Total Energy Requirement including transmission losses (10+11)	2,021.74	1,890.84
B)	ENERGY AVAILABILITY / PURCHASED		
1	Net Generation (Share from CGS & shared plants) (in Mus)	1,611.69	1,633.01
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
2	Power Purchased from (Other Sources)	302.25	257.83
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	-
3	Net Energy purchase (MU)	1,913.94	1,890.84
H	PXIL (Buy) to match the energy requirement	107.80	
4	Gross Purchase including PX (MU)	2,021.74	

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

- 2.17 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

- 2.18 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.
- 2.19 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)
		Annual Total	1,730.27	1,685.92

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



- 2.20 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

- 2.21 For computing the power purchase cost for FY 2011-12, CED has considered the power purchase cost validated by the Hon'ble Commission for 10 months of FY 2011-12 during the issuance of FY 2012-13 Tariff Order and has added the power purchase cost for balance two months (i.e. February and March 2012) of FY 2011-12.
- 2.22 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.
- 2.23 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 vide letter dated 6.7.2012 and in subsequent suo-moto hearings for carry forward of the renewable purchase obligation (RPO) to the subsequent years in view of the limited availability of solar and non-solar REC in the exchange. In compliance to the same, CED has purchased additional RECs during FY 2012-13 for meeting the RPO for FY 2011-12. Therefore, CED once again requests the Hon'ble Commission to consider the carry forward of RPO to future year and allow cost of the same.
- 2.24 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.
- 2.25 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

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	



Source	Approved by the Commission for FY 2011-12				Actual for FY 2011-12	
Supplementary Bills & Arrears					34.51	
LC Charges					0.64	
Total	2,021.74	618.84	3.06	1,890.84	623.65	3.30

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

Other Components

2.27 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

2.28 Net Annual Revenue Requirement has been computed after netting off Non-Tariff Income of CED.

Operation & Maintenance Expenses

2.29 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

2.30 Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits i.e. pension & gratuity, leave encashment and staff welfare expenses.

2.31 The Employee Expenses as per the annual accounts for FY 2011-12 were Rs. 47.46 Crore 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



- 2.32 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.
- 2.33 The actual expense incurred by CED towards R&M expense for FY 2011-12 is Rs. 8.85 Cr as against the approved Rs. 9.57 Cr. by the Hon'ble Commission during the review of FY 2011-12.
- 2.34 The Hon'ble Commission is requested to allow the actual R&M expenses of Rs. 8.85 Crores for FY 2011-12.

Administrative & General Expenses

- 2.35 Administrative and General expenses mainly comprise of rents, telephone and other communication expenses, regulatory expenses, professional charges, conveyance and travelling allowances, other debits.
- 2.36 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 actual A&G expense amount submitted to the Hon'ble Commission.
- 2.37 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 Crores) for FY 2011-12

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

Depreciation

- 2.38 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.



- 2.39 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 also directed its various divisions to provide all details of capital expenditures executed in the past and capitalization of works. However, it is submitted to the Hon'ble Commission that CED is in operation since 1966/67 and gathering old records may take some time. In the meanwhile, CED requests the Hon'ble Commission to allow 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. Crores) 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%
Depreciation	0.66	19.63

- 2.40 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 Crores for FY 2011-12.

Advance Against Depreciation (AAD)

- 2.41 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

- 2.42 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.



- 2.43 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%
Interest on Normative Loan	33.18

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

Interest on Working Capital

- 2.45 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”



- 2.46 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.
- 2.47 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 common account and is therefore not available at the disposal of the CED. Further, it is submitted that the Regulations 29 with respect to the calculation of working capital and interest on working capital do not provide for deduction of security deposit from the working capital requirement.
- 2.48 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

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
Total Working Capital		56.83
Interest Rate (%)		13.00%
Interest on WC		7.39

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

Reasonable Return

- 2.50 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.”

- 2.51 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. Crore)**

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%
Return on NFA	8.70

Provision for Bad Debts

2.52 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

2.53 The Non-tariff income comprises of metering, late payment charges, interest on staff loans, reconnection fee, miscellaneous revenue etc.

2.54 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

2.55 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 & Exchange (in Rs. Cr) for FY 2011-12

Particular	Units (in MUs)	Amount (Rs. Cr)	Per Unit (Rs. Per kWh)
UI Sale	114.17	32.15	2.82
Exchange Sale	87.90	26.74	3.11
Banking*	2.85	-	-



Particular	Units (in MUs)	Amount (Rs. Cr)	Per Unit (Rs. Per kWh)
Total	204.93	58.89	

**Net units banked with J&K*

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

Aggregate Revenue Requirement for FY 2011-12

2.57 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	1.97
Depreciation	0.66	19.63
Interest and finance charges	2.27	33.18
Interest on working capital & Interest on Security Deposit	5.14	9.78
Return on NFA /Equity	-	8.70
Provision for Bad Debt	-	5.29
Advance Against Depreciation	-	-
Total Revenue Requirement	693.99	758.52
Less: Non-Tariff Income	10.87	15.41
Less: Revenue from Sale through UI & Power Exchanges	42.79	58.89
Net Revenue Requirement	640.33	684.21

Revenue from Sale of Power

2.58 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	Total Revenue	594.4	534.71

2.59 During FY 2011-12, the actual revenue is lower than the approved revenue primarily due lower actual sales across consumer categories.

2.60 Since the revenue collected is lower than the actual billing, CED has considered Rs. 529.36 Cr towards revenue realization for FY 2011-12 after accounting for 99% of collection efficiency. Further, CED requests the Hon'ble Commission to consider the revenue of Rs. 529.36 Cr towards computation of revenue deficit.

Revenue Gap for FY 2011-12

2.61 In the Tariff Order for FY 2012-13, the Hon'ble Commission had approved a revenue gap of Rs. 45.93 Cr for FY 2011-12 based on the review. However, considering the actual expenditure and revenue (as also detailed above), the actual revenue gap for the FY 2011-12 computes to Rs. 154.85 Cr. Comparison of the approved and actual ARR, revenue and revenue gap is summarized in table below:

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

Description	Approved as per T.O. (RE)	Proposed (Actual)
Net Revenue Requirement	640.33	684.21
Revenue from sale of Power	594.40	529.36
Revenue Surplus/ (Gap)	(45.93)	(154.85)



- 2.62 The Hon'ble Commission is requested to approve above mentioned Revenue gap. 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."*
- 2.63 CED request the Hon'ble Commission to allow carrying cost based on interest rate approved for working capital borrowing in line with the principles defined in the tariff regulations. CED has proposed the interest on revenue gap in the Chapter 3: ARR Projections for FY 2013-14.



A3: Chapter 3: Annual Performance Revised for FY 2012-13 and ARR Projection for FY 2013-14

3.1 In this section, CED has outlined its performance for FY 2012-13 for eight months (upto November 2012) against the Tariff Order for FY 2012-13 issued by the Hon'ble Commission on May 7th, 2012 and also has proposed review of ARR for FY 2012-13 based on the eight month actual figures. Further, CED is submitting the projections of ARR for FY 2013-14 as per the methodology defined in the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

Sales Projection

3.2 The category wise connected load (in kW) for FY 2006-07 to FY 2011-12 of CED are shown in the following table

Table 16: Category-wise connected load(in KW)

Category	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Domestic	518,366	539,862	588,925	609,933	609,926	658,690
Commercial	240,035	252,872	260,796	274,628	301,758	318,272
Large Supply	65,160	67,049	64,321	65,937	65,026	65,763
Small Power	15,513	15,452	17,398	18,484	18,500	18,652
Medium Supply	37,961	40,631	51,222	53,566	55,564	57,603
Agriculture	998	987	986	1,006	737	675
Public Lighting	3,511	3,540	3,845	2,966	5,039	5,455
Bulk Supply	11,388	11,659	27,119	42,977	28,745	30,378
Others-Temporary Supply	-	-	8,654	8,763	24,741	27,840
Total	892,932	932,052	1,023,266	1,078,260	1,110,035	1,183,329

3.3 The category wise number of consumers for the period FY 2006-07 to FY 2011-12 for CED are shown in the table below:

Table 17: Category-wise number of consumers

Category	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Domestic	160,292	162,105	165,121	167,208	168,429	170,364
Commercial	23,354	23,536	24,066	24,420	24,837	25,359
Large Supply	99	102	103	102	102	104
Small Power	1,226	1,359	1,371	1,409	1,286	1,291
Medium Supply	786	865	879	884	1,042	1,076
Agriculture	164	163	163	167	133	122
Public Lighting	538	546	554	568	678	775
Bulk Supply	167	190	219	258	286	348
Others-Temporary Supply	294	261	265	266	751	903
Total	186,920	189,127	192,741	195,282	197,544	200,342



- 3.4 Based on the past growth trends and actual number of consumers and load addition during the eight months of FY 2012-13, the category-wise number of consumers and connected load projections for FY 2012-13 and FY 2013-14 is summarized in table below:

Table 18: Projected Category-wise Number of consumers & Connected Load for FY 2012-13 & FY 2013-14

Category	Number of Consumers		Connected Load (KW)	
	FY 2012-13	FY 2013-14	FY 2012-13	FY 2013-14
Domestic	178,883	187,828	683,736	709,734
Commercial	25,806	26,261	340,119	363,466
Large Supply	104	104	66,251	66,743
Small Power	1,291	1,291	19,090	19,539
Medium Supply	1,152	1,233	59,902	62,293
Agriculture	122	122	675	675
Public Lighting	867	970	6,130	6,887
Bulk Supply	383	422	31,549	32,765
Others-Temporary Supply	994	1,094	30,624	33,686
Total	209,602	219,325	1,238,076	1,295,788

- 3.5 The category-wise sales for FY 2006-07 to FY 2011-12 for CED were as follows:

Table 19: Category wise Sales in MUs

Category	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Domestic	425.00	450.00	433.00	471.90	518.00	525.79
Commercial	313.00	313.00	318.00	440.50	398.00	417.36
Large Supply	138.00	142.00	145.00	141.40	140.00	128.72
Small Power	14.00	16.00	17.00	20.70	21.00	22.02
Medium Supply	83.00	91.00	101.00	116.50	89.00	103.71
Agriculture	2.00	1.00	1.00	1.00	2.00	1.27
Public Lighting	16.00	15.00	14.00	15.10	17.00	17.45
Bulk Supply	28.00	33.00	39.00	57.70	73.00	74.67
Others-Temporary Supply	46.00	95.00	124.00	10.50	27.00	10.50
Total	1,065.00	1,156.00	1,192.00	1,275.30	1,285.00	1,301.47

- 3.6 Sales projections for FY 2012-13 and FY 2013-14 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.



- 3.7 As also detailed above in the chapter for provisional true-up for FY 2011-12, the actual sales during FY 2011-12 has been different as the approved sales in the various categories. Therefore, revised growth rate have been calculated considering the actual sales in each of the categories.
- 3.8 Sales forecast for various categories barring some category have been done based on CAGR trends. CAGR for past years i.e. 3 years, 4 years and 5 years have been computed across each consumer category. CAGR for various categories as computed based on historical data is summarized in the table below:

Table 20: CAGR of Sales at the end of FY 2011-12

Consumer Category	3 Yr. CAGR	4 Yr. CAGR	5 Yr. CAGR
Domestic	6.69%	3.97%	4.35%
Commercial	9.49%	7.46%	5.92%
Large Supply	-3.89%	-2.43%	-1.38%
Small Power	9.00%	8.31%	9.48%
Medium Supply	0.89%	3.32%	4.55%
Agriculture	8.43%	6.26%	-8.61%
Public Lighting	7.62%	3.85%	1.75%
Bulk Supply	24.17%	22.65%	21.67%
Others-Temporary Supply	-56.09%	-42.34%	-25.58%
Total	2.97%	3.01%	4.09%

- 3.9 The energy sales for FY 2012-13 and FY 2013-14 have been determined based on three-year CAGR in various consumer categories. Since the energy sales in each category depends upon a number of factors like growth in economy, climate, Government policies, etc, normalization in sales has been undertaken in order to remove any wide fluctuations.
- 3.10 The assumptions and methodology adopted in estimating the sales under different categories has been detailed in the following paragraphs:

Domestic Sales

- 3.11 Sales to domestic consumers form approximately 40% of the total CED sales. The growth in sales to domestic consumers has remained buoyant in the recent years. The 3-year CAGR has been 6.69% as compared with 4-year and 5-year CAGR of 3.97% and 4.35%, respectively.
- 3.12 It is assumed that the growth in other domestic category in past years would continue in the subsequent years. The increase in domestic consumers would largely come from increase in consumers and increase in specific consumption of the existing consumers due to increase in living standards. Therefore, a growth of 6.69% i.e. similar to last 3-year CAGR has been considered for projecting sales to domestic consumers for FY 2012-13 & FY 2013-14.



Commercial Sales

- 3.13 Commercial category forms more than 30% of the total CED sales. Sales in commercial category have recorded a 3-year CAGR of approx. 9.49%. The increase is on account of growth in commercial outlets and load in the region. Therefore, CED has considered a growth rate of 9.49% during next 2 years for sales projection to commercial category of consumers.

Large Supply

- 3.14 Consumers in this category have remained stagnant while the sales have shown a negative CAGR in the past five years. Therefore, no growth in the sales in this category has been projected for FY 2012-13 and FY 2013-14.

Small Industrial Power

- 3.15 This category of consumers comprise of small power industries with connected load not exceeding 20 KW. The growth in sales in this category for FY 2012-13 and FY 2013-14 has been projected based on the 3-year CAGR of 9.00%.

Medium Industrial Supply

- 3.16 The medium industrial supply applies to industrial consumers having connected load ranging from 21 kW to 100 kW. Sales to this category have not seen much movement. The recorded 3-year CAGR has been 0.89% which has been used to project the sales for FY 2012-13 and FY 2013-14.

Agriculture

- 3.17 Share of sales to agriculture category forms a miniscule part of CED sales. The 3-year CAGR has been utilized for projecting sales in this category.

Street Light

- 3.18 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. This category has recorded a 3-year CAGR of 7.62%. The same has been considered as the rate of growth for sales projection for the next 2 years.

Bulk Supply

- 3.19 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.



- 3.20 The number of consumers and sales in this category is increasing at a high growth rate. The 3-year CAGR of the sales recorder under this category has been 24.17% which has been utilized for projecting the sales for FY 2012-13 & FY 2013-14.

Temporary Supply

- 3.21 There is no specific trend in sales to temporary supply in the past 5 years. The 3-year CAGR recorded under this category shows a negative trend. Also, the sales in this category declined during FY 2011-12. It is submitted that the consumption in this category cannot be projected with certainty owing to the nature of the category. Therefore, a reasonable growth of 10% has been considered for projection of sales to this category for FY 2012-13 & FY 2013-14.

Sales Forecast Consolidated

- 3.22 The category-wise actual sales for FY 2011-12, approved and revised projected sales for FY 2012-13 & projected sales for FY 2013-14 is summarized in table below:

Table 21: Actual, Approved and Proposed Sales for FY 2012-13 and FY 2013-14 (in MUs)

Category	2011-12 (Actual)	2012-13 (Approved)	2012-13 (RE)	2013-14 (Projected)
Domestic	525.8	618.4	560.9	598.4
Commercial	417.4	495.5	456.9	500.3
Large Supply	128.7	147.0	128.7	128.7
Small Power	22.0	28.2	24.0	26.2
Medium Supply	103.7	119.6	104.6	105.5
Agriculture	1.3	1.7	1.4	1.5
Public Lighting	17.4	20.3	18.8	20.2
Bulk Supply	74.7	106.7	92.7	115.1
Others-Temporary Supply	10.5	10.5	11.6	12.7
Total Sales	1,301.5	1548.0	1,399.7	1,508.7

- 3.23 The above table summarizes projected category-wise sales for FY 2012-13 and FY 2013-14. CED submits to the Hon'ble Commission to approve the revised energy sales forecasted for FY 2012-13 and projected energy sales for FY 2013-14 herein.

Transmission & Distribution Losses

- 3.24 The Hon'ble Commission had approved T&D loss level of 16.00% for FY 2012-13 for CED in the Tariff Order for FY 2012-13 issued on May 7th, 2012. While approving the T&D loss level for FY 2012-13, the approved loss of 17.00% was considered and 1% reduction as per the recommendations of the Abraham Committee report was considered.

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



actual distribution loss for FY 2011-12 was 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.

- 3.26 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. CED requests the Hon'ble Commission to allow 2% losses on account of absence of metering point within the boundaries of Chandigarh.
- 3.27 It is also submitted to the Hon'ble Commission that the LT consumers contribute majority of the total energy sales of CED. Considering the high mix of LT consumption, it is submitted that the current loss levels are amongst the lowest in the country and further reduction in the losses can be achieved with high capital investment. 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 18.00% for FY 2012-13 and 17.00% for FY 2013-14.
- 3.28 CED requests the Hon'ble Commission to consider the actual T&D loss of FY 2011-12 for approving the target T&D loss for FY 2012-13 and FY 2013-14.

Power Purchase Quantum

- 3.29 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.
- 3.30 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.
- 3.31 Since the allocation of power from various sources is inadequate, the Petitioner is required to procure power from short –term sources i.e. UI, exchange, banking and other trading sources. 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 draws.



- 3.32 For estimation of quantum of power purchase for FY 2012-13, actual power available during the first eight months (April '12 - Nov '12), 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'12 to Mar'13), CED has considered the actual power available during last four months of FY 2011-12.
- 3.33 Under the banking arrangement CED has procured power from J&K during the summer months in FY 2012-13. It is required to return this banked power during FY 2012-13. Therefore, the balance quantum of power to be returned has been considered during FY 2012-13.
- 3.34 Actual power procured under short-term has been considered. This includes power procured under bilateral which was procured based on competitive bidding, UI power and power exchange has been considered.
- 3.35 Considering the energy balance for FY 2012-13, CED would be required to purchase 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. exchange.
- 3.36 For projection of power available for FY 2013-14, CED has considered the following methodology:
- Average allocation (including fixed and variable allocation) of last 12 months for computing the allocation of power from various sources. The average allocation considered is summarized in table below:

Table 22: Plant-wise Allocation for Projection of Power Purchase Quantum for FY 2013-14

Generation Company	Name of Project	Type	Capacity (in MW)	Average Allocation (%)
NTPC	Anta	Gas	419	1.99%
	Auraiya	Gas	663	1.31%
	Dadri GPP	Gas	830	0.92%
	Dadri II TPP	Coal	980	0.68%
	Kahalgaon II	Coal	1500	0.19%
	Rihand I	Coal	1000	1.67%
	Rihand II	Coal	1000	1.47%
	Rihand III	Coal	1000	1.11%
	Singrauli	Coal	2000	0.67%
	Unchahar I	Coal	420	0.69%
	Unchahar II	Coal	420	1.38%
	Unchahar III	Coal	210	1.14%
NHPC	Chamera I	Hydel	540	3.90%
	Chamera II	Hydel	300	1.66%



Generation Company	Name of Project	Type	Capacity (in MW)	Average Allocation (%)
	Chamera III	Hydel	231	1.54%
	Dhauliganga	Hydel	280	1.52%
	Dulhasti	Hydel	390	1.27%
	Salal	Hydel	690	0.27%
	Sewa II	Hydel	120	1.63%
	Tanakpur	Hydel	120	1.28%
	Uri	Hydel	480	0.62%
NPCIL	NAPP	Nuclear	446	1.92%
	RAPP B	Nuclear	440	0.66%
	RAPP C	Nuclear	440	1.79%
SJVNL	SJVNL/NJPC	Hydel	1000	1.06%
APCPL	IGSTPP	Coal	1000	0.34%
THDC	Koteshwar	Hydel	400	0.89%
	Tehri	Hydel	1000	1.13%

- Average PLF of last three years has been considered for CGS thermal and nuclear stations. For Rihand III, normative PLF of 85% has been considered.
- For IGSTPP (APCPL) generating station, average PLF of past two years has been considered.
- For BBMB (including Dehar & Pong), the total units estimated (eight months actual and four months projected) for FY 2012-13 has been projected for FY 2013-14.
- In case of hydro-stations, design energy for respective generating plants has been considered.
- Auxiliary consumption has been considered on normative basis for thermal and hydro stations as per CERC norms

3.37 In view of the computed energy balance, there would be a demand-supply gap during FY 2013-14 which would be required to be met through purchase of power from short-term sources. The purchase of deficit power has been considered from mix of bilateral and Exchange in the ratio of 70% and 30%, respectively.

Inter-State Transmission Losses

3.38 Inter-State transmission losses of 3.35% have been considered based on the actual transmission losses for FY 2011-12.

**Energy Availability during FY 2012-13 & FY 2013-14**

- 3.39 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 23: Power Purchase in MUs for FY 2012-13 & FY 2013-14

Particulars	FY 2012-13 (Approved)	FY 2012-13 (RE)	FY 2013-14 (Projected)
NTPC	687.17	549.20	682.49
NHPC	168.29	215.43	187.27
NPCIL	86.77	121.09	108.10
SJVNL	85.93	76.88	68.31
BBMB	676.79	681.41	681.41
APCPL	10.7	16.14	15.63
THDC	79.8	45.55	41.33
Others	110.74	252.11	134.61
Total	1,906.18	1,957.82	1,919.15

- 3.40 The Petitioner requests the Hon'ble Commission to approve the quantum of power purchase for FY 2012-13 and FY 2013-14 as estimated in the table above.

Energy Balance

- 3.41 Based on the data on projected sales and power purchase obtained, a revised energy balance has been prepared for FY 2012-13 and projected energy balance for FY 2013-14:

Table 24: Energy Balance in MUs for FY 2012-13 & FY 2013-14

S. No.	Particulars	FY 2012-13	FY 2012-13	FY 2013-14
		Approved	RE	Projected
A)	ENERGY REQUIREMENT			
1	Energy sales within the State/UT	1,548.01	1,399.65	1,508.70
2	Energy sales to Agriculture consumers (included in total sales)			
3	Total sales within the State/UT	1,548.01	1,399.65	1,508.70
4 a)	Distribution losses			
i)	%	16.00%	18.00%	17.00%
ii)	MU	294.86	307.24	309.01
b)	Losses due to absence of interstate transmission point			
i)	%		2.00%	2.00%
ii)	MU		34.83	37.10



S. No.	Particulars	FY 2012-13	FY 2012-13	FY 2013-14
5	Energy required at State Periphery for Sale to Retail Consumers	1,842.87	1,741.73	1,854.81
6	Add: Sales to common pool consumers/ UI		155.67	-
7	Sales outside state/UT : UI/Under drawal		83.21	-
8	Sales			
	a) To electricity traders			
	b) Through PX		48.37	-
9	Sales to other distribution licensees			
	a) Bilateral Trade		-	-
	b) Banking Arrangement		24.10	-
10	Total Energy Requirement for State (5+6)	1,842.87	1,897.40	1,854.81
11	Inter-state Transmission losses			
i)	MU	63.31	60.41	64.34
12	Total Energy Requirement including transmission losses (10+11)	1906.18	1,957.82	1,919.15
B)	ENERGY AVAILABILITY / PURCHASED			
1	Net Generation ((Share from CGS & shared plants) (in Mus)	1,704.95	1,644.01	1,727.58
A	NTPC	687.17	549.20	682.49
B	NHPC	168.29	215.43	187.27
C	NPCIL	86.77	121.09	108.10
D	SJVNL/NJPC	85.93	76.88	68.31
E	BBMB (including dehar & pong)	676.79	681.41	681.41
2	Power Purchased from (Other Sources)	90.50	313.80	191.57
A	THDC	79.80	45.55	41.33
B	Jhajjar	10.70	16.14	15.63
C	PXIL (Buy)		68.24	40.38
D	Bilateral Trade (Buy)		120.47	94.23
E	RPO (Buy)			
F	UI (Buy)		41.20	
G	Banking Arrangements (Buy)		22.21	
3	Net Energy purchase (MU)	1,795.44	1,957.82	1,919.15
H	PXIL (Buy) to match the energy requirement	110.74		
4	Gross Purchase including PX (MU)	1,906.18		

Power Purchase Cost for FY 2012-13

3.42 The cost of purchase from the various sources during FY 2012-13 has been projected based on the following assumptions:



- Actual power purchase cost for the first eight months of FY 2012-13 has been considered based on the invoices received from various generating stations, short-term sources, etc. The supplementary and arrear amount for the eight months has been considered based on actual invoices.
- 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 2012-13. For the projections of balance four months, CED has not considered any supplementary/ arrear charges and requests the Hon'ble Commission to approve the same at the time of true-up.
- UI charges for the first eight months have been considered for energy drawn within the specified frequency of 49.7 (capped as per UI Regulations notified by CERC).
- The proposed shortage during the balance four months of FY 2012-13 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 2012-13
- The transmission, NRLDC and reactive energy charges for FY 2012-13 has been considered based on the actual invoices received during the first eight months of FY 2012-13.
- CED has also included the LC charges incurred towards power purchase in the total power purchase cost for FY 2012-13.

3.43 The estimated power purchase quantum and cost for FY 2012-13 is tabulated below:

Table 25: Estimated Power purchase Cost for FY 2012-13

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)	Total Charges (Rs. Cr)	Total Charges (Rs/kWh)
1	NTPC	Anta	32.85	4.52	9.76	0.01	0.05	14.35	4.37
2		Auraiya	24.40	3.50	8.18	0.00	0.03	11.71	4.80
3		Dadri GPP	34.55	4.02	10.64	(0.00)	0.05	14.71	4.26
4		Dadri II TPP	35.42	7.86	10.10	(0.00)	0.05	18.00	5.08
5		Kahalgaoon II	16.81	2.27	3.69	0.00	0.03	6.00	3.57
6		Rihand I	103.13	8.31	12.63	0.77	0.23	21.94	2.13
7		Rihand II	115.02	10.55	14.35	(0.00)	0.25	25.16	2.19
8		Rihand III	13.40	2.44	1.68	0.03	0.00	4.16	3.10
9		Singrauli	97.71	5.41	11.52	0.02	0.19	17.13	1.75



S. No	Generating Company	Name of Project	Units (MU)	Capacity Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Other Charges (Rs. Cr)	Arrears / Supplement ary Charges (Rs. Cr)	Total Charges (Rs. Cr)	Total Charges (Rs/kWh)
10		Unchahar I	19.79	1.93	4.81	0.00	0.05	6.79	3.43
11		Unchahar II	39.36	4.67	9.42	0.12	0.09	14.31	3.63
12		Unchahar III	16.76	2.56	3.99	0.00	0.04	6.59	3.93
13	NHPC	Chamera I	94.39	6.66	8.47	0.01	1.31	16.45	1.74
14		Chamera II	25.06	3.84	3.23	0.00	0.43	7.50	2.99
15		Chamera III	10.38	1.49	1.36	0.00	0.25	3.11	2.99
16		Dhauliganga	18.49	2.90	2.57	0.00	0.37	5.85	3.16
17		Dulhasti	28.15	8.35	7.86	0.00	0.74	16.96	6.03
18		Salal	8.75	0.50	0.41	0.00	0.16	1.06	1.21
19		Sewa II	7.71	1.82	1.52	0.00	0.10	3.43	4.45
20		Tanakpur	4.67	0.75	0.53	0.00	0.22	1.50	3.22
21		Uri	17.83	1.83	1.41	0.00	0.33	3.57	2.00
22		NPCIL	NAPP	39.93	-	9.50	0.37	0.05	9.92
23	RAPP B		22.81	-	6.27	0.13	-	6.40	2.80
24	RAPP C		58.34	-	20.12	0.22	(0.12)	20.23	3.47
25	SJVNL	SJVNL/NJPC	76.88	10.73	8.80	0.95	0.09	20.58	2.68
26	BBMB	BBMB 3.5%	279.91	6.31	-	-	5.36	11.68	0.42
27		BBMB 1LU	36.50	-	11.64	-	-	11.64	3.19
28		BBMB 10LU	365.00	-	168.56	0.43	1.18	170.17	4.66
29	APCPL	IGSTPP	16.14	4.63	5.48	0.02	-	10.14	6.28
30	THDC	Koteshwar	10.06	2.46	2.20	-	0.00	4.66	4.63
31		Tehri	35.49	6.63	8.87	0.26	0.71	16.47	4.64
32	Others	Banking J &K	22.21	-	-	-	-	-	-
33		Bilateral Source	120.47	-	49.30	-	-	49.30	4.09
34		NRLDC F &C	-	0.06	0.30	0.12	-	0.47	-
35		PGCIL Transmission Charges	-	36.02	-	-	-	36.02	-
36		Power Exchange (Buy)	68.24	-	27.21	-	-	27.21	3.99
38		Reactive Energy Charges	-	-	-	0.40	-	0.40	-
39		LC Charges	-	-	-	0.60	-	0.60	-
40		UI (Buy) (Payable)	41.20	-	13.97	-	-	13.97	3.39



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)	Total Charges (Rs. Cr)	Total Charges (Rs/kWh)
		Total Power Purchase Cost	1,957.82	153.03	460.35	4.47	12.24	630.09	3.22

3.44 The Hon'ble Commission is requested to approve the revised power purchase cost (excluding cost of REC) of Rs 630.09 Crores including transmission charges for FY 2012-13 as shown in table above.

Power Purchase Cost for FY 2013-14

3.45 The Power purchase cost for FY 2013-14 has been projected based on the following assumptions:

- Annual fixed charges for Central Generating Stations including coal, gas and hydro have been considered as per latest CERC tariff order for the corresponding Stations.
- For Coal and Gas based Power Plants, an escalation rate of 7.37% is considered over the per unit actual variable cost for FY 2012-13. 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 08-Oct-2012.
- For Hydro Power Stations, an escalation of only 5% is considered in the estimation of variable cost for FY 2013-14.
- 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 2013-14.
- Other charges (including cess, electricity duty, etc.) for FY 2013-14 have been considered at similar level as per the actual bills for FY 2012-13.
- In case of BBMB (3.5% and Dehar & Pong) the actual per month cost during FY 2012-13 has been considered for projecting the FY 2013-14 cost. For the balance units from BBMB (1LU & 10LU) the average per unit cost has been considered with an escalation of 5%.
- For power procured through bilateral purchases and power exchanges, an escalation rate of 5% over the average rate of FY 2012-13 is considered.
- Transmission charges payable to PGCIL are based on the total capacity allocation in the transmission network. An escalation of 10% has been considered over the total transmission charges for FY 2012-13 for projecting the FY 2013-14 transmission charges in view of the allocation from new



generating stations i.e. Rihand III and escalation in transmission tariffs.

- NRLDC and LC charges for FY 2013-14 have also been projected based on the estimated FY 2012-13 charges.

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

Table 26: Projected Power Purchase Cost for FY 2013-14

S. No	Generating Company	Name of Project	Units (MU)	Capacity Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Other Charges (Rs. Cr)	Total Charges (Rs. Cr)	Total Charges (Rs/kWh)
1	NTPC	Anta	48.29	4.25	15.40	0.01	19.67	4.07
2		Auraiya	47.52	3.83	17.09	0.00	20.92	4.40
3		Dadri GPP	46.40	3.75	15.34	0.00	19.09	4.11
4		Dadri II TPP	45.24	7.45	13.85	0.00	21.30	4.71
5		Kahalgaon II	15.12	1.04	3.57	0.00	4.61	3.05
6		Rihand I	121.10	9.55	15.92	0.90	26.37	2.18
7		Rihand II	107.01	9.66	14.34	0.00	24.00	2.24
8		Rihand III	69.72	6.89	9.41	0.17	16.47	2.36
9		Singrauli	100.25	5.07	12.69	0.02	17.77	1.77
10		Unchahar I	21.44	1.75	5.59	0.00	7.35	3.43
11		Unchahar II	42.72	3.61	10.98	0.13	14.72	3.45
12		Unchahar III	17.66	2.28	4.51	0.00	6.80	3.85
13	NHPC	Chamera I	64.94	10.46	6.12	0.01	16.58	2.55
14		Chamera II	24.97	5.59	3.38	0.00	8.97	3.59
15		Chamera III	17.04	0.52	2.35	0.00	2.87	1.68
16		Dhauliganga	17.25	4.12	2.52	0.00	6.65	3.85
17		Dulhasti	24.22	12.14	7.10	0.00	19.25	7.95
18		Salal	8.32	0.68	0.41	0.00	1.09	1.31
19		Sewa II	8.70	3.06	1.80	0.00	4.86	5.58
20		Tanakpur	5.79	1.13	0.69	0.00	1.82	3.15
21		Uri	16.04	2.11	1.33	0.00	3.44	2.14
22	NPCIL	NAPP	37.98	0.00	9.49	0.35	9.84	2.59
23		RAPP B	18.91	0.00	5.46	0.11	5.56	2.94
24		RAPP C	51.21	0.00	18.55	0.20	18.74	3.66
25	SJVNL	SJVNL/NJPC	68.31	10.73	8.21	0.85	19.79	2.90
26	BBMB	BBMB 3.5 %	279.91	6.95	0.00	0.00	6.95	0.25
27		BBMB 1 LU	36.50	0.00	12.23	0.00	12.23	3.35
28		BBMB 10 LU	365.00	0.00	176.99	0.43	177.42	4.86
29	APCPL	IGSTPP	15.63	3.81	5.70	0.02	9.53	6.09
30	THDC	Koteshwar	10.07	2.46	2.32	0.00	4.77	4.74
31		Tehri	31.26	6.63	8.20	0.23	15.06	4.82



S. No	Generating Company	Name of Project	Units (MU)	Capacity Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Other Charges (Rs. Cr)	Total Charges (Rs. Cr)	Total Charges (Rs/kWh)
32	Others	Banking J&K	0.00	0.00	0.00	0.00	0.00	0.00
33		Bilateral Source	94.23	0.00	40.49	0.00	40.49	4.30
34		NRLDC F &C	0.00	0.00	0.00	0.00	0.52	0.00
35		PGCIL Transmission Charges	0.00	0.00	0.00	0.00	39.62	0.00
36		Power Exchange(Buy)	40.38	0.00	16.91	0.00	16.91	4.19
37		Reactive Energy Charges	0.00	0.00	0.00	0.00	0.00	0.00
38		LC Charges	0.00	0.00	0.00	0.60	0.60	0.00
Total Power Purchase Cost			1919.15	129.52	468.92	4.05	642.64	3.35

3.47 CED requests the Hon'ble Commission to approve the total power purchase cost (excluding purchase of REC) of Rs 642.64 Cr including transmission charges for FY 2013-14.

Renewable Purchase Obligation

3.48 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."

3.49 It is submitted that CED has purchased solar and non-solar REC for FY 2012-13 to meet its RPO as specified in the Regulations. Further, it is submitted that CED has purchased additional REC during FY 2012-13 to make good for the shortfall in



purchase of REC for FY 2011-12.

- 3.50 In absence of any RPO specified for FY 2013-14, CED has considered the RPO as per FY 2012-13 in line with the Clause 1.2 of RPO Regulations.
- 3.51 The computation of RPO requirement for FY 2011-12, FY 2012-13 & FY 2013-14 and actual REC purchased during FY 2011-12 and FY 2012-13 is summarized in table below.

Table 27: Proposed and Actual RECs for FY 2012-13 & FY 2013-14

Particulars	Unit	FY 2012-13	FY 2013-14
Consumption of Energy	MU	1,399.65	1,508.70
RPO	%	3.00%	3.00%
As per Regulations			
Solar RECs (0.40%)	No.	5,599	6,035
Non Solar RECs (2.60%)	No.	36,391	39,226
Actual REC Purchased (upto Nov'12)			
Solar RECs Purchased	No.	2,204	
Non Solar RECs Purchased	No.	52,732	

- 3.52 During FY 2011-12, 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 will meet its consolidated RPO for FY 2011-12 and FY 2012-13 by purchasing additional REC during FY 2012-13. CED requests the Hon'ble Commission to approve the same and allow the cost of additional REC purchased during FY 2012-13.
- 3.53 Further it is submitted that the CED had planned to procure RECs as per the consumption approved by the Hon'ble Commission for FY 2012-13. Since CED has proposed revision in sales projection for FY 2012-13 as per the actual sales of FY 2011-12, 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 2012-13, the Hon'ble Commission is requested to allow carry forward of RPO to the following years.
- 3.54 The details of RECs purchased and cost thereof during eight months of FY 2012-13 (up to Nov'12) and proposed REC cost for FY 2012-13 (full year) is summarized in the table below:

**Table 28: Details of RECs for FY 2012-13 (upto Nov'12)**

Particulars	Nos.	Cost (Rs. Cr)
Solar RECs Purchased	2,204	2.77
Non Solar RECs Purchased	52,732	8.74
Actual REC Purchased (upto Nov'12)	54,936	11.51
Add: Solar RECs to be purchased in Balance four months	2,331	3.12
Total for FY 2012-13	57,267	14.63

3.55 For FY 2013-14, CED proposes to meet RPO 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 23rd August 2011 on "Determination of Forbearance and Floor Price for REC Framework" to be applicable from April 1st, 2012. CED requests the Hon'ble Commission for approval of Rs. 21.03 Cr for the purchase of RECs during FY 2013-14.

3.56 The revised total power purchase cost for FY 2012-13 & projected power purchase cost for FY 2013-14 is summarized in the table below:

Table 29: Power Purchase Cost for FY 2012-13 & FY 2013-14 (Rs. Cr)

Particulars	FY 2012-13 (RE)			FY 2013-14 (Projected)		
	Units (MUs)	Cost (Rs. Cr)	Per Unit (Rs. Per unit)	Units (MUs)	Cost (Rs. Cr)	Per Unit (Rs. Per unit)
Gross Power Purchase	1957.82	630.09		1919.15	642.64	
Cost of REC		14.63			21.03	
Total Power Purchase	1957.82	644.72	3.29	1919.15	663.67	3.46

3.57 CED requests the Hon'ble Commission to approve the total power purchase cost for FY 2012-13 and FY 2013-14 as proposed in the table above and consider the same for the purpose of ARR determination for FY 2013-14. 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

3.58 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;



- b) **Repair and Maintenance (R&M) Expenses** include all expenditure incurred on the maintenance and upkeep of assets; and
- c) **Administrative and General Expenses** include all expenditure incurred in operating a business such as rent, conveyance, telephone charges, etc.

3.59 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;”

3.60 Since more than half year of FY 2012-13 has already lapsed, CED has considered an escalation of 9.69% p.a. based on the increase in Wholesale Price Index for the first six months of FY 2012-13. The actual WPI data has been considered as available till September 2012 on the website of Economic Advisor, Ministry of Commerce and Industry.

Employee Cost

3.61 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.

3.62 Actual employee expense for FY 2011-12 is Rs. 47.46 Cr, breakup for which is provided in the enclosed formats. For projecting the employee cost for FY 2012-13, CED has considered the actual expense for eight months of FY 2012-13 and projected the employee expense for full year of FY 2012-13 on pro-rata bases. Further employee cost for FY 2013-14 has been projected based on the estimated employee expense for FY 2012-13 and an increase of 9.69% based on the average increase in WPI Index as detailed above.

3.63 In the previous petition, CED had highlighted the requirement for addition in employees for various departments. However, the Hon'ble Commission had disallowed recruitment of new employees in the Tariff Order for FY 2012-13. As per the directive of the Hon'ble Commission, CED has initiated the manpower study and appointed the consultant to carry out the same.

3.64 It is submitted that the current number of employees are not sufficient to carry out smooth operations of CED and with the increase in number of consumers and retirement of employees, CED is facing a lot of difficulty in day to day operation of the department. Further, approval from the Administration of UT of Chandigarh has also been deferred due to disapproval of the Hon'ble Commission with regard to addition of employees in the precious Tariff Order. Therefore, the delay in addition of new employee during FY 2012-13 has aggravated the problems of the department. CED proposes to add new employees to fill the vacancies created due to retirement of employees during the period



FY 2011-12 to FY 2013-14.

- 3.65 CED once again requests the Hon'ble Commission to allow addition of employees towards vacant positions during FY 2013-14. The Hon'ble Commission is requested to true-up the actual employee cost of CED based on actual at the end of the year.
- 3.66 The projected employee cost for FY 2012-13 and FY 2013-14 is provided in the table below:

Table 30: Employee Expenses for FY 2012-13 and FY 2013-14

Particulars	FY 2012-13 (Approved)	FY 2012-13 (Actual upto Nov)	FY 2012-13 (RE)	FY 2013-14 (Projected)
Employee Expenses	60.98	35.93	53.89	59.11
Less: Capitalization	-	-	-	-
Total Employee Expenses	60.98	35.93	53.89	59.11

- 3.67 The Hon'ble Commission is requested to approve the employee costs for FY 2012-13 and FY 2013-14 as proposed by CED.

Repair and Maintenance Cost

- 3.68 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.
- 3.69 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.
- 3.70 The actual R&M expense for FY 2011-12 is considered as the base and an increase of 9.69% per annum has been considered over the same in line with the estimated wholesale price index for projecting the R&M expense for FY 2012-13 and FY 2013-14.

Table 31: R&M Expenses for FY 2012-13 and FY 2013-14 (Rs. Cr)

Particulars	FY 2012-13 (Approved)	FY 2012-13 (Actual upto Nov)	FY 2012-13 (RE)	FY 2013-14 (Projected)
R&M Expenses	10.41	6.38	9.56	11.42

- 3.71 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**

- 3.72 Administration and General expenses mainly comprise of rents, telephone and other communication expenses, regulatory expense, professional charges, conveyance and travelling allowances and other expenses.
- 3.73 For projecting the A&G expense for FY 2012-13, the actual A&G expense Rs.1.66 Cr for up to November, 2012 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.
- 3.74 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.
- 3.75 The approved and proposed A&G cost for FY 2012-13 and FY 2013-14 is shown below:

Table 32: A&G expenses for FY 2012-13 and FY 2013-14 (Rs. Cr)

Particulars	FY 2012-13 (Approved)	FY 2012-13 (Actual upto Nov)	FY 2012-13 (RE)	FY 2013-14 (Projected)
A&G Expenses	1.57	1.65	2.31	2.54

- 3.76 The revised estimate for FY 2012-13 proposed by CED is higher than the approved A&G expense for the year. It is submitted that the regulatory & licensee fee was not included in the A&G expense submitted by CED for the previous years. Therefore, the same has not been accounted in the approved A&G amount for FY 2012-13. CED requests the Hon'ble Commission to consider the same for approving the review of FY 2012-13 and projections for FY 2013-14.

Total Operations and Maintenance Expenses

- 3.77 The revised estimates of total O&M expenses for FY 2012-13 and the projected O&M expenses for FY 2013-14 have been calculated by summing up corresponding employee cost, R&M cost and A&G cost.
- 3.78 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.
- 3.79 The table below summarizes the O&M expenses submitted by the Petitioner:

**Table 33: O&M Costs in Rs Cr. projected for FY 2012-13 and FY 2013-14**

Particulars	FY 2012-13 (Approved)	FY 2012-13 (Actual upto Nov)	FY 2012-13 (RE)	FY 2013-14 (Projected)
Employee Expenses	60.98	35.93	53.89	59.11
R&M Expenses	10.41	6.38	9.56	11.42
A&G Expenses	1.57	1.66	2.31	2.54
Total O&M Expenses	72.96	43.96	65.77	73.07

Capital Investment Plan

- 3.80 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.
- 3.81 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.
- 3.82 In the Petition for FY 2012-13, CED had proposed a capital expenditure of Rs. 20.50 Cr for FY 2012-13 which was also approved by the Hon'ble Commission in the tariff order for FY 2012-13. Further it is submitted that upto November of FY 2012-13 CED has incurred Rs. 10.18 Cr towards capital expenditure and would incur a total capital expenditure of Rs. 20.50 Cr for the full year of FY 2012-13.
- 3.83 Further for FY 2013-14, CED proposes a Capital Investment Plan of Rs. 22.50 Cr during FY 2013-14. Funding for the capex works would be entirely from equity.
- 3.84 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 2013-14 is summarized below:

Table 34: Schemes proposed for FY 2013-14 for Capital Expenditure

S. No.	Details of Schemes	Amount (Rs. Lacs)
A.	220 KV WORKS	600
1.	Providing 3rd 100 MVA 220/66KV T/F at 220KV S/Stn. Manimajra	375
2.	O & M of 220/66 KV Sub-station along with Nalagarh-Manimajra transmission line	225
B.	(a) 66 KV WORKS	482



S. No.	Details of Schemes	Amount (Rs. Lacs)
1.	Providing 2x20MVA, 66/11 KV Transformer in place of 2x12.5 MVA T/F and reinstallation of 2x12.5 MVA transformer at existing Grid Sub Stations, at Civil Secretariat Sector-1 & Sector 12, Chandigarh	20
2.	Providing 2x20MVA 66/11KV Grid Sub-Station in the Institutional Area of Village Sarangpur in UT Chandigarh	100
3.	Up-gradation of existing 33KV Grid Sub-station to 66KV voltage level by providing 1x30MVA, 66/11KV power transformer alongwith associated transmission line in Sector 34-C, Chd.	120
4.	Providing 2x20MVA, 66/11KV Grid Sub-Station at Raipur Kalan.	50
5.	Providing 1x30 MVA 66/11KV additional transformer at existing 66/11KV Grid Sub-Station, Sector 52, Chandigarh.	20
6.	Providing new 66/11KV, 16/20 MVA power T/F on existing bay at 66KV Sub-Stn. Sec 47, Chd.	100
7.	Providing Automatic Capacitor Bank at various 66KV Grid Sub-Stns.in Chd.	20
8.	Providing additional 66/11KV 20MVA additional transformer at 66KV Grid Sub-Stn. IT Park, Chandigarh	32
9.	Providing additional 66/33/11KV, 20MVA Transformer at existing 33/11 KV Grid Sub Station, Sector 17, Chandigarh	20
	(b) New Works	418
1.	Providing 66KV Transmission line from 66KV Sub-Station Industrial Area, Phase-I to proposed 66KV Sub-Station Raipur Kalan.	50
2.	Turnkey execution of 66 KV Transmission Line from T-off point to the proposed 66 KV Grid Substation in Institutional Area, Village Sarangpur, Chandigarh.	200
3.	Turnkey Execution for two Nos. 66 KV Line bays at 66/11 KV Grid Substation in Institutional Area, Village Sarangpur, U.T., Chandigarh.	50
4.	Providing 66KV Double circuit line from Sec-80 Mohali to Sec-47 U.T., Chandigarh	20
5.	Replacement of existing 66KV MOCBs with SF6 Breaker installed at 66KV Grid Substation at Sector 52 and Sector 12, Chandigarh.	98
C.	11KV & BELOW WORKS	750
1.	11KV & below works including commissioning of 11/.4KV T/F & related equipments.	750
	TOTAL CAPITAL EXPENDITURE FOR FY 2013-14	2250

Capitalisation schedule

3.85 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 35: Details of CWIP for FY 2012-13 and FY 2013-14 (Rs Cr.)

Particulars	FY 2012-13 (Approved)	FY 2012-13 (RE)	FY 2013-14
Opening CWIP	0	0	0
Add: Capital Expenditure during the Year	20.50	20.50	22.50
Less: Capitalization	20.50	20.50	22.50
Closing CWIP	0	0	0

- 3.86 The Hon'ble Commission is requested to approve the capital expenditure and capitalization of Rs. 22.50 Cr for FY 2013-14. The details of the Investment Plan/ Capital Expenditure are also provided in enclosed Format of the Tariff Filing Formats.

Funding of Capital Investment Plan

- 3.87 The entire capital expenditure proposed by CED for FY 2012-13 and FY 2013-14 is proposed to be funded through equity infusion by Government of India.

Gross Fixed Assets

- 3.88 It is submitted that the Gross Fixed Assets at the end of FY 2011-12 is Rs. 383.88 Cr. The same is considered for the purpose of projection for FY 2012-13 and FY 2013-14.

- 3.89 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”.

- 3.90 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.
- 3.91 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 also directed its various divisions to provide all details of capital expenditures executed in the past and capitalization of works. However, it is submitted to the Hon'ble Commission that CED is in operation since 1966/67 and gathering old



records and getting the same audited may take some time.

- 3.92 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 2012-13 and FY 2013-14.
- 3.93 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 2012-13 and FY 2013-14 is summarized in table below:

Table 36: GFA and CWIP for FY 2012-13 and FY 2013-14

Particulars	FY 2011-12 (Actual)	FY 2012-13 (RE)	FY 2013-14
Opening GFA	359.74	383.88	404.38
Add: Capitalization during the Year	24.14	20.50	22.50
Closing GFA	383.88	404.38	426.88

Depreciation

- 3.94 It is submitted that in absence of fixed asset register with the petitioner, the details of various categories of asset cannot be determined. Post the preparation of asset register and accounts, the petitioner would submit the asset-wise details at the time of true-up.
- 3.95 For the purpose of projections of depreciation for FY 2012-13 and FY 2013-14 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.
- 3.96 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 2012-13 & FY 2013-14 is summarized in table below:

Table 37: Depreciation for FY 2012-13 and FY 2013-14 (Rs Cr.)

Particulars	FY 2012-13 (Approved)	FY 2012-13 (RE)	FY 2013-14
Opening GFA	25.00	383.88	404.38
Addition during the Year	20.50	20.50	22.50
Closing GFA	45.50	404.38	426.88
Average GFA	35.25	394.13	415.63



Particulars	FY 2012-13 (Approved)	FY 2012-13 (RE)	FY 2013-14
Rate of Depreciation	5.28%	5.28%	5.28%
Depreciation for the Year	1.86	20.81	21.95

Interest and Finance Charges

- 3.97 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.
- 3.98 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 2012-13 and FY 2013-14.
- 3.99 Repayment has been considered to be equal to the depreciation amount computed as per the section on computation of depreciation above. The interest at the SBI PLR rate of 14.75% as on April 1st, 2012 has been applied on the average normative debt in order to project the amount of normative interest on long-term loans for FY 2012-13 and FY 2013-14.

Table 38: Interest and Finance charges for Distribution functions for FY 2012-13 and FY 2013-14

Particulars	FY 2012-13 (Approved)	FY 2012-13 (RE)	FY 2013-14
Opening balance of Normative Loans	25.00	249.08	242.62
Repayment for the Year	2.50	20.81	21.95
Add: Normative Loan against Asset Capitalized during the year	20.50	14.35	15.75
Closing Balance of Normative Loan	43.00	242.62	237.67
Average Normative Loans	34.00	245.85	239.53
<i>Interest rate based on SBI PLR</i>	<i>14.75%</i>	<i>14.75%</i>	<i>14.75%</i>
Interest on Normative Loan	5.72	36.26	35.33

- 3.100 CED prays the Hon'ble Commission to approve the Interest on normative loans for capital expenditure for FY 2012-13 (RE) and FY 2013-14 as proposed in the above table.



Interest on Working Capital

3.101 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 39: 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

3.102 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.”*

3.103 An interest rate of 14.75% has been considered as per short-term SBI PLR as on April 1st, 2012 for calculating Interest on working Capital for the FY 2012-13 and FY 2013-14.

3.104 In accordance with above, the working capital and the interest thereon proposed for FY 2012-13 (RE) and FY 2013-14 is provided in the table below:

Table 40: Interest on Working capital for FY 2012-13 and FY 2013-14 (Rs. Cr)

Particulars	FY 2012-13 (RE)	FY 2013-14
Power Purchase	53.73	55.31
Employee Cost	4.49	4.93
R&M	0.80	0.95
A&G	0.19	0.21
Total Working Capital	59.21	61.39
<i>Interest Rate</i>	<i>14.75%</i>	<i>14.75%</i>
Interest on WC	8.73	9.06



Interest on Consumer Security Deposit

- 3.105 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.
- 3.106 CED has proposed addition in consumer security deposit during FY 2012-13 & FY 2013-14 equivalent to the addition during FY 2011-12. Further bank rate of 9.50% has been applied as approved in the tariff order for FY 2012-13 for computation of interest on consumer security deposits.

Table 41: Interest on Consumer Security Deposit for FY 2012-13 and FY 2013-14 (Rs. Cr)

Particulars	FY 2012-13 (RE)	FY 2013-14 (Projected)
Opening	26.33	28.96
Addition	2.63	2.63
Closing	28.96	31.59
<i>Bank Rate</i>	9.50%	9.50%
Interest on Security Deposit	2.63	2.88

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

Return on Equity

- 3.108 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.
- 3.109 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 2011-12 were considered for the purpose of computation of reasonable return.
- 3.110 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.
- 3.111 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 42: Proposed Return for FY 2012-13 & FY 2013-14 (Rs. Crore)

Particulars	FY 2012-13 (Approved)	FY 2012-13 (RE)	FY 2013-14 (Projected)
Opening NFA balance	25	292.28	291.97
Add: Assets Capitalized during the Year		20.50	22.50
Less: Depreciation for the Year	0.66	20.81	21.95
Closing NFA	24.34	291.97	292.53
Reasonable Return (%)	3.0%	3.0%	3.0%
Return on NFA	0.73	8.76	8.77

Provision for Bad & Doubtful Debts

3.112 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.”

3.113 CED has proposed the provision for bad and doubtful debts on 1% of the receivables for FY 12-13 and FY 2013-14.

3.114 CED requests the Hon'ble Commission to approve the provision for bad & doubtful debts as summarized in the Table below:

Table 43: Provision for Bad Debts for FY 2012-13 and FY 2013-14 (Rs. Cr)

Particulars	FY 2012-13 (Approved)	FY 2012-13 (RE)	FY 2013-14 (Projected)
Provision for Bad & Doubtful Debt	6.48	6.51	7.07

Non-Tariff Income

3.115 The Hon'ble Commission had approved a non-tariff income of Rs. 11.96 Cr for FY 2012-13 in the tariff order for FY 2012-13. For the purposes of projections of NTI for FY 2012-13, CED has considered actual non-tariff income for eight months of FY 2012-13 and projected for balance four months of FY 2012-13. While projecting for the balance four months, CED has removed non-recurring items i.e. sale of scrap, etc. For the FY 2013-14, CED has considered similar level of NTI as estimated for FY 2012-13 excluding the non-recurring items.

**Table 44: Non-tariff Income for FY 2012-13 and FY 2013-14**

Particulars	FY 2012-13 (Actual upto Nov)	FY 2012-13 (RE)	FY 2013-14
Sale proceeds of dead stock, waste paper etc	1.94	1.94	-
Meter/Service rent	2.39	3.58	3.58
Late Payment Surcharge	0.75	1.12	1.12
Theft/Pilferage of Energy	1.10	1.10	1.10
Wheeling Charges under Open Access	0.24	0.36	0.36
Interest on staff Loans and advance	0.02	0.03	0.03
Misc receipts/Income	6.51	6.51	6.51
Total Non-Tariff Income	12.94	14.63	12.69

3.116 The petitioner prays to the Hon'ble Commission to allow the non-tariff income for FY 2012-13 (RE) and the FY 2013-14 as per the submissions.

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

3.117 For the purpose of determination of revenue from sale of surplus power for FY 2012-13, 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 power is estimated for the balance four months of FY 2012-13.

3.118 Further, as per the energy balance for FY 2013-14 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 2013-14.

Table 45: Revenue from sale of Surplus Power for FY 2012-13 (Rs. Cr)

Particulars	FY 2012-13 (Approved)	FY 2012-13 (Actual upto Nov)	FY 2012-13 (RE)	FY 2013-14
Revenue from Exchange (Sale)	0.00	14.75	14.75	0.00
Revenue from UI (Sale)	0.00	21.56	21.56	0.00
Total Revenue from Sale of Surplus Power	0.00	36.31	36.31	0.00

3.119 The Hon'ble Commission is requested to approve the revenue from sale of surplus power as proposed in the table above.



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

3.120 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 46: Comparison of Approved ARR and Revised estimates for FY 2012-13

Particulars	FY 2012-13		FY 2013-14
	Approved as per T.O.	Revised Estimate	Projected
Cost of fuel		-	-
Cost of power purchase for full year	563.09	644.72	663.67
Employee costs	60.98	53.89	59.11
R&M expenses	10.41	9.56	11.42
Administration and general expenses	1.57	2.31	2.54
Depreciation	1.86	20.81	21.95
Interest and finance charges	5.72	36.26	35.33
Interest on working capital & Interest on Security Deposit	6.01	11.36	11.93
Return on NFA /Equity	0.73	8.76	8.77
Provision for Bad Debt	6.48	6.51	7.07
Advance Against Depreciation	-	-	-
Total Revenue Requirement	656.85	794.19	821.78
Less: Non-Tariff Income	11.96	14.63	12.69
Less: Revenue from Sale through UI & Power Exchanges		36.31	-
Net Revenue Requirement	644.89	743.25	809.09

Revenue at Existing Tariff for FY 2012-13 & FY 2013-14

3.121 The Hon'ble Commission issued the Tariff Order for FY 2012-13 on May 7th, 2012 approving the applicability of the new tariff with effect from May 1st, 2012. Therefore, CED has computed the revenue for FY 2012-13 based on one month of old tariff i.e. as approved in the Tariff Order for FY 2011-12 and revenue for balance eleven months based on the revised tariff i.e. as per Tariff Order for FY 2012-13. Sales for FY 2012-13 has been considered as detailed earlier in this chapter.

3.122 Further, revenue for FY 2013-14 has been consider based on the projected sales and existing tariff i.e. as per Tariff Order for FY 2012-13 of each consumer category.

3.123 The category-wise revenue computed for FY 2012-13 & FY 2013-14 is summarized in



table below:

Table 47: Revenue at Existing Tariff for FY 2012-13 & FY 2013-14(Rs. Cr)

Particulars	FY 2012-13 (Approved)	FY 2012-13 (RE)	FY 2013-14 (Projected)
Domestic	241.74	230.14	247.54
Commercial	237.78	232.39	256.19
Large Supply	73.80	65.31	66.10
Small Power	12.48	10.65	11.65
Medium Supply	58.61	51.68	52.73
Agriculture	0.40	0.32	0.34
Public Lighting	9.18	8.54	9.27
Bulk Supply	50.76	44.11	54.56
Others-Temporary Supply	6.90	7.49	8.51
Total Revenue	691.64	650.63	706.89

- 3.124 It is submitted that for FY 2012-13, the Hon'ble Commission had projected revenue of Rs. 691.64 Cr. However, based on the revised estimated sales, the revenue from existing retail tariff for FY 2012-13 is Rs. 650.63 Cr only which is lower than what was approved by the Hon'ble Commission for FY 2012-13. Further, the projected revenue with existing tariff for FY 2013-14 is Rs. 706.89 Crs.

Revenue Surplus/ (Deficit)

- 3.125 Based on the ARR and Revenue computed above, the revenue gap proposed for FY 2012-13 & FY 2013-14 is as given in table below:

Table 48: Revenue Deficit at Existing Tariff for FY 2012-13 & FY 2013-14 (Rs. Cr)

Particulars	FY 2012-13 (RE)	FY 2013-14
Net Aggregate Revenue Requirement	743.25	809.09
Revenue at Existing Tariff	650.63	706.89
FPPCA Billed during the Year	5.54	
Revenue Surplus / (Gap) for the Financial Year	(87.08)	(102.20)

- 3.126 CED requests the Hon'ble Commission to approve the revenue gap of Rs.87.08 Cr and Rs. 102.20 Cr for FY 2012-13 and FY 2013-14, respectively as proposed in the table above.



Consolidate Revenue Surplus/ (Deficit)

- 3.127 In the Tariff Order issued on May 7th, 2012 the Hon'ble Commission had undertaken review of FY 2011-12 and projected ARR for FY 2012-13. Based on the ARR and revenue projected for the respective years, total revenue gap of Rs. 59.20 Cr was approved for FY 2011-12 & FY 2012-13. The Hon'ble Commission had approved revised tariff for FY 2012-13 for recovery of the computed revenue gap.
- 3.128 CED is now filing this petition for true-up of FY 2011-12, revised ARR for FY 2012-13 and ARR projection for FY 2013-14. Therefore, based on the actual numbers for FY 2011-12 and revised projections for FY 2012-13, the revised gap has been computed and has been carried forward to arrive at the cumulative surplus/ gap for FY 2013-14.
- 3.129 The computation of revised cumulative deficit at the end of FY 2013-14 is summarized in the table below:

Table 49: Consolidated Revenue Deficit for FY 2011-12, FY 2012-13 and FY 2013-14 (Rs. Cr)

Particulars	FY 2011-12 (Actual)	FY 2012-13 (RE)	FY 2013-14 (Projected)
Net Aggregate Revenue Requirement	684.21	743.25	809.09
Revenue at Existing Tariff	529.36	650.63	706.89
FPPCA Billed during the Year		5.54	
Revenue Surplus / (Gap) for the Financial Year	(154.85)	(87.08)	(102.20)
Surplus / (Gap) Carried Forward	0.00	(154.85)	(241.93)
Cumulative Surplus/(Deficit) at the end of the year	(154.85)	(241.93)	(344.13)

- 3.130 Considering the Existing tariff and carry-forward of FY 2011-12 revenue gap, the total revenue gap by the end of FY 2013-14 amounts to Rs. 344.13 Cr. The Hon'ble Commission is requested to approve the recovery of the same vide adequate tariff approval as proposed in the subsequent Chapter.
- 3.131 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."*
- 3.132 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. The computation of carrying cost is summarized in table below:

**Table 50: Consolidated Revenue Deficit for FY 2011-12, FY 2012-13 and FY 2013-14 (Rs. Cr)**

Particulars	FY 2011-12 (Actual)	FY 2012-13 (RE)	FY 2013-14 (Projected)
Opening Revenue Gap	0.00	154.85	241.93
Revenue Gap for the Year	154.85	87.08	0.00
Closing Revenue Gap	154.85	241.93	0.00
Average Gap	77.43	198.39	120.97
Rate of Interest	13.00%	14.75%	14.75%
Carrying Cost	10.07	29.26	17.84
Total Carrying Cost		57.17	

3.133 CED request the Hon'ble Commission to allow carrying cost as computed in the table above.



A4: Chapter 4: Proposed Tariff for FY 2013-14

- 4.1 The computed revenue at existing tariff for FY 2013-14 are not adequate to cover the actual revenue gap for FY 2011-12, estimated revenue gap for FY 2012-13 and ARR of FY 2013-14. 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.
- 4.2 While proposing the revised retail tariff for FY 2013-14, 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.
- 4.3 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.”

- 4.4 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 and the tariff of BPL consumers shall be 50% of the average cost of supply.
- 4.5 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 bulk supply tariff and it is observed that a number of inconsistencies are prevalent leading to disputes in billing and default in 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 and agriculture consumers. It is submitted that a fixed component of the ARR should also be recoverable from the domestic and agricultural 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 as well as agricultural consumers for FY 2013-14.
 - c) Further, CED has proposed common fixed charges for domestic and commercial consumers. It is submitted that the levy of fixed charge based on connected load results in increase in malpractices and non-declaration of the correct load by the consumers. Therefore, CED requests the Hon'ble Commission to approve common fixed charge within the slabs of domestic and commercial categories.
 - d) The Hon'ble Commission in the previous tariff order had directed CED to propose suitable tariff category for a few consumers. After study of tariff schedule of few states including Delhi, Chhattisgarh, etc, CED proposes to apply domestic tariff on 'Religious Institutions exclusively used for worship by the general public'. Further, the Government institutions i.e. educational institutes, hospitals, public libraries, dispensaries, Working Women's Hostel, etc. are proposed to be charged as per domestic tariff while all other such institutions (other than government run institutions) are proposed to be charged at commercial tariff.



- e) CED has also included the following consumers under the domestic category:
- 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.
 - ii. Orphanage/ Cheshire Home/ Old age homes/ Charitable homes and Gaushalas.
 - iii. Shelter Homes (including Night Shelters) approved by Chandigarh Administration.
 - iv. Electric crematoriums.
- f) CED has proposed to revise the existing miscellaneous and general charges in the current petition. The existing applicable miscellaneous and general charges have been approved in Tariff Order for FY 2011-12. The Miscellaneous and General Charges, which are essentially driven by the labour and material costs have undergone significant amount of increase (increase in Wholesale price Index) and the present rates do not reflect the actual cost. Therefore, CED has proposed revision of the General and Miscellaneous charges.
- g) CED has also included the power factor surcharge clause and disconnection in case of low P.F. under General condition for LT & HT Supply.
- h) CED has proposed to delete the point no. 1 regarding “Additional charges for exceeding contracted load/ contracted maximum demand” under General condition for LT & HT Supply” mentioned in the approved tariff order for FY 2012-13 as it is in contradiction with the provisions of JERC Supply Code Regulation 2010.

4.6 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.

4.7 The average cost of supply of CED for FY 2013-14 (including past revenue gap resulting from true-up of FY 2011-12 and APR of FY 2012-13) is computed in the table below:

Table 51: Average Cost of Supply for FY 2013-14

Particulars	Unit	
Aggregate Revenue Requirement for FY 2013-14	Rs. Cr	809.09
Add: Revenue Gap for Past Year		
- True-up of FY 2011-12	Rs. Cr	154.85



Particulars	Unit	
- APR for FY 2012-13	Rs. Cr	87.08
Total ARR for FY 2013-14 (including revenue gap for past years)	Rs. Cr	1051.02
Sales Projected for FY 2013-14	MUs	1508.70
Average Cost of Supply	Rs. Per Unit	6.97

4.8 As per the existing tariff, the category-wise average tariff as percentage of average cost of supply for FY 2013-14 is summarized in table below:

Table 52: Average Category-wise Tariff (Existing) Vs Average Cost of Supply for FY 2013-14

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	4.14	6.97	59%	41%
Commercial	5.12	6.97	74%	26%
Large Supply	5.14	6.97	74%	26%
Small Power	4.45	6.97	64%	36%
Medium Supply	5.00	6.97	72%	28%
Agriculture	2.30	6.97	33%	67%
Public Lighting System	4.59	6.97	66%	34%
Advertisement /Neon sign boards	-	6.97	-	-
Bulk Supply	4.74	6.97	68%	32%
Others-Temporary Supply	6.70	6.97	96%	4%

4.9 As can be observed in the table above, the tariff across majority of 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 2013-14 is as given in the table below:

Table 53: Existing and Proposed Tariff for FY 2013-14

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	Domestic				
1	0-150 kWh	-	2.30	25	3.50
2	150-400 kWh	-	4.20	25	5.20
3	Above 400 kWh	-	4.40	25	6.00
B	Commercial				



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)
1	0-150 kWh	6.00	4.30	110	5.00
2	150-400 kWh	70.00	4.50	110	6.25
3	Above 400 kWh	70.00	4.70	110	7.00
C	Large Supply	70.00	4.70	150	6.70
D	Small Power	6.00	4.40	70	6.30
E	Medium Supply	70.00	4.50	125	6.50
F	Agriculture	-	2.30	20	3.50
G	Public Lighting				
	<i>Public Lighting System</i>	70.00	4.30	100	6.70
	<i>Advertisement /Neon sign boards*</i>	70.00	6.00	100	9.00
H	Bulk Supply	70.00	4.50	100	6.80
I	Others-Temporary Supply	-	6.70	0	9.80
J	SPD (JJ cluster/ unauthorized colonies)			0	3.50

4.10 Considering the proposed tariff revision to be applicable from 1st April 2013, the projected revenue for FY 2013-14 from various categories is as summarized in table below:

Table 54: Revenue at Proposed Tariff for FY 2013-14 (Rs. Cr)

Particulars	Sales	Revenue
Domestic	598.44	351.56
Commercial	500.30	395.55
Large Supply	128.72	98.25
Small Power	26.16	18.12
Medium Supply	105.55	77.95
Agriculture	1.50	0.54
Public Lighting	20.21	14.37
Advertisement /Neon sign boards	-	-
Bulk Supply	115.13	82.22
Others-Temporary Supply	12.71	12.45
Total Revenue	1,508.70	1,051.01

4.11 Based on the proposed tariff of CED, the revised category-wise average tariff as



percentage of average cost of supply for FY 2013-14 is summarized in table below:

Table 55: Average Category-wise Tariff (Proposed) Vs Average Cost of Supply for FY 2013-14

Category	Average unit rate as per Proposed tariff (Rs/Kwh)	Avg Cos (Rs/Kwh)	Tariff as a percentage of average cost of supply %
Domestic	5.87	6.97	84%
Commercial	7.91	6.97	113%
Large Supply	7.63	6.97	110%
Small Power	6.93	6.97	99%
Medium Supply	7.39	6.97	106%
Agriculture	3.61	6.97	52%
Public Lighting System	7.11	6.97	102%
Advertisement /Neon sign boards	-	6.97	0%
Bulk Supply	7.14	6.97	103%
Others-Temporary Supply	9.80	6.97	141%

- 4.12 Based on the proposed changes in retail tariff, CED would be able to recover the cumulative revenue deficit of Rs. 344.13 Cr projected above.
- 4.13 Therefore, CED humbly requests the Hon'ble Commission to approve the proposed changes in the retail tariff structure for FY 2013-14.



A5: Chapter 5: 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) Single private house/flat.
- b) Government education institutions, viz schools, colleges, universities, hostels, canteens, and residential quarters attached to the educational institutions.
- c) Government and public sports institutions/Gymnasium halls etc. banks and PCO exclusively for the use of educational institutions.
- d) 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.
- e) Housing colonies and multi storied flats/buildings as defined in Electricity Supply Code Regulations notified by the JERC.
- f) Dispensary / Hospitals / Public Libraries / School / College / Working Women"s Hostel / run by the Chandigarh Administration.
- g) Recognized Center/ societies for welfare of blind, deaf and dumb, spastic children, physically handicapped persons, mentally retarded persons, as approved by the Chandigarh Administration.
- h) Orphanage/ Cheshire Home/ Old age homes/ Charitable homes and Gaushalas.
- i) Shelter Homes (including Night Shelters) approved by Chandigarh Administration.
- j) Electric crematoriums.

NOTES:

- i. Where a portion of dwelling unit is used for mixed load purpose the connection shall be billed for the purpose for which the tariff is higher.
- ii. Hostels shall be considered as one unit and billed under domestic supply tariff without compounding.
- iii. Private education institutions shall be billed under Non Domestic Tariff.
- iv. STD/PCO, shops attached to Religious Institutions will be billed under Non-Domestic Tariff.
- v. 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.

**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 60 KW supply shall be given on three phase 400 volts. For loads above 60 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	25.00	2.30	3.50
151-400 kWh	0.00	25.00	4.20	5.20
Above 400 kWh	0.00	25.00	4.40	6.00

2. COMMERCIAL / 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 recognized/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 up to 30 KW, supply shall be given on 3 phase 400 volts. For loads above 30KW, supply shall be given on 11 KV in case of multi consumer complex including commercial complex and in other cases for load above 60 KW the supply shall be on 11 KV. 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.

TARIFF

Consumption range	Fixed charge (Rs. per KW/kVA/HP per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
0-150 kWh	0 to 20 KW – Rs.6.00	Rs.110.00	4.30	5.00
151-400 kWh	21 to 100 KW- Rs.70.00	Rs.110.00	4.50	6.25
Above 400 kWh	Above 100 KW – Rs.70.00	Rs.110.00	4.70	7.00



3. LARGE INDUSTRIAL POWER SUPPLY (LS)

APPLICABILITY

The schedule shall apply for consumers having industrial connected load above 100kW. Their contract demand shall not be less than 100 kVA.

No consumers shall increase his connected load without prior approval of the department. The consumer availing supply at high tension shall indicate rated capacity of all the step down transformers installed in his premises and shall not increase the capacity of such step down transformers without prior approval of the department.

CHARACTER OF SERVICE

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

Supply can be given at 33/66/220kV depending on quantum/type of load and contract demand and availability of bus voltage and transformer winding capacity at the feeding substation wherever possible at the discretion of supplier.

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

NOTE

- i. The above tariff covers supply at 11 kV. Surcharge at 20% on the tariff shall be leviable for all the existing consumers which are being given supply at 400 volts. A consumer getting supply at 33 kV and above will get a rebate of 3%.
- ii. Surcharge 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	150	4.70	6.70

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.

CONTRACT DEMAND

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.

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 100 kW.

CHARACTER OF SERVICE

AC,50 cycles ,3 phase, 400volts,or at 11 kV for load above 60 KW.

TARIFF

Consumption range	Fixed charge (Rs. Per KW/kVA/HP per Month)		Energy charge (Rs./kWh)	
	Existing	Proposed	Existing	Proposed
All Units	70.00	125.00	4.50	6.50

POINT OF SUPPLY



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

5. SMALL INDUSTRIAL POWER SUPPLY (SP)

APPLICABILITY

This schedule apply to small power industries with connected load not exceeding 20 KW (26BHP) in Urban and rural areas.

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	70.00	4.40	6.30

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 (Govt. Tubewells meant for water supply are covered under 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	20.00	2.30	3.50
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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, signages, passenger information system installed on bus queue shelter/ bus stand etc., (apart from the advertisement boards installed on commercial establishment & charged under commercial tariff).

CHARACTER OF SERVICE

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

TARIFF

Consumption range	Consumption Slab	Fixed charge Rs. per KW/kVA/HP per month		Energy charge Rs./kWh	
		Existing	Proposed	Existing	Proposed
Public Lightning system -	All Units	70.00	100.00	4.30	6.70



Consumption range	Consumption Slab	Fixed charge Rs. per KW/kVA/HP per month		Energy charge Rs./kWh	
		Existing	Proposed	Existing	Proposed
Public lighting system managed by Municipal Corporation, Panchayat and Street lights maintained/ outsourced to an external agency					
Advertisement /Neon sign boards - Advertisement boards, bill boards, sign boards, passenger information system installed on bus queue shelter/ bus stand (apart from advertisement boards installed on the commercial establishments & charged under commercial tariff)	All Units	70.00	100.00	6.00	9.00

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 exceeding 60 kW shall be released on HT 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	4.50	6.80

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	9.80

10. SINGLE POINT DELIVERY**APPLICABILITY**

This tariff schedule shall apply to JJ cluster/ unauthorized colonies/ slum dwellers drawing power at single delivery 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	-	3.50



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 category of consumers.

1) Power Factor Surcharge

In case of HT, EHT consumer, if the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor upto 0.7(lagging).

The licensee may discontinue supply, after due notice of 15 days, to any installation where the average power factor in a month is less than 70% for consecutive three months where meter installed is having P.F. measuring feature.

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.

In case the monthly average power factor is above 95%, consumer shall get a rebate at a rate of 1% on billed energy charges for each 1% increase in monthly average power factor above 95%.



For example, if the average power factor in a month is 97%, then the consumer shall be given rebate of 2% on the billed energy charges for that month.

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%

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

Sr. No	Description	Proposed
A	Application processing charges for new connection/ enhancement of load/ reduction of load/	
i	Domestic supply	Rs 25/-
ii	Non-Domestic Supply	Rs 200/-



Sr.	Description	Proposed
iii	SP, MS and street lighting supply.	Rs 300/-
iv	LS and bulk supply	Rs 750/-
v	AP supply	Rs 25/-
vi	Temporary metered supply	Two times the normal rates of category of permanent supply
B	Charges for Re-fixing/ Changing of meter /Meter Board in the same premise on consumer request when no additional material is required. (When the cause leading to subsequent change/replacement of meter is either manufacturing defect or Department's fault then, it shall be free of cost and further, if shifting of meter is done in the interest of department work then it is free of cost.)	
i	Single Phase Meter	250/- per meter
ii	Three Phase Meter without CT	500/- per meter
iii	Three Phase Meter (with CTs & PTs)	1000/- per meter
iv	Trivector and special type meters	1200/- per meter
v	HT/ EHV metering equipment	3000/- per meter
C	Meter Inspection & Testing Charges	
	(In case correctness/accuracy of a meter belonging to the Licensee is challenged by the consumer)	
i	Single phase	150/- per meter
ii	3-phase whole current i.e. without C.T	500/- per meter
iii	L.T. meter with CTs	1500/- per meter
iv	H.T. & E.H.F metering equipment.	3000/- per meter
	NOTE: If the challenged meter is found to be incorrect ,the credit of these charges will be given to the consumer, otherwise these will be forfeited.	
D	Re-sealing charges (irrespective of the number of seals involved against each item below and where seals found to have been broken by the consumer):	
i	Meter cupboard	50/-
ii	Where cut-out is independently sealed	50/-
iii	Meter cover or Meter Terminal cover (Single phase)	150/-
iv	Meter cover or Meter Terminal cover (3-phase)	375/-
v	Maximum Demand Indicator or C.T.s Chamber	900/-
vi	Potential fuses	900/-
	Note :If M&T and ME seals are found to be broken/tempered cost of meter shall be recoverable and the case shall be treated as theft case.	
E	Reconnection Charges	
a	Reconnecting/connecting the premises of any consumer who was previously disconnected on account of breach of his agreement with the department or of any other provisions of the Act as may be relevant.	
i	Domestic supply	Rs 250/-
ii	Non-Domestic Supply	Rs 500/-



Sr.	Description	Proposed
iii	SP, MS and street lighting supply.	Rs 900/-
iv	LS and bulk supply	Rs 3000/-
v	AP supply	Rs 250/-
vi	Temporary metered supply	Rs 1500/-
F	Testing/ Inspection of Consumer's installation	
a	Initial Test/ Inspection	Free of Cost.
b	For subsequent test of a new installation or an extension to an existing installation if the installation is found to be defective or the wiring contractor or his representative fails to be present	
i	Single Phase	Rs 150/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
ii	Three Phase	Rs 200/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
iii	MS/BS loads upto 100 kW	Rs 1000/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
iv	LS/BS (loads above 100 kW)	Rs 2500/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
G	Meter Reading Cards/ Passbook (New/ Replacement)	
i	Provision of meter reading cards including PVC jacket	Rs 5/- per card
ii	Replacement of meter card found to be missing on consumer's premises	
iii	Domestic & NRS	Rs 5/- per card
iv	SP and AP	Rs 10/- per card
v	MS	Rs 25/- per card
vi	LS	Rs 45/- per card



Sr.	Description	Proposed
vii	Replacement of Passbook in case it is lost by AP Consumer	Rs 60/-
viii	Replacement of identification card missing on the premises of AP Consumer	Rs 25/-
ix	Temporary	Rs 60/- per card
H	Meter Rentals	
a	(In case where consumer opts that department to supply departmental meter)	
i	Single Phase meter	Rs 20/- per month
ii	Three Phase LT meter	Rs 50/- per month
iii	Three Phase LT meter with CT	Rs 70/- per month
iv	11 kV Metering System	Rs 720/- per month
v	33 kV Metering System	Rs 1140/- per month
vi	66 kV Metering System	Rs 2500/- per month
I	Replacement of broken glass	
a	Replacement of broken glass of meter cupboard (when the cause of the breakage is considered to be an act or fault of the consumer).	Rs 60/-
b	Replacement of meter glass where the same has been tampered with or broken by the consumer	
i	Single phase meter	Rs 250/-
ii	Three phase meter	Rs 450/-
J	Supply of duplicate copies of electricity bills	
i	Domestic consumers	Rs 5/-
ii	Non-Domestic consumers	Rs 10/-
iii	Temporary consumers	Rs 10/-
iv	L.T. Industrial (upto 20 kW) & AP consumer	Rs 10/-
v	L.T. Industrial (above 20 kW) & Street lighting consumer	Rs 15/-
vi	H.T. Industrial & bulk supply consumer	Rs 20/-
K	Review of electricity bills	
a	(If the accuracy of licensee's bill is challenged by the consumer and a review of the bills is demanded)	
i	Single Phase Supply	Rs 20/-
ii	Three Phase Supply	
	load upto 20 kW	Rs 450/-
	load above 20 kW upto 60 kW	Rs 600/-
	load above 60 kW upto 60 kW	Rs 900/-
iii	Large Supply (above 100 kW)	Rs 1500/-
	NOTE: If the challenged bill is found to be incorrect ,the credit of the fee will be given to the consumer, otherwise these will be forfeited.	
L	Testing and calibration including sealing of energy meter owned /supplied by the consumer	
i	Single Phase	Rs 100/-
ii	Polyphase whole current meter	Rs 500/-



Sr.	Description	Proposed
iii	Polyphase meters with CTs	Rs 1200/-
iv	HT and EHT metering equipment	Rs 4500/-
M	Checking of the capacitors at the request of the consumer	
a	Consumer receiving supply at	
i	230/440 V	Rs 250/- per visit
ii	Above 400 V and up to 11 KV	Rs 500/- per visit
N	Rates for Security Deposit for new/extension in load only.	
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.	
O	Security for Meter/Metering equipment for new/ extension in load cases	
i	LT Single Phase meters	Rs 600/-
ii	L. T. Three Phase / poly Phase Meters without CTs.	Rs 1500/-
iii	L. T. Three Phase C. T. Meters Without C.T.s	Rs 4000/-
iv	L.T./T.P.T Metering Equipments without C.Ts	Rs 15000/-
v	Solid State H.T./T.P.T Metering equipment (without C.T./P.T.Units)	Rs 10000/-
vi	L.T.-C.T.s	
	a) 50/5A	Rs 800/-
	b) 100/5A, 150/5, 200/5, 300/5,400/5A	Rs 400/-
	H.T.C.T./P.T. Unit	Rs 25000/-
P	Charges recoverable from the consumer when the meter is found damaged / burnt owing to negligence or default on the part of consumer	
i	Single Phase Meter	Rs 700/-
ii	Three Phase Meter	Rs 1550/-
iii	LT CT operated Solid State Meter. (Without CTs)	Rs.3000/-
iv	LT CTs	
a	a) Upto 50/5A	Rs.1,580/-
b	b) Above 50/5 A	Rs. 600/-
c	Solid State HT TPT metering equipment (without CT/PT unit)	Rs.20,000/-
d	H.T.C.T./P.T. Unit	Rs.40,470/-
Q	Special Meter reading charges in case of change in occupancy/ vacation of premises for domestic consumers	Rs. 50/-



A6: Chapter 6: Compliance to directives issued by Hon'ble Commission

6.1 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 2012-13. 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
Directive 1 - Annual Statement of Accounts	<p>Electricity Department Chandigarh has not prepared the account for the Electricity Department separately. As Electricity Business comes under the preview of Electricity Act, 2003, the accounts pertaining to Electricity Business are required to be prepared separately and got audited.</p> <p>Accounts of the licensee need to be prepared on commercial account principles for regulated business of electricity as per regulatory requirement by 30 Sep, 2012.</p>	<p>The CED being a UT and a Govt. Department has been carrying out the transmission and distribution business as an integrated utility till date. As such the accounts pertain to Electricity Business (Integrated Utility) are prepared regularly on year to year basis and submitted to AG UT Chandigarh for audit. The audit certificate for the accounts FY 2007-08, 2008-09 and 2009-10 have been received while the audit certificate of FY 2010-11 and FY 2011-12 are awaited. However, DNIT is being prepared for appointment of consultant/CA with the help of Information Technology department, UT Chandigarh for preparation of Accounts of the department on commercial account principles.</p>
Directive 2- Preparation of Asset and Depreciation Register	<p>The ED Chandigarh has stated that the complete data of fixed assets is not available. Unless the function wise, asset wise data is up-dated, correct asset value and depreciation thereon cannot be ascertained. The Electricity department is directed to arrange for preparation of assets and depreciation registers etc.</p> <p>Petitioner is directed to submit quarterly progress report and the final completion date.</p>	<p>The preparation of Asset and Depreciation register is covered under R-APDRP Part-A project. While doing GIS mapping, these registers will be prepared. The DNIT for the third party audit for evaluation of asset (Transmission and distribution business) is being prepared. The final study report is expected to be finalized by Dec 2013.</p>
Directive-3: Management Information System	<p>The ED Chandigarh has not maintained proper data in respect of sales, revenue and revenue expenses as also the category wise / slab wise number of consumers, connected load / demand etc. for proper analysis of the past data based on actual and estimate of proper projections for consideration in the ARR</p>	<p>In this regard, it is submitted that M/S NIELIT (formerly known as DOEACC) has been entrusted the work of computerized billing and accordingly the Management Information Reports are being generated on regular basis as per requirement. These reports are being considered for filing the ARR and Tariff Petition. However,</p>



	<p>and Tariff Petition. The ED Chandigarh is directed to take steps to build credible & accurate and verifiable data base and management information system (MIS) to meet the requirements for filing ARR & Tariff Petition as per regulatory requirement of the Commission & CERC and also to suit the Multi Year Tariff principles. The ED Chandigarh should get a study conducted on computerized data base, and shall give a proposal as to how the department proposes to achieve this & submit an action plan with target dates</p> <p>Petitioner is directed to submit quarterly progress report and the final completion date.</p>	<p>R-APRDP project has already been initiated for a credible & accurate and verifiable data base and management information system (MIS).</p>
<p>Directive-4: Metering of consumer installations / replacement of Non-Functional or defective Meters</p>	<p>Under Section 55 (1) of Electricity Act 2003, no licensee shall supply electricity after expiry of 2 years from the appointed date except through installation of correct meter in accordance with the regulation to be made in this behalf by the authority. Accordingly, metering is required to be done in line with CEA (installation and operation of meters) Regulations 2006 to all consumers.</p> <p>Procurement process be expedited and action plan to install these meters be given by 30.09.12.</p>	<p>In this regard, it is submitted that as per SOP Report submitted to the Hon'ble JERC for December 2012, 1932 Nos. of meters were defective and 96 Nos. of meters were burnt which totally contributes to about 1% of the total installed meter and it is within the prescribed tolerance limit. However, CED has already arranged 5,550 No. Single phase meters and 5,550 No. three phase meters. The case for procurement of 35000 nos. of single phase meters and 8000 nos. three phase meters are in the advance stage of sample testing after clearing the technical and commercial bids.</p>
<p>Directive-5: Energy Audit</p>	<p>The ED Chandigarh is directed to get an Energy Audit conducted through an accredited agency to assess actual technical and commercial losses. Based on the studies, ED Chandigarh shall propose reduction of losses in subsequent years.</p> <p>The investment required to reduce the losses be included in the investment plan for augmentation of T&D system to be submitted to the Commission. Effective technical and administrative measures shall be taken to reduce the commercial losses.</p> <p>Procurement process be expedited and action plan reduce the losses be given by 30.09.12.</p>	<p>The aspect of Energy Audit is covered under Part- A of the R-APDRP project (IT Implementation). Earlier the case for allotment of work to M/S SPANCO has been initiated but due to poor/ unsatisfactory performance in the State of Bihar, Punjab and other states, the allotment has been put on hold as directed by Joint Secretary (Power) GOI in a review meeting held on 3.10.2012. However, PFC has advised the department to explore the other possibilities for IT implementation or explore feasibility for sharing DC/ DRC with the State of Haryana.</p> <p>The aspect of investment plan for augmentation of T&D system is covered under the R-APDRP project for which the DPR for Part- B (System Strengthening and loss reduction programme) has</p>



		already been prepared by Part- B Consultant i.e M/S Feedback Infra and the DPR shall be submitted to PFC for its investment approval.
Directives-7: Interest on Security Deposit	<p>U/S 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.</p> <p>The petitioner is directed to pay interest on consumer security deposit at the applicable bank rate.</p>	<p>CED has already prepared a detailed list of consumers and their security amount for FY 2011-12 and FY 12-13 and provided the same to the billing agency i.e. M/S NIELIT (formerly known as DOEACC) for further processing of the same to pay interest on consumer security deposit at the applicable bank rate. However, voluminous and previous years' data pertaining to actual consumer security deposit amount since inception of the electricity department (Year 1966/67) are being prepared which may take some more time.</p>
Directive-10: Demand Side Management and Energy Conservation	<p>Demand Side Management and Energy Conservation are very important areas, which should be in focus in ED Chandigarh particularly in context of Peak load. ED Chandigarh is directed to conduct a detailed study on demand side management and energy conservation through an external accredited agency for efficient use of electricity by various means.</p> <p>Petitioner is directed to inform the time bound action plan for installation of TOD meters.</p>	<p>Tender was floated for purchase of meters having TOD facility. However, the tender was not matured due to one reason or the other and despite several time extensions. Therefore, the decision was taken to refloat the same. The refloating of the tender is under progress.</p>
Directive -11: Manpower Study	<p>EDC is directed to conduct a detailed study on manpower requirement by an accredited agency while taking into account the future load growth in Chandigarh. The employee cost provision shall be based on the results of above study in the Tariff Petition for 2012-13.</p> <p>Therefore, distribution licensee is directed to submit the reason for non-compliance within two weeks from the date of issuance of this order along with present status in this regard. Non-compliance of the directive is viewed seriously. Compliance be reported by 30-9-2012 and outcome of the study be incorporated in the ARR of FY 2013-14 to be submitted before 30.11.2012.</p>	<p>CED has already issued letter of intent (LOI) to M/S Deloitte Touche Tohmatsu India Pvt Ltd, Gurgaon to conduct manpower study on 31.1.2013 and the study is under progress.</p>



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

Reference No.	Directive	Compliance
Directive 1: Segregation of T&D losses and loss reduction trajectory	The Petitioner is directed to furnish segregation of losses into transmission, distribution and commercial losses separately in their next petition along with a status report on energy accounting and T&D losses.	The aspect of Energy Audit is covered under Part- A of the R-APDRP project (IT Implementation). Earlier the case for allotment of work to M/S SPANCO has been initiated but due to poor/ unsatisfactory performance in the State of Bihar, Punjab and other states, the allotment has been put on hold as directed by Joint Secretary (Power) GOI in a review meeting held on 3.10.2012. However, PFC has advised the department to explore the other possibilities for IT implementation or explore feasibility for sharing DC/ DRC with the State of Haryana.
Directive 2: Load Forecasting study	The Petitioner is directed to conduct a detailed load forecasting study for short term (2-5 years), medium term (7-10 years) and long term (15-25 years) in order to understand the load requirements in their area at various periods and submits to Commission along with next tariff petition.	The DNIT for the appointment of consultant for load forecasting in under finalization process and shall be submitted to competent authority for its approval very shortly.
Directive 3: Optimization of Power Purchase from short term sources:	The Petitioner's power purchase cost is highest in all the jurisdictions of the Commission and calls for a drastic rationalization and optimization of Power purchase cost. For day-to-day management, Power purchase should not be resorted to 10% of power purchase cost approved in the table no. 5.7.6. Any purchase beyond the quantity, price and source approved, needs specific approval of the Commission. The Petitioner is directed to restrict high cost short-term power purchases, including UI to a prudent level subject to CERC regulation (Unscheduled Interchange and related	The above details have been incorporated in the petition filed by the petitioner for FY 2013-14 and CED had imposed rotation power cuts in view of the system constraints to ensure grid security.



	<p>matters) as amended from time to time.</p> <p>The scheduling be done on day ahead (spot & contingency), term ahead (weekly), monthly and yearly, strictly on a merit order purchase of power from approved sources, which is not being done appropriately. In case of an emergency, approval be obtained on the same day from the Commission for spot purchase.</p> <p>The short-term power purchase be rationalized especially under UI mechanism; the overdraws from UI below 49.7 Hz will not be allowed. As last year (FY 2011-12), 18 MUs have been recorded as overdraws below 49.5 Hz, purchased at 873 paise/KWh.</p> <p>The Petitioner is directed to give details of power purchase under UI mechanism. The details include the overdrawl frequency, date, time, block, quantity, UI charges, additional UI charges.</p> <p>The summary of total Sale/Purchase from short term sources including Net gain/Net loss under purchase of UI and from other sources including power exchange, bilateral etc. The results of gain/loss of such sale/purchase from other sources be explicitly mentioned.</p> <p>In order to optimize the cost of power purchase, if unavoidable, the rotational power cuts could be undertaken by the utility, keeping equity</p>	
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	among all consumers of the utility irrespective of their status.																												
Directive 4: Online Bill Payment:	The facility of online payments may be made more visible and consumer friendly and extra charge on online payment should be discontinued forthwith. The Petitioner is directed to introduce multiple payment gateways for online collection and status of existing bill payment be submitted within three months.	In this regard, the department has already approached Director- Information Technology, Chandigarh Administration to provide multiple payment gateways for online collection and is in continuous touch with Information Technology Department and same is under progress. However, as far as existing bill payment is concerned, following methods are available:- 1. Manually payment of electricity bills at various E-Sampark Centres at Chandigarh. 2. Online payment through debit and credit cards.																											
Directive 5: Renewable Purchase obligation	The Petitioner is directed to stagger the purchase over the year to avoid bunching of purchase at high cost towards the end of the year to meet their quarterly & yearly RPO targets as specified by the Commission. In case, the Petitioner is buying Renewable Energy certificates to meet their RPO targets, Commission directs the Petitioner to avoid bulk purchase of RE certificates at high cost towards the end of the year. RE certificates should be procured in such a manner that average cost of RE certificates will be equal to the floor price of ensuing year.	CED has followed the direction of Hon'ble commission to avoid bulk purchase of RE certificates at high cost towards the end of the year and purchased RPOs as per under: <table border="1"> <thead> <tr> <th>Month</th> <th>Solar</th> <th>Non-Solar</th> </tr> </thead> <tbody> <tr> <td>Jun 12</td> <td>-</td> <td>2421</td> </tr> <tr> <td>Jul 12</td> <td>81</td> <td>5451</td> </tr> <tr> <td>Aug 12</td> <td>247</td> <td>10000</td> </tr> <tr> <td>Sep 12</td> <td>425</td> <td>20000</td> </tr> <tr> <td>Oct 12</td> <td>956</td> <td>10000</td> </tr> <tr> <td>Nov 12</td> <td>401</td> <td>4860</td> </tr> <tr> <td>Dec 12</td> <td>94</td> <td>-</td> </tr> <tr> <td>Total</td> <td>2204</td> <td>52732</td> </tr> </tbody> </table> The compliance of the RPOs has already been made communicated to commission vide memo no. 126 dated 10.1.2013, 6343 dated 17.12.2012 and 5085 dated 27.9.2012.	Month	Solar	Non-Solar	Jun 12	-	2421	Jul 12	81	5451	Aug 12	247	10000	Sep 12	425	20000	Oct 12	956	10000	Nov 12	401	4860	Dec 12	94	-	Total	2204	52732
Month	Solar	Non-Solar																											
Jun 12	-	2421																											
Jul 12	81	5451																											
Aug 12	247	10000																											
Sep 12	425	20000																											
Oct 12	956	10000																											
Nov 12	401	4860																											
Dec 12	94	-																											
Total	2204	52732																											
Directive 6: Rural Electrification	The Petitioner is directed to submit the status of rural electrification in their area along with the detailed plan for rural electrification with the timeline proposed to achieve the complete electrification of rural area.	In this regard, it is submitted that all the villages under Chandigarh Administration stands already electrified.																											
Directive 7: Change of	Commission has observed that consumer	The consumer category of 'Government recognized institutions', 'Government & public sports																											



<p>Category</p>	<p>category of 'Government recognized institutions', 'Government & public sports institutions/ gymnasium halls etc.' and 'Religious Institutions exclusively used for worship by the general public' are either being charged under Non-Domestic Category in some of the states and in some states, they are being charged other 'Bulk Supply Tariff'. Therefore, the Petitioner is directed to conduct an analysis and the impact of such conversion into Bulk Supply Tariff or Non-Domestic Tariff and accordingly submit a proposal for their conversion into the applicable category in their future ARR & Tariff Petition. The number of consumers, connected load and actual consumption of such consumers be submitted with their future ARR & Tariff petition.</p>	<p>institutions/gymnasium halls etc.' and 'Religious Institutions exclusively used for worship by the general public' are being considered under Domestic category by NDMC, New Delhi and JVVNL, Rajasthan in their approved tariff schedule by the respective regulatory commissions. Accordingly, CED has submitted similar tariff proposal in its tariff petition for FY 13-14.</p>											
<p>Directive 8:Capital expenditure</p>	<p>The Petitioner is directed to submit the detailed statement of capital expenditure incurred and capitalization for every quarter, within 15 days in the subsequent quarter.</p>	<table border="1" data-bbox="776 1276 1349 1528"> <thead> <tr> <th>S. No.</th> <th>Quarter</th> <th>Capital expenditure incurred (Rs Cr)</th> <th>Capitalization (Rs Cr)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Apr 12- Jun 12</td> <td>115.54</td> <td rowspan="2">Expected to be capitalized by end of FY 2012-13</td> </tr> <tr> <td>2</td> <td>Jul 12- Sept 12</td> <td>819.59</td> </tr> </tbody> </table> <p>However, the capital expenditure and capitalization for FY 12-13 (till Nov 2012) has been described in the submitted petition for FY 2013-14.</p>	S. No.	Quarter	Capital expenditure incurred (Rs Cr)	Capitalization (Rs Cr)	1	Apr 12- Jun 12	115.54	Expected to be capitalized by end of FY 2012-13	2	Jul 12- Sept 12	819.59
S. No.	Quarter	Capital expenditure incurred (Rs Cr)	Capitalization (Rs Cr)										
1	Apr 12- Jun 12	115.54	Expected to be capitalized by end of FY 2012-13										
2	Jul 12- Sept 12	819.59											
<p>Directive 9:Enforcement Cell</p>	<p>The Petitioner is directed to submit the status of the functioning of enforcement cell and quarterly progress report detailing number of cases, amount involved,</p>	<p>The enforcement cell of CED is a centralized team on circle level. It comprises of five no. of officials including one no. A.E., two nos. JEs and two nos. Assistant line man. It is regularly functioning by way of checking of consumer premises, energy audit of independent feeders and meters installed on distribution transformers in Industrial Units.</p>											



	<p>sub-judice cases, reduction in losses as a consequence.</p>	<p>The desired information is as per follow:-</p> <table border="1" data-bbox="789 302 1430 552"> <thead> <tr> <th>S.No.</th> <th>Quarter</th> <th>Number of cases</th> <th>Amount involved*</th> <th>Sub-judice cases</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Apr 12- Jun 12</td> <td>223</td> <td>1,20,81,959.00</td> <td>01</td> </tr> <tr> <td>2</td> <td>Jul 12- Sept 12</td> <td>264</td> <td>1,91,43,070.00</td> <td>05</td> </tr> </tbody> </table> <p>*charged due to slow/ defective meter, theft and unauthorized extension of load.</p>	S.No.	Quarter	Number of cases	Amount involved*	Sub-judice cases	1	Apr 12- Jun 12	223	1,20,81,959.00	01	2	Jul 12- Sept 12	264	1,91,43,070.00	05
S.No.	Quarter	Number of cases	Amount involved*	Sub-judice cases													
1	Apr 12- Jun 12	223	1,20,81,959.00	01													
2	Jul 12- Sept 12	264	1,91,43,070.00	05													
<p>Directive 10:Voltage wise Categorisation</p>	<p>There should be two major categorization LT and HT based on voltage supply, within each voltage class, sub-categorisation be according to use by some consumer category, to be proposed in next ARR i.e. voltagewise, consumerwise, category wise be done.</p>	<p>In this regards, it is submitted that CED has submitted its inputs/ suggestions on “Draft Consultation Paper- seek to provide a policy framework to address uniformity in consumer classification based on uses of electricity, voltage wise contract load/ demand limits and terms & condition of LT and HT supply to various consumer categories” to Hon’ble JERC vide memo no. 261 dated 28.1.2013. The final action in this regard shall be taken as per JERC approval.</p>															



A7: Chapter 7: Annexures

Annexure I: Copy of Annual Accounts for FY 2011-12



Annexure II: Formats