TARIFF ORDER

Determination of
Aggregate Revenue Requirement & Retail Tariff
for
FY 2013-14,
Review for FY 2012-13
&
Provisional Truing Up of FY 2011-12
For
Electricity Department, Union Territory of Chandigarh (Petition no – 100/2013)

JOINT ELECTRICITY REGULATORY COMMISSION

For the State of Goa and Union Territories

2nd Floor, HSIIDC Office Complex, Vanijya Nikunj
Udyog Vihar, Phase-V, Gurgaon-122 016 (Haryana)
Phone: 0124-2342852 Fax: 0124-2342853
Website: www.jercuts.gov.in

15th April 2013

Contents

List of Tables

List of Annexures

S. No.	Annexure
1.	Admission Order dated February 25' 2013 issued by Joint Electricity Regulatory Commission for the State of Goa and Union Territories
2.	Public Notices published by the petitioner for inviting objections/suggestions on the ARR & tariff petition
3.	Public Notices published by the Commission for intimation of hearing
4.	List of objectors

List of Abbreviations

Abbreviation		Full Form
A&G	:	Administration & General Expenses
Act	:	The Electricity Act, 2003
ARR	:	Aggregate Revenue Requirement
BBMB	:	Bhakra Beas Management Board
CAGR	:	Compound Annualized Growth rate
Capex	:	Capital Expenditure
CC	:	Current Consumption
CEA	:	Central Electricity Authority
CERC	:	Central Electricity Regulatory Commission
CGS	:	Central Generating Station
COD	:	Commercial Operation Date
Commission/JERC	:	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
CKt. Km	:	Circuit Kilometer
DISCOM/CED	:	Electricity Department of UT of Chandigarh
CPSU	:	Central Public Sector Undertaking
D/C	:	Double Circuit
DS	:	Domestic Supply
EA 2003	:	The Electricity Act, 2003
FC	:	Fixed Charges
FPPCA	:	Fuel & Power Purchase Cost Adjustment
FY	:	Financial Year
GFA	:	Gross Fixed Assets
HP	:	Horse Power
HT	:	High Tension
JERC	:	Joint Electricity Regulatory Commission for the state of Goa and union territories
KVA	:	Kilo Volt Ampere
KWh	:	Kilo Watt Hour
LPS	:	Late Payment Surcharge
LT	:	Low Tension
MU	:	Million Unit

Abbreviation		Full Form
MW	:	Mega Watt
MYT	:	Multi Year Tariff
NAPS	:	Narora Atomic Power Station
NDS	:	Non-Domestic Supply
NFA	:	Net Fixed Assets
NHPC	:	NHPC Limited
NPCIL	:	Nuclear Corporation of India Limited
NTPC	:	NTPC Limited
NTP/Tariff Policy	:	National Tariff Policy
NSPCL	:	NTPC-SAIL Power Corporation Limited
O/H	:	Over head
O&M	:	Operation & Maintenance
PGCIL	:	Power Grid Corporation of India Ltd.
PLF	:	Plant Load Factor
PX	:	Power Exchange
RoE	:	Return on Equity
RPO	:	Renewable Purchase Obligation
R&M	:	Repair & Maintenance
RAPP	:	Rajasthan Atomic Power Project
RE	:	Revised Estimates
REA	:	Regional Energy Accounting
RLDC	:	Regional Load Dispatch Centre
SCL	:	Sanctioned Connected Load
S/C	:	Single Circuit
SLDC	:	State Load Dispatch Centre
SBI CAPS	:	SBI Capital Market Limited
SBI PLR/SBAR	:	SBI Prime Lending Rate/State Bank Advance Rate
SJVNL	:	Satluj Jal Vidyut Nigam Limited
T&D	:	Transmission & Distribution
UI	:	Unscheduled Interchange
VAR	:	Volt Ampere Reactive
VC	:	Variable Charges

Before the

Joint Electricity Regulatory Commission
For the State of Goa and Union Territories
Gurgaon

CORAM
Dr. V K Garg (Chairperson)
S.K. Chaturvedi (Member)

Petition No. 100/2013

In the matter of

Aggregate Revenue Requirement (ARR) and Retail Tariff for the Financial Year 2013-14 for the Electricity Department, Union Territory of Chandigarh

And in the matter of

Electricity Department, Union Territory of Chandigarh…………………………………………………………………………………………..Petitioner

ORDER

Date: April 15’ 2013

1. INTRODUCTION

1.1 JERC Formation

In exercise of the powers conferred by Section 83 of the Electricity Act, 2003 the Central Government constituted a two member (including Chairperson) Joint Electricity Regulatory

Commission for all Union Territories except Delhi to be known as "Joint Electricity Regulatory Commission for Union Territories'' with headquarters at Delhi as notified vide notification no. 23/52/2003 – R&R dated May 2' 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 May 30' 2008. The Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Andaman & Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman & Diu, Lakshadweep and Puducherry) started functioning with effect from August 2008. Office of the Commission is presently located in a rented building in the district town of Gurgaon, Haryana.

1.2 Electricity Department of UT Administration of Chandigarh

The Electricity Department of UT Administration of Chandigarh herein called ED Chandigarh, a deemed licensee under section 14 of the Electricity Act 2003, is carrying on the business of distribution and retail supply of electricity in Chandigarh (UT).The Chandigarh Electricity Department (CED) has been allowed to function as an integrated distribution licensee of Union Territory of Chandigarh.

1.3 Filing of Petition

Electricity Department of Chandigarh UT has filed its petition for determination of Aggregate Revenue Requirement(ARR) & Retail Tariff for distribution and retail sale of electricity for FY 2013-14, Review of FY 2012-13 & Truing up of FY 2011-12 on February 15' 2013 according to the regulation 10 of JERC (Conduct of Business) Regulations, 2009 and as per the procedures outlined in section 61, 62 & 64 of the Electricity Act, 2003. CED has submitted its ARR and Tariff petition for FY 2013-14 on the basis of the principles outlined in the JERC Tariff Regulations 2009. The Electricity Department of Chandigarh UT has prayed to permit the petitioner to recover the unrecovered gap for FY 2011-12, FY 2012-13 and the likely gap for FY 2013-14 through the tariffs being proposed to be made applicable to the consumers for FY 2013-14 and may be determined in line with the Electricity Act, National Tariff policy, Electricity Policy, Plan and various orders of APTEL on the subject and governing tariff regulations of the Hon'ble Commission.

1.4 Admission of Petition & Technical Validation Session

A Technical Validation Session of the petition was conducted on February 25' 2012. During the Validation session the petitioner presented the salient features of the Petition. After initial scrutiny/analysis, the petition was admitted on February 25' 2013 subject to clarifications, which would be submitted by the Petitioner. The petitioner was directed to file information as stated during the session. A copy of the Admission Order dated February 25' 2013 is enclosed as **Annexure 1** to this Order.

1.5 Interaction with the petitioner

The Order has referred at numerous places to various actions taken by the "Commission". It may be mentioned for the sake of clarity, that the term "Commission" except for the hearing and orders denotes Secretariat of the Commission for carrying out the technical due diligence & validation of data of the petitions filed by the utilities, obtaining and analyzing information/clarifications received from the utilities and submitting relevant issues for consideration of the Commission.

For this purpose, the Commission's Staff held discussions with the Petitioner/Petitioner's representative, obtained information/clarifications wherever required and carried out technical validation with regard to the information provided. Commission's staff interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for the analysis of the tariff petition. The Commission's staff and the Petitioner also discussed key issues related to the petition, which included Power Purchase Cost, Estimated Sales and Revenue submitted to the Commission, etc.

Commission's staff conducted validation session with the Petitioner during which discrepancies in the petition and additional information required by the Commission were sought. The Petitioner submitted its replies, as shown below, in response to the queries raised by the Commission, which have been considered during arriving at the ARR & the resultant tariff thereof of the Petitioner.

Table 1.5.1: List of Submissions made by the Petitioner

S.No.	Date of Receipt	Subject
1.	22.02.2013	Reply to the first set of deficiencies
2.	27.02.2013	Additional UI Data
3.	06.03.2013	Reply to the deficiencies pointed out during Technical Validation Session
4.	02.04.2013	Reply to Additional Data Gaps submitted by CED

1.6 Public hearing process

Commission directed the petitioner to publish the summary of the ARR and Tariff proposal in the abridged form in the format to ensure public participation.

The public notices were published by the Petitioner for inviting for inviting objections/ suggestions from its stakeholders on the tariff petition:

Table 1.6.1 : Details of public notice published by the Petitioner

S.No.	Date	Language	Name of Newspaper
1.	23.02.2013 & 24.02.2013	English	The Times of India
2.	23.02.2013 & 24.02.2013	Punjabi	Punjabi Tribune
3.	23.02.2013 & 24.02.2013	Hindi	Punjab Kesri

The petitioner also uploaded the petition on its website (www.chdengineering.gov.in) for inviting objections and suggestions on their petition.

Interested parties / stakeholders were requested to file their objections / suggestions on the petition to the utility with a copy to the Commission on or before 11th March' 2013. The copies of paper cutting of public notice are attached as **Annexure 2** to this order.

Commission received 34 written objections / suggestions on the petition, by the last date for filing objections/suggestion i.e. 11th March' 2013. The Commission forwarded them to the Petitioner for communicating their reply to the objections, raised by the objectors. It was confirmed by the Commission at the beginning of the hearing that the objectors have received the replies to their objections, even though; some objectors did mention that they received the reply on the day of hearing but they were satisfied. The officers of the utility orally on the spot also replied to stakeholders who raised their concerns on the spot.

1.7 Notice for public hearing

Commission also published a public notice in the leading newspapers as given below giving due intimation to stakeholders, consumers, objectors and the public at large about the public hearing to be conducted by the Commission on March 15' 2013 at the Central AC hall of Institute of Engineers, Sector 19 A, Chandigarh from 10.00 AM for all consumers.

Table 1.7.1 : Details of public notice published by Commission

Sr. No.	Date	Language	Name of Newspaper
1.	07.03.2013	English	The Tribune – Chandigarh Edition
2.	07.03.2013	Punjabi	Punjabi Tribune
3.	07.03.2013	Hindi	Punjab Kesari
4.	07.03.2013	Hindi	Dainik Bhaskar – Chandigarh Edition
Repeated on			
5.	13.03.2013	English	The Tribune – Chandigarh Edition
6.	13.03.2013	Punjabi	Punjabi Tribune
7.	13.03.2013	Hindi	Punjab Kesari
8.	13.03.2013	Hindi	Dainik Bhaskar – Chandigarh Edition

Copies of public notice published by the Commission for intimation of public hearing are attached as **Annexure 3** to this order. First public notice for the public hearing was published in the above newspapers on March 07' 2013 and again on March 13 '2013 is a day before the public hearing to remind the public for better participation in the public hearing.

During the public hearing, each objector was provided an opportunity to present his views on the petition filed by the Petitioner. All those present in the hearing, irrespective of whether they had given a written objection or not, were given equal opportunity to express their views. The list of objectors is attached at **Annexure 4** to this order. The list includes the objectors who gave their written objections; those who gave their written objections & presented before the Commission; and other stakeholders who did not give their written objection or prior intimation.

Commission has examined the issues and concerns expressed by stakeholders. The major issues discussed during the public hearing, & the comments/replies of the utility and the views of the Commission thereon, have been summarized in section 3 of this order.

2. APPROACH OF THE ORDER FOR DETERMINATION OF ARR & TARIFF FOR FY 2013-14, REVIEW FOR FY 2012-13 & TRUING UP FOR FY 2011-12.

2.1 Introduction

Electricity Department of Union Territory of Chandigarh had filed its first petition for Determination of Aggregate Revenue Requirement and Tariff for FY 2011-12 to the Commission on January 13'2011. After deliberations, the Commission on July 16' 2011 issued the Tariff Order and the new electricity tariff was made effective from April 1' 2011. Further, Electricity Department of Union Territory of Chandigarh had filed its second petition for Determination of Aggregate Revenue Requirement and Tariff for FY 2012-13 to the Commission on December 30' 2011. After deliberations, the Commission on May 07' 2012 issued the Tariff Order and the new electricity tariff was made effective from May 01' 2012.

Electricity Department of UT- Chandigarh filed its petition for determination of Aggregate Revenue Requirement (ARR) & Retail Tariff for distribution and retail sale of electricity for FY 2013-14, Review of FY 2012-13 & Provisional Truing Up for FY 2011-12 on February 15' 2012 according to the regulation 10 of JERC (Conduct of Business) Regulations, 2009 and as per the procedures outlined in section 61, 62 & 64 of the Electricity Act, 2003. CED has submitted its ARR and Tariff petition for FY 2013-14 based on the principles outlined in the JERC Tariff Regulations 2009. After initial scrutiny, the petition was admitted on February 25' 2013 subject to clarifications & information gaps to be submitted by the Petitioner. The Commission has taken the petition bearing no. 100/2013 on record on February 25' 2013.

2.2 Summary of Tariff Petition for Annual Revenue Requirement

Table 2.2.1: Truing up for FY 2011-12, Review for FY 2012-13 and Aggregate Revenue Requirement for FY 2013-14

Rs Crores

Sr. No.	Particulars	Truing Up for FY 2011-12	APR for FY 2012-13	Projected for FY 2013-14
1	Cost of fuel	-	-	-
2	Cost of power purchase for full year	623.65	644.72	663.67
3	Employee costs	47.46	53.89	59.11
4	R&M expenses	8.85	9.56	11.42
5	Administration and general expenses	1.97	2.31	2.54
6	Depreciation	19.63	20.81	21.95
7	Interest and finance charges	33.18	36.26	35.33
8	Interest on working capital & Interest on Security Deposit	9.78	11.36	11.93
9	Return on NFA /Equity	8.70	8.76	8.77
10	Provision for Bad Debt	5.29	6.51	7.07
11	**Total Revenue Requirement**	**758.51**	**794.18**	**821.79**
12	Less: Non-Tariff Income	15.41	14.63	12.69
13	Less: Revenue from Sale through UI	32.15	14.75	-
14	Less: Revenue from Sale of Power-Exchanges	26.74	21.56	-
15	**Net Revenue Requirement (11-12-13-14)**	**684.21**	**743.24**	**809.09**
16	Revenue from Retail Sales at Existing Tariff	529.36	650.63	706.89
17	FPPPCA billed during the FY	-	5.54	-
18	**Net Gap (15-16-17)**	**154.85**	**87.07**	**102.20**
19	Gap for the previous year	-	154.85	241.92
20	**Total gap (18+19)**	**154.85**	**241.92**	**344.12**
21	Additional revenue from proposed tariff	-	-	1,051.01
22	**Revenue Gap/ (Surplus), if any, after proposed tariffs**	**-**	**-**	-

As may be seen, the petitioner's proposal entails an average tariff increase of 48.68% over the existing tariff. Further, in addition to above the petitioner has asked for carrying cost amount of Rs 57.17 Crores on unrecovered gap of FY 2011-12 and FY 2012-13.

Prayer:

ED Chandigarh requested the Commission to:

- Accept the Annual Revenue Requirement and Tariff petition for the FY 2013-14 for CED formulated in accordance with the guidelines outlined as per the regulation of Joint

Electricity Regulatory Commission relating to Distribution Licensee and the principles contained in Tariff Regulations;

- Approve the total projected ARR of FY 2013-14;
- Permit the petitioner to recover the unrecovered gap for FY 2011-12, FY 2012-13 and the likely gap for FY 2013-14 through the tariffs being proposed to be made applicable to the consumers for the FY 2013-14 and may be determined in line with the principles outlined in the Tariff Proposal submitted by CED and considering various provisions of Electricity Act 2003 and governing tariff regulations of JERC.
- Examine the proposal submitted by the petitioner as detailed in the enclosed proposal for a favorable dispensation.
- The delay in filing this ARR Petition may please be condoned and the Hon'ble Commission is requested to accept this Petition and process the same;
- Pass suitable orders with respect to the ARR for FY 2013-14 for the expenses to be incurred by CED for serving its consumers;
- CED may also be permitted to propose suitable changes to the respective ARRs and the mechanism of meeting the revenue on further analysis, prior to the final approval by the Hon'ble Commission;
- Condone any inadvertent omissions/errors/shortcomings and permit CED to add/change/modify/alter this filing and make further submissions as may be required at a future date.
- Pass such further, as the Hon'ble Commission may deem fit and appropriate keeping in view the facts and circumstances of the case.

Commission's Perspective:

The Commission, while determining the tariff is guided by the principles contained in Section 61 of the Act, namely

a) The principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;

b) The generation, transmission, distribution and supply of electricity are conducted on commercial principles;

c) The factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;

d) Safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;

e) The principles rewarding efficiency in performance;

f) Multi-year tariff principles;

g) That the tariff progressively reflects the cost of supply of electricity and also, reduces and eliminates cross-subsidies within the period to be specified by the Appropriate Commission;

h) The promotion of co-generation and generation of electricity from renewable sources of energy;

i) The National Electricity Policy and Tariff Policy;

j) Renewable purchase obligations

2.3 Approach for Provisional Truing up of FY 2011-12

The Petitioner in its petition has requested for provisional true up for FY 2011-12 based on the Tariff Order for FY 2012-13 issued on May 7th, 2012 by the Hon'ble Commission wherein it had undertaken review of FY 2011-12 as per the actual information submitted by CED for 10 months. Further, the petitioner stated that 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 /proforma 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.

The Petitioner in its petition has requested for a provisional true up for FY 2011-12 that was determined earlier by the Commission. The truing up for FY 2011-12 is to be carried out as per the provisions of regulation 8 of JERC Tariff Regulations, 2009. As per the regulation 8 of JERC Tariff Regulations, 2009:

'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''.

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'.

The detailed analysis & treatment of each component is provided in Chapter 4 (Provisional Truing up for FY 2011-12) of this Order.

2.4 Approach for Review of ARR for FY 2012-13

The Petitioner in its petition has requested for a revision of the ARR for FY 2012-13 which was determined earlier by the Commission in its ARR order dated May 07' 2012. The review of ARR for FY 2012-13 is to be carried out as per the provisions of regulation 8 of JERC Tariff Regulations, 2009. As per the regulation 8 of JERC Tariff Regulations, 2009:

'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''.

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'.

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

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

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.

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.

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.

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

In view of the above, the Commission has reviewed the variations between approvals and revised estimates/pre-actuals of sale of electricity, income and expenditure for FY 2012-13 submitted by the petitioner and permitted necessary adjustments/ changes in cases where variations are for reasonable and justifiable reasons.

The detailed analysis & treatment of each component is provided in Chapter 5 (Review of ARR for FY 2012-13) of this Order.

2.5 Approach for Determination of ARR & Retail Tariff for FY 2013-14

The Petitioner has submitted the ARR & tariff petition for FY 2013-14 along with review petition for FY 2012-13 and provisional truing up for FY 2011-12.

In this regard, various provisions of the JERC's Tariff Regulations 2009 pertaining to Distribution business of the integrated utility are relevant and Commission is guided by the principles contained in Section 61 of the Act among other things to examine the Sales forecast, Power purchase quantum and estimates of various expenses and revenue including other income.

The Commission has considered the petition as per the JERC regulations for (Determination of Tariff), 2009. The Commission had given directions in the tariff order dated July 16' 2011 & May 07' 2012 to get the accounts prepared on commercial principles and get them audited. However the petitioner during a Commission's subsequent hearing/data validation had expressed that since CED is operating as a department within the Govt. of India, the system of account keeping is on cash receipt and expense basis. As per the accounting principles the revenue and expenditure to be considered for a financial year should be on accrual basis of accounting, therefore, CED has considered the accrual methodology for computing the actual

revenue and expenditure for FY 2011-12 and submitted the same in the Petition. Further, CAG has audited the proforma accounts for FY 2011-12 and the certificate was provided post-technical validation session held on 25th February 2013. The figures of income & expenditure submitted by the Petitioner for FY 2011-12 and pre-actuals for FY 2012-13 form the basis for projection of income and expenditure for FY 2013-14.

The detailed analysis and treatment of each component is provided in Chapter 6 (Determination of Aggregate Revenue Requirement for FY 2013-14) of this Order.

3. SUMMARY OF OBJECTIONS RAISED, RESPONSE FROM THE PETITIONER AND COMMISSION'S VIEWS

3.1 Public response to the Petition

On admitting the ARR & Tariff Petition for the FY 2013-14, the Commission directed the Petitioner to make copies of the petition available to the Public, upload the petition on the Website & also publish format in the newspapers in abridged form in the given format duly inviting, Comments/Objections from public as per provision of the JERC (Conduct of Business) Regulations 2009.

3.2 Public Hearing

A public hearing was held at Chandigarh on March 15' 2013 at the Central AC hall of Institute of Engineers, Sector 19 A, Chandigarh from 10.00 AM for all consumers. During the public hearing, those who submitted the objections in writing presented their Objections/Suggestions in person before the Commission. Other participants from general public, who did not submit written objections earlier, were also given an equal opportunity to offer their views/suggestions in respect to the ARR & tariff proposal for FY 2013-14 of the ED Chandigarh. The list of objectors are attached as an **Annexure 4** to this order. Commission had ascertained from the stakeholders at the beginning of the hearing that they have received the reply to their respective written objections. Some of them said they have received the reply on the date of hearing but they were satisfied. Those stakeholders who did not give prior written objections/suggestions & expressed their views, objections, suggestions during the hearing were replied to verbally by the petitioner during the hearing itself.

3.3 Objections/Suggestions and response of ED Chandigarh

<u>PART 1 : General Issues and Comments</u>

3.3.1 General Comments and Suggestions

Stakeholders Objections/Comments:

The main point raised by the Joint Forum of Industries Association of Chandigarh and Chamber of Chandigarh Industries, Chandigarh Beopar Mandal, Chandigarh Business Council, Sh Hansraj Sharma and Sh. P S Chawla in brief, are as under:

1. The stakeholders suggested that the licensee should cut cost by adopting IT services; service of online pre-information of energy bills should be started. An online record of complaints with redressal and delay record showing responsibility lapses should be available on the site of the department. Online bill payment facility should be provided;
2. Further, the stakeholders suggested that facility on the lines of Lok adalats, for the out of court settlement of consumer disputes should be provided;
3. Facility of consumer education should be available;
4. The stakeholders requested that the official mobile phones should be provided to all the maintenance staff, for their better efficiency;
5. There was an inadequate publicity of ARR petition by the utility, resulting in low turnout of objections. The stakeholders suggested that at least 15 days advance notice should be given so that it is convenient for the consumers to present their views/comments;
6. Measures for illegal Kundi Connections & Power theft;

Petitioner's submission:

1. The petitioner submitted that it is in the process of implementing the R-APDRP project once the decision by MoP is arrived as to whether UT Chandigarh should share DC (Data Centre)/ DRC (Data Recovery Centre) with utility of Punjab or Haryana, further progress in this regard will certainly help to reduce T&D Loss and improvement in the distribution system. The following shall be the part of R APDRP programme:

   Preparation of Base-Line Data for the project area covering Consumer Indexing, GIS Mapping, Metering of distribution transformers and feeders and Automatic Data Logging for all distribution transformers and feeders and SCADA/DMS system (only in the project area having more than 4 lakhs population and annual input energy of the order of 350 Million Units). It would include Asset Mapping of the entire distribution network at and below the 11 KV Transformers and include the distribution transformers and feeders, L.T lines, poles and other distribution Network equipment. It will also include adoption of Information Technology application for meter reading, billing and collection; energy accounting and auditing; MIS; redressal of consumer grievances, establishment of Information Technology enabled consumer service centers etc.

2. The petitioner further submitted that step by step options are already available to the electricity consumers of UT Chandigarh for out of court settlement of their disputes -

   - Dispute Settlement Committee (DSC) notified at CED level.

- Consumer Grievance Redressal Forum (CGRF) notified & established as per JERC regulation.
- Ombudsman notified & appointed as per JERC regulation.

All the necessary and requisite information about Chandigarh Electricity Department (CED) is made available on the website www.chdengineering.gov.in, which shall help the consumers. Further, the orders issued by the Consumer Grievance Redressal Forum (CGRF) in respect of consumers' complaint/disputes are also available on the said website and these definitely help the consumers. Besides, above, CGRF is conducting "Interactive Program" where consumer can come and gather more information about the rules and regulations of the department.

3. The petitioner submitted that all the information has been readily available on the website www.chdenginering.gov.in. Further, the consumers should feel free to for seeking any information for the department

4. The petitioner submitted that the proposal has already been put up before the competent authority for providing the mobile phone to all the maintenance and complaint staff in UT Chandigarh.

5. The petitioner submitted that the Public Notice was published in 3 leading local newspapers (Times of India, Punjab Kesari and Punjabi Tribune) on dated 23.02.2013 & 24.02.3013 for giving objections/suggestions regarding ARR & Tariff Petition for FY 2013-14 filed by CED. It is the effect of the wider publicity that CED has received approx. thirty nos. of objections from public this time. Further, the ARR and tariff petition has been uploaded on the website of CED and JERC. Thus, adequate publicity have been made.

6. The petitioner submitted that the a special cell called "Enforcement Cell" which raids the premises based on inputs and also undertake other vigilance activities like review of loads, checking of by-passing and tampering of meters, checking the accuracy of electricity meter. Moreover, at sub-division level also, the routine checking of premises is also going on to take care of any theft/regularities. To avoid kundi connections, electricity consumers has been provided to slum dwellers/ unauthorized colonies/ residents outside lal dora to plug revenue leakage and for safety of human beings from electrocution etc. Many consumers who found guilty are penalized by the Department as per notifications issued by the JERC/Electricity Act, 2003

Commission's views:

Adequate publicity, notice/time, opportunity was given to the stakeholders by publishing the summary of ARR by the licensee on 23.02.2013 & 24.02.2013 & again the notice for hearing by the Commission on 07.03.2013 & 13.03.2013. Thus, the Commission considers that the adequate time, information & opportunity were given to the stakeholders to give their objections/suggestions.

Commission observes that redressal of consumer's complaints and grievances is an important function and responsibility of distribution licensee and licensee must pay due attention to it. The Commission has put in place the appropriate mechanism for redressal of consumer grievances. A full-time Ombudsman is fully functional at the JERC office, Chairman & two members were appointed the CGRF and is fully functional at JERC, apart from Consumer Grievance Redressal Forums (CGRF) functioning at UT of Chandigarh. The licensee need to give due publicity to the said grievance redressal forum and its redressal mechanism so that public may be aware of all existing forums/levels. The licensee should work towards goal of greater consumer satisfaction, adopt a pro-active approach and settle consumers' complaints in a time bound manner.

Licensee should give due publicity of Standard of Performance / Salient features of Supply Code and Distribution Code to inform to the consumers of the deliverable by the licensee to the consumer. The Commission further directs CED to create awareness among the consumers on the standards of performance notified by the Commission, and directs the department to make arrangements to publish the Standard of Performance/Salient features of Supply Code and Distribution Code in all leading newspapers and in the the local vernacular.

The Petitioner should furnish the status of the working of the enforcement cell as per the last year directive, through regular submission of quarterly reports detailing the number of cases, amount involved, sub-judice cases and reduction of losses as a consequence.

3.3.2 Lack of effort to procure electricity meters, transformers, cable of gauges because they are always out of stock with the electricity department

Stakeholders Objections/Comments:

The main point raised by the Chandigarh Beopar Mandal in brief are as under:

Providing of Electricity Meters is the duty of the Electricity Department but the Department always fails to provide the same to the Consumers. The position is that whenever a new connection is issued or a case of defective / burnt meters; Electricity Meters should be provided or replaced as applicable, but the consumers are authoritatively directed by the Department to purchase their own Electricity Meters from a particular shop and deposit the purchased Electricity Meter along with the cash memo with the Electricity Department. This practice is totally against the Electricity Act / Rules applicable in Chandigarh.

Providing and fixing of the Cable from the nearest Electricity Poll upto the Electricity Meter at the premises of the Consumer is to be provided by the Electricity Department as per Law / Rules of the Electricity Department, by the Electricity Department but the factual picture is different i.e. the Electricity Department asks and compel the Consumers to purchase the Cable of required gauge from his own pocket and deposit the same with the Electricity Department and only thereafter electricity supply is connected to their premises. This practice is also totally against the Electricity Act / Rules applicable in Chandigarh.

Therefore, JERC may take note of this deficiency on the part of Electricity Department and consider this issue and pass necessary instruction to the Chandigarh Administration's Electricity Department to render such mandatory services to their consumers if they are so eager of raise the Electricity Tariff in the presence of deficiency of services.

There is scarcity of Electricity Transformers with the Electricity Department and also the Electricity Transformers have not been provided in consonance with the requirement of Electricity Load in different residential/commercial areas of Chandigarh, i.e., why the constant Electricity breakdown occurs very frequently from time to time in peak hours. Despite the fact that Chandigarh People have already voluntarily declared the connected
Load, the Department has not yet worked out the Electricity Load requirement for particular segment of houses or Commercial Buildings to provide additional Electricity Transformers to maintain uninterrupted electricity supply. Despite the fact that Chandigarh people have already voluntarily declared the connected Load by the Consumers i.e., Load gets upgraded from 2-Phase meters to 3-Phase meters, but the Electricity Department has neither replaced the 2-Phase Meters with 3-Phase Meters nor the compatible gauge Electricity Cable has not been connected by replacing the old Cable, though the voluntarily declared load appear in the bimonthly consumption bills.

Petitioner's submission:

The procurement of meters as well as cables are under progress. However, all the breakdowns are being attended as per Standard of performance as notified by JERC. All the sub-divisions are in the process of getting the additional transformers installed wherever required as per load requirement/ breakdown level/ voltage fluctuation. However, the procurement of distribution transformer is under progress.

Commission's views:
Commission noted the concerns raised by the stakeholders and the explanations submitted by the petitioner. Commission cannot overlook the hardship faced by the consumers and as such, the utility's achieved level of performance is being reflected in, the voice of consumers. The petitioner is directed to highlight such cases before the Commission on or before May 30'2013 along with the present facts, reason for delay in procurement of meters & cables and action plan in this regard. **The Commission will view any non-compliance in this direction seriously.**

3.3.3 Misuse of Section 126 of EA 2003

The main point raised by the National Consumer Awareness Group in brief are as under:

Stakeholders Objections/Comments:

Sec-126 being still misused by the CED. After connected load, now it is being used on DMC consumers who were converted to DS instead of NRS and then charged on UUE which is illogical. These consumers should be treated as NRS on the same terms as has been done in case of temporary connections to Rehri Markets.

Petitioner's submission:

The Section 126 has been implemented strictly wherever applicable as per the provisions of the Electricity Supply Code Regulation notified by Hon'ble JERC wherein Increase in connected load in excess of the Sanctioned load has been considered as the Act under Section 126. Since there is no DMC category mentioned in the Supply code regulation and accordingly all the consumers have been requested to regularize their consumer category by completing the requisite formalities. Further , as per Section 10.1.1(iv) of the Electricity Supply Code Regulation 2010 "Use of electricity for the purpose other than for which the supply of electricity was given " shall be considered under Section 126 of the EA 2003. As such, notices have already been issued to get their connection regularized by completing the requisite formalities.

Commission's views:

It was deliberated that there is no provision of any misuse category in the Tariff Order of ED-Chandigarh. Neither do the regulations provide for the same. Till date, the Commission was also not aware of such categories being created by ED- Chandigarh. Therefore, any such categories created by ED-Chandigarh are ultravires and they shall be converted to appropriate tariff categories as already approved by the Commission. If creation of separate category is considered fit by the licensee, approval of such category may be obtained afresh from the Commission by the licensee by filing a petition.

In order to avoid the misuse of Section 126 of Electricity Act, 2003 Commission has also specified the following in the tariff schedule of this order:

- Act on the part of the consumer to be considered as unauthorized use of electricity for the purpose of assessment under the provisions of Section 126 of the Act
- Cases not to be treated as unauthorized use of Electricity

3.3.4 Fresh Recruitments

Stakeholders Objections/Comments:

The main point raised by the Joint forum of Industries association of Chandigarh and chamber of Chandigarh industries in brief are as under:

The licensee has shown additional recruitment of 207 employees during FY 2012-13, which needs to be justified by the licensee. The Government of India has already put a blanket ban on fresh recruitment. Similar request of the licensee should again be disallowed on the ground that, with the computerization and adoption of many new technologies, there is definite improvement in work capacity per employee. No such effect have been shown, neither in the FY 2012-13 nor in the estimates of 2013-14. The department has not shown the status of their employee costs visa vise the national average. Their cost should be lesser then the national average due the area compactness of their operations. The situation should be viewed in the national interest, since the Government of India has already put a blanket ban on fresh recruitment, Rather there are directions for reducing the staff strength at every level.

Petitioner's submission:

The petitioner submitted that CED is in the process of implementing the R-APDRP project once the decision by MoP is arrived as to whether UT Chandigarh should share DC (Data Centre)/ DRC

(Data Recovery Centre) with utility of Punjab or Haryana after which the IT techniques and new technologies shall be implemented. The CED has proposed a total employee cost of Rs. 59.11 Crore for the FY 2013-14 against the approved employee cost of Rs. 60.98 Crore for the FY 2012-13. It can be seen the employee cost has been reduced for FY 2013-14 in comparison to the approved employee cost of FY 2012-13 despite the fact there is around 13-14% increase in WPI. As such the employee cost proposed is reasonable otherwise CED will not be able to provide services as per standard of performance (SoP) notified by Hon'ble JERC.

Commission's views:

Commission is not satisfied with the explanation given by the licensee. The utility was over staffed in 1990-1991, when one employee was catering to only 73 consumers. Even today the physical area of Chandigarh is the same whereas the density of consumers per sq. km has increased. As of now, one employee is catering to only 199 consumers as shown by the Petitioner.

Considering that the All India average number of employee per thousand consumers is 0.40[1] (i.e. one employee for every 2500 consumers), it can be construed that the Electricity Department of Chandigarh is still overstaffed. Hence the Commission does not consider and does not approve the projected manpower recruitment. However a few IT, Commercial and Accounts Officers may be considered for recruitment. Action plan for improving efficiency of the existing staff and reduction in existing employee strength shall be submitted in the next ARR and Tariff Petition.

PART 2: ARR related

3.3.5 Assessment of T&D Losses

Stakeholders Objections/Comments:

The main point raised by the Joint forum of Industries association of Chandigarh and Chamber of Chandigarh industries, Social welfare council, Chandigarh Beopar Mandal, Chandigarh Business Council, Citizen for Chandigarh, Indian Citizen Forum, Federation of Sector welfare association, Sh. Gurpratap Singh, Chandigarh Defense Colony Welfare Association and Sh. P S Chawla in brief are as under:

The stakeholders have submitted that T&D loss proposed by the petitioner for FY 2013-14 is on the higher side for such a small and well managed system of UT Chandigarh as compared to

[1] Annexure 4.20 of Annual Report (2011-12) on the working of State Power Utilities & Electricity Departments published by Planning Commission, Government of India in October 2011.

utilities in neighboring states. It was requested that Commission should reduce the T&D losses by 2% fixed for FY 2013-14 as per the Abraham Committee report. Further they have submitted that the major reason for high T&D losses is kundi connections where rampant theft of energy is going on which needs to be checked/monitored.

The department has demanded 2% additional T&D loss due to HT transmission of their supplies from Mohali, Nalagarh and Dhulkote up to the metering end. The actual calculated line losses on these lines should make a rationale for the department and not an adhoc figure of 2%.

The stakeholders further submitted that the licensee is not conducting any energy audit, therefore, there is no public control over its activities. The stakeholders advocated that the licensee must carry out an energy audit in order to confirm their transmission & distribution losses and thereafter an acceptable road map for line wise transmission losses should be prepared and actual loss should be evaluated by putting line energy meters.

The Commission may issue directions to the distribution licensee to put an end to this theft of energy and save consumers of UT Chandigarh from unnecessary burden due to this theft. As per the latest technologies and the availability of small capacity 11000/440 transformers coupled with higher connected load requirements, both in domestic and commercial supply, a systematic plan to reduce LT line lengths should be undertaken on a medium terms plan basis, The same should be presented before the commission. More so there is no permitted unmetered supply to any consumer. The same should be checked immediately.

Petitioner's submission:

The petitioner submitted that it has not been provided any Inter State Transmission Point within the periphery of UT Chandigarh as such additional 2-3% notional interstate losses are being borne by CED. Further, CED has proposed 17% Intra state transmission & distribution losses for FY 2013-14 due to the fact that around 98% of the consumers are LT consumers and only less than 2% are HT/EHT Consumers. Further, CED is in the process of implementing the R-APDRP project once the decision by MoP is arrived as to whether UT Chandigarh should share DC (Data Centre)/ DRC (Data Recovery Centre) with utility of Punjab or Haryana, further progress in this regard will certainly help to reduce T&D Loss and improvement in the distribution system. The following shall be the part of R APDRP program:

Preparation of Base-Line Data for the project area covering Consumer Indexing, GIS Mapping, Metering of distribution transformers and feeders and Automatic Data Logging for all distribution transformers and feeders and SCADA/DMS system (only in the project area having *more than 4 lakhs population and annual input energy of the order of 350 Million Units). It would include Asset Mapping of the entire distribution network at and below the 11 KV Transformers and include the distribution transformers and feeders, L.T lines, poles and other distribution Network equipment. It will also include adoption of Information Technology application for meter reading, billing and collection; energy accounting and auditing; MIS; redressal of consumer grievances, establishment of Information Technology enabled consumer service centers etc.*

Moreover, after the implementation of R-APDRP schemes, the loss shall further be reduced. We are also in the process of implementing the R-APDRP project once the decision by MoP is arrived as to whether UT Chandigarh should share DC (Data Centre)/ DRC (Data Recovery Centre) with utility of Punjab or Haryana. Further progress in this regard will certainly help to reduce T&D Loss. We have already got the DPR sanctioned from MoP for Rs 33.34 Cr. Further, under IT implementation stage of R-APDRP, the energy audit shall be conducted;

Commission's views:

The Commission appreciates the licensee's effort to set up an enforcement cell, but there are no statistics given in the ARR, to prove or quantify the results of enforcement cell in terms of amount realized, energy saved and brought into account as compared to total commercial loss.

The petitioner submitted that they are taking all steps to reduce T&D losses. However, they should take energy audit more seriously as it is the basis of assessment of present loss level and reduction in it.

Further, in relation to extra losses as claimed by the petitioner, the Commission, while approving T&D losses has considered the power availability at the licensee's periphery, existing infrastructure, input and output point and Abraham Committee Report. **Commission has considered the T&D losses of 16% for FY 2012-13 as approved in tariff order dated 07th May 2012 for the entire network of CED comprising of intra-state transmission and distribution. The Commission has approved T&D losses of 15% for FY 2013-14 as detailed in para 6.5.**

The Commission directs ED that they should take the energy audit more seriously as it is the basis of assessment of present loss level and setting out the loss reduction trajectory. The petitioner should furnish the segregation of losses into transmission and distribution losses in the first place and further segregation of distribution losses in to technical and commercial losses in the next petition along with the status report on energy audit and accounting.

3.3.6 Capital Expenditure

Stakeholders Objections/Comments:

The main point raised by the Joint forum of Industries association of Chandigarh and chamber of Chandigarh industries in brief are as under:

The funds demanded for capital work needs to be examined from the angle of requirement of the works projected and should be allowed only after the complete technical and financial justification/examination. Such expense should generate profits, resulting in lower the revenue by the UTED. Moreover, the development cost of the power system in a particular sector is taken into consideration while working out the cost of land, which is born by allotters. Further, the cost of service line is also recovered at the time of release of individual connections.

Petitioner's submission:

The petitioner submitted that the scheme/estimate that includes technical viability is being prepared before according of Administrative approval to any capital work under Plan head.

Commission's views:

Commission is of the view that expenditure on capital cost, depreciation, interest on loans, return on Equity/NFA etc. has been considered based on the prudence check.

The directive on the capital expenditure should be duly adhered to. The petitioner should submit the detailed statement of the capital expenditure incurred and capitalization for every quarter, within 15 days in the subsequent quarter.

3.3.7 Depreciation

Stakeholders Objections/Comments:

The main point raised by the Joint forum of Industries association of Chandigarh and chamber of Chandigarh industries in brief are as under:

The depreciation of assets should be considered and allowed as per the JERC tariff regulations.

Petitioner's submission:

The petitioner submitted that they have claimed the depreciation of assets as per the provisions of JERC tariff regulations and has requested the Hon'ble Commission to approve the same.

Commission's views:

The Commission has noted the concern of the stakeholders and the submission made by the petitioner. The Commission has taken a prudent view as per the JERC's tariff regulations and the reasonableness of the expenditure for provisional true up of FY 2011-12, review of FY 2012-13 and estimation of Aggregate Revenue Requirement for FY 2013-14 and the same has been discussed in detail in section 4, 5 and 6 of this order.

3.3.8 Interest & Finance Charges

Stakeholders Objections/Comments:

The main point raised by the Joint forum of Industries association of Chandigarh and chamber of Chandigarh industries in brief are as under:

The rate at which interest (14.75%) has been claimed in the ARR is very much on the higher side. It is brought to the notice of the Commission that on one side Chandigarh administration is buying FDRs at much lower rate of interest and at the same time loans has been shown at a much higher interest rate. Otherwise also, the UTED is a large organization and can qualify to be a corporate borrower.

Petitioner's submission:

The petitioner submitted that as per the regulation for Determination of tariff, the rate of interest should be the SBI PLR rate as on 1st April of that year. As such the interest at the SBI PLR rate of 14.75% as on April 1st, 2012 has been applied.

Commission's views:

The Commission appreciates the concern of the stakeholders and has noted the submission of the petitioner. Commission clarifies that SBI PLR rate has now been substituted as State Bank Advance Rate. Commission is of the view that interest rate could be considered based on the prudence check

3.3.9 Interest on Security Deposit

Stakeholders Objections/Comments:

The substantive point raised by the Joint forum of Industries association of Chandigarh and chamber of Chandigarh industries, and Sh. Baljinder Singh in brief are as under:

The licensee has claimed interest on consumer's security deposit, which needs to be disallowed in the absence of actual interest paid by the licensee in the past years/current year. More so, the security deposits collected by the UTED is a long term public current liability and must be available with it in the form of current assets/ generating enough revenue to pay for such interests. Costs on account of delay in payment of interests cannot be loaded on the public as provided in the ARR

Petitioner's submission:

The petitioner has submitted that 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;

Commission's views:

The Commission has taken a serious note of the non - compliance of the directive given by the petitioner wherein in its last tariff order dated 07th May' 12 it has directed the petitioner to pay the interest on consumer security deposit by giving credit in the respective consumer's bill at the applicable Bank rate, with effect from 1st April 2011 to the consumers on their security deposit irrespective of petitioner's constraints. The Commission again directs the petitioner to do so at the earliest.

3.3.10 Operation & Maintenance Expenses

Stakeholders Objections/Comments:

The main point raised by the Joint forum of Industries association of Chandigarh and chamber of Chandigarh industries and Lt. Col. (Retd.) P.J.S. Mehta in brief are as under:

1. The licensee has projected an increase of almost 60% in A&G expenses for FY 2013-14. There is no detail of professional charges being paid under this head which needs to be disallowed. The UTED should be restricted to adhoc consultation charges as they have enough technical and professional strength at their own level. The Commission may allow the increase over the base rates of FY 2011-12 by WPI, as per the tariff regulations. Similarly, the increase under various heads of O&M expenses should be allowed as per the tariff regulations.

Petitioner's submission:

1. The petitioner submitted that the increase in A&G expenses is basically due to increase in regulatory expenses (License Fee and Petition Fee) which is mandatory as per conduct of business Regulation notified by JERC. Further, the CED has been carrying out a Manpower Study, R-APDRP project for which the consultants have to be appointed for its implementation. Some of the advertising and publicity expenses are also been included for publicity of CGRF, Public Notices for general awareness etc during FY 2013-14. Further the petitioner has submitted that the R&M Expenses would be required to undertake various Repairs and Maintenance activities as a step towards improvement of systems, reduction in breakdowns, reduction in response time and increasing preventive maintenance and has been determined as per the JERC Terms and Condition for Determination of Tariff Regulations, 2009.
2. The employee cost is an important component of the O&M cost for every utility in India. All distribution utilities have a large number of employees for maintenance of electricity distribution infrastructure, billing and its distribution & collection, etc. out of which employee cost forms a significant portion of the O&M expenses. It can be seen that the employee cost has been reduced for FY 2013-14 in comparison to the approved employee cost of FY 2012-13 despite the fact there is around 13-14% increase in WPI. As such the employee cost proposed is reasonable otherwise CED will not be able to provide services as per standard of performance (SoP) notified by Hon'ble JERC

Commission's views:

The Commission has noted the concern of the stakeholder and submissions made by the petitioner. The Commission has taken a prudent view to assess the reasonableness of cost projected for ARR of FY 2013-14 as per the tariff regulations and the same has been discussed in detail in section 6 of this order.

3.3.11 Provision for Bad Debts and defaulters in payments

Stakeholders Objections/Comments:

The main point raised by the Joint forum of Industries association of Chandigarh and Chamber of Chandigarh industries, Chandigarh Defense Colony Welfare Association, Anti-Corruption Cell, Sh Pradeep Singh and Sh. Ajay Jagga in brief are as under:

The licensee has made a provision of 1% towards bad debt. This demand needs to be examined thoroughly by the Hon'ble Commission as per the practices being followed by other SERCs. However, if It is to be allowed, it should be allowed on the estimated bad debts related to the current year only and not on the bad debts of the previous years. The department should certify in public domain, that, they have exhausted all legal and other means to recover the debit, before utilizing this provision. Such provisions, without any riders shall be anti-public. More over UT of Chandigarh is a compact area and with computer generated disconnection lists of the defaulters, there is no reason that there should be accumulation of defaulters in Crores in case temporary/permanent disconnection is effected honestly. Moreover, new connections are not released in the defaulting premises without clearance of defaulting amount. Bad debits should not thus be allowed as percentage of revenue receipts but on basis of actual figures, with detailed
Justification.

Petitioner's submission:

The petitioner submitted that they have calculated bad debts amounting to 1% of revenue from existing tariff as against revenue requirement in accordance with regulation 28 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

Commission's views:

The regulation no. 28 of JERC Tariff regulations read with the format is given below.

"28. Bad and Doubtful Debts

*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. (Information to be furnished in format 18)"*

Format -18

S.No.	*Particulars*	*Amount (Rs. in Crores)*
1.	*2.*	*3.*
1.	*Amount of receivable bad and doubtful debts (audited)*	
2.	*Provision made for debts in ARR*	

As can be observed, the regulation allows a provision for bad and doubtful debts up to 1% of receivables in the revenue requirement.

3.3.12 Power Purchase

Stakeholders Objections/Comments:

The main point raised by the Joint forum of Industries association of Chandigarh and chamber of Chandigarh industries and Indian Citizen Forum in brief are as under:

1. The power purchase rates in respect of certain central generating stations like Dulhasti, IGSTPP, Sewa-ll and SPECIALLY from BBMB 10 LU, are very much on the higher side vis-a-vis the rates of power purchase available in the market. As such, the power purchase from these sources may not be allowed. Sourcing of power from BBMB 10 LU is a welcome step, but this allocation should be at the same rate as applicable for 3.5% allocation from BBMB;

2. The energy purchased bilateral arrangements has increased many times and constitutes 20.5% of total power purchase. The licensee must arrange power from cheaper sources through long term PPAs and dependence on this source should be minimized to avoid unnecessary burden on consumers. Further, since UT Chandigarh has no generation of its own, the Administration should approach the MoP for allocation of power from unallocated quota from Central Generating Stations.

3. The licensee has shown power purchase through UI at an average rate of Rs. 4.19 per unit. The licensee may be directed not to buy power under UI.

4. The purchase of electricity at higher rate to supply at normal tariff, especially during PEAK-HOURS in the city & for industrial establishment & bulk consumers, is a major cause of loss of govt revenue. Thus, it is important to impose the peak-hour-restrictions on highly consuming electricity establishments should be imposed to save the further increase of tariff un-necessary, in case, dept. goes correctly works under planned-manners. This can also save the undue burden on the other residents / consumers at the cost of such establishments, which

can be avoided to save the loss of revenue and to save the lower percentage of increase in tariff because of purchase of electricity for city, at highest-tariff- period of the day i.e. peak-hours.

Petitioner's submission:

1. The petitioner submitted the power purchase rate in respect of the Central generating stations like Dulhasti, IGSTPP, Seva-II, are being determined by the CERC from time to time as per guidelines issued for which the PPAs has already being approved by the Hon'ble Commission. It is pertinent to mention that Dulhasti and Seva-II are the new hydro Power projects for which the fixed charges/capacity charges are on comparatively higher side and negligible energy charges. The power from IGSTPP has been allocated to all the utilities in the Northern region by MoP from the unallocated quota. In case, the commission does not approve the power from IGSTPP, the fixed charges are to be borne by UT Chandigarh and it will further burden the per unit cost of power purchase.

2. The 10 LUs per day BBMB power is the special assistance provided to UT Chandigarh in view of capital state of Haryana and Punjab for which the tariff is being determined in the BBMB board meeting held from time to time. It is pertinent to mention that in the board meeting held in the year FY 2010-11 the board has arbitrarily increased the tariff to Rs. 6.00 per unit and after deliberation with the BBMB authorities the tariff was got reduced to the prevailing Global rate (BTPS Power) as being carried out previously. Further the matter has been taken up the GoHP for long term power arrangements for replacing this power with comparatively cheaper one. The reply of GoHP is still awaited. This 10 LUs per day BBMB power (being around 30% of the total power purchase) cannot be surrendered without making any other arrangement which are already in process because that will create severe power shortage in UT Chandigarh. has been procuring power at the competitive market rates through various power trading companies licensed by CERC. Every effort is being made to provide continuity of power supply to all the consumers even through procurement of power from power exchange platform to bridge the gap of demand and supply in summer season.

3. The petitioner submitted that, every effort is being made to remain within the scheduled power when the frequency falls below 49.70 Hz to avoid Grid indiscipline. CED in order to manage the schedule of power has been procuring power on short term competitive bidding on monthly basis, IEX/PXIL on day ahead basis. But in case there is still any shortage of power the same is being met from UI but keeping in view the Grid discipline as per IEGC. After the implementation, the load management will be online and at present, it is manual.

4. Further, it is submitted that CED is buying power through short term bilateral arrangements in the summer season only through competitive bidding to meet the increased load demand.

Since CED is having shortage of power during summer season only and surplus during winter season and if long term power purchase agreements are made, this may lead to financial loss to the CED in this ABT regime in view of the market rates which may vary Rs 2 to 3 per unit during summer season and winter season. Therefore, buying short term power is most appropriate rather than selling surplus power at lesser rates in the winter season.

Commission's views:

Commission has taken note of the concerns expressed by stakeholders on quantum of power purchase, particularly from bilateral sources. The Commission observes that ED Chandigarh did not make long term PPA to meet its base requirement and depends largely on short term power purchases to meet the present shortages. It purchases power at higher rate from bilateral source, power exchanges and over drawls under UI beyond prudent level.

Commission also observes that the utility has not undertaken an appropriate management of Power in their area. The Commission has taken a serious note of the non - compliance of the directive given by the petitioner wherein in its last tariff order dated 07th May' 12 it had directed the petitioner 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 at the time of day, month/seasons and submit the outcome of the study to the Commission in their future ARR & Tariff Petitions and to make long term PPA to meet of their base load requirement to avoid/minimize short term Power purchases from bilateral sources, Power exchanges and U.I. not beyond the prudent level so as to minimize the impact on ARR. Further, the Commission also directs the licensee to separately show the date wise/time wise details of all short term Power purchases including quantum, rate & amount and grid frequency in case of U.I. over drawls/under drawls.

3.3.13 Revenue Gap/Deficit

Stakeholders Objections/Comments:

The main point raised by the Joint forum of Industries association of Chandigarh and chamber of Chandigarh industries in brief are as under: The revenue gap has been transferred and included in the gap determined for FY 2013-14. The objector's requested the Commission to determine the gap for FY 2011-12 on the same principles on which the ARR for FY 2011-12 was determined and allow only reasonable costs as per the Tariff regulations.

Petitioner's submission:

In this context, the petitioner submits that the computation of Aggregate Revenue Requirement is done on the basis of projections as per Terms and conditions for determination of tariff regulations 2009 notified by JERC, every distribution licensee has to submit its Annual Revenue Requirement (ARR) to regulatory commission for determination of tariff. Accordingly, Chandigarh Electricity Department (CED) being distribution licensee has submitted its ARR and tariff proposal for FY 2013-14 and proposed the tariff hike accordingly.

Commission's views:

Commission appreciates the concern of the stakeholder and has noted the submissions made by the petitioner. The prudent view has been taken to assess the reasonableness of the costs and expected revenue as per the tariff regulations, 2009. The same has been discussed in the chapter 4, 5 and 6 of this order.

3.3.14 Purchase and Sales Mechanism

Stakeholders Objections/Comments:

The main point raised by the Lt.Col (Retd.) PJS Mehta, in brief are as under:

Gap between purchase of power and sale of power to be reduced by adopting measures such as use of open excess to purchase power at lesser rates, reduction in transmission losses by proper monitoring through dedicated meters at sending and receiving ends of the lines from various supply sources. Further the total figure of units purchased source wise and units sold category wise for the year 2012-13 up to Nov be disclosed to arrive at actual losses , including the theft through kundi connections..

Petitioner's submission:

The CED has been meeting the Supply and demand by procuring power as under

a) Banking of power - CED has already entered in to the agreement with PDD J&K wherein CED receives power during peak summer season i.e. May to August from 1000 to 1800 hrs. and returns the same during the lean period in winter season i.e. Nov to Feb. from 2200 to 0600 hrs.
b) Short term bilateral arrangements- CED has been procuring power for the peak summer season i.e. April to September through short term competitive bidding purely on the lines of the guidelines issued by Ministry of Power, GoI. The power thus procured are at the

periphery of the UT Chandigarh inclusive of all the relevant charges and transmission losses.

c) Power Exchanges- The CED has been procuring /selling the power through Power Exchange platform i.e. PXIL /IEX which is a competitive market envisaged by CERC.

All the figures of Purchase and sales up to Nov 2012 has already been provided in the Review for the FY 2012-13 filed by CED

Commission's views:

Commission has taken a note of the concern stated by the stakeholders regarding sale to common pool consumers/UI. Petitioner should ensure that overdrawl through UI is minimized to restrict its impact on power purchase cost.

PART 3: Tariff related

3.3.15 General Comments

Stakeholders Objections/Comments:

The main points raised by the Chandigarh Beopar Mandal, Sh Joginder Singh Bhogal, the Joint forum of Industries association of Chandigarh and chamber of Chandigarh industries, 504 MIG Flats (RWA), Sh Ajay Jagga, Federation of Small Scale Industries, Sh M. R. Munjal and Federation of Sector welfare association in brief are as under:

1. Most of the objectors furnished their objections against tariff hike.
2. The incentive for power factor more than the prescribed limit of 0.90 should be allowed as and when there is increase in power factor beyond 0.90 instead of 0.95
3. Some of the stakeholders requested to grant some specific subsidy in power rates on the pattern of neighboring states

Petitioner's submission:

1. The petitioner has submitted that as per Terms and conditions for determination of tariff regulations 2009 notified by JERC, every distribution licensee has to submit its Annual Revenue Requirement (ARR) to regulatory commission for determination of tariff. Accordingly, Chandigarh Electricity Department (CED) has submitted its ARR and tariff proposal for FY 2013-14 and proposed the tariff hike accordingly.

2. The petitioner further submitted that the prescribed limit of power factor is 0.90. However, this shall not be considered for incentive for power factor. The incentive for power factor should be for more than 0.95.

3. The petitioner submitted that there is no such provision of giving subsidy in power tariff to any consumer in the approved tariff rates by JERC as well as in the state policy. Further, there is no discrimination in determination of tariff or supply of electricity to any consumers in Chandigarh.

4. The petitioner submitted that the proposed fixed charge for electricity consumers is to compensate for the fixed cost to maintain the Electricity infrastructure including Operation & Maintenance. As a general principle of tariff recovery, the fixed charges such as Depreciation, O&M expenses, Interest on debt, Interest on Working capital, Return on Equity etc need to be recovered from Fixed/ Demand Charges to keep the utility healthy financially. The variable cost in terms of power purchase are ought to be recovered from energy charges. Also it is contemplated that by imposing the fixed charges, the consumer will be restricted to apply for the actual load requirement. In case, consumer is not charged on the basis of fixed charges, anyone can apply for un-realistic load for which department has to invest through un-warranted capital cost which will again leads to increase in tariff. Therefore, check & balance has to be there.

   As per clause 4.11(2) of JERC Supply Code Regulation 2010 also, "If, as a result of such proposed extensions and alterations, there is possibility of an increase in connected load or contract demand over sanctioned connected load or contract demand, the consumer shall take steps to submit a requisition for additional supply. Failure to regularize the increase in connected load or contract demand may not only result in billing at the penal rates, as provided in chapter – 10 under unauthorized use of electricity but may also result in disconnection of supply after due notice".

Commission's views:

Commission has noted the suggestion of stakeholders and clarifications furnished by the petitioner. Commission while deciding the matter has appropriately considered the views of the stakeholders in section 7 of this order.

3.3.16 Single part Tariff and Fixed Charges

The main points raised by the Chandigarh Beopar Mandal, Sh Joginder Singh Bhogal, the Joint forum of Industries association of Chandigarh and chamber of Chandigarh industries, 504 MIG

Flats (RWA), Sh Ajay Jagga, Federation of Small Scale Industries, Sh M. R. Munjal and Federation of Sector welfare association:

Stakeholders Objections/Comments:
Single part Tariff and Fixed Charges

Petitioner's submission:

The petitioner submitted that the proposed fixed charge for electricity consumers is to compensate for the fixed cost to maintain the Electricity infrastructure including Operation & Maintenance. As a general principle of tariff recovery, the fixed charges such as Depreciation, O&M expenses, Interest on debt, Interest on Working capital, Return on Equity etc need to be recovered from Fixed/ Demand Charges to keep the utility healthy financially. The variable cost in terms of power purchase are ought to be recovered from energy charges. Also it is contemplated that by imposing the fixed charges, the consumer will be restricted to apply for the actual load requirement. In case, consumer is not charged on the basis of fixed charges, anyone can apply for un-realistic load for which department has to invest through un-warranted capital cost which will again leads to increase in tariff. Therefore, check & balance has to be there.

As per clause 4.11(2) of JERC Supply Code Regulation 2010 also, "If, as a result of such proposed extensions and alterations, there is possibility of an increase in connected load or contract demand over sanctioned connected load or contract demand, the consumer shall take steps to submit a requisition for additional supply. Failure to regularize the increase in connected load or contract demand may not only result in billing at the penal rates, as provided in chapter – 10 under unauthorized use of electricity but may also result in disconnection of supply after due notice".

Commission's views:

Commission has noted the suggestion of stakeholders and clarifications furnished by the petitioner. Commission while deciding the matter has appropriately considered the views of the stakeholders in section 7 of this order.

3.3.17 Consumer Governance from connected load to contract demand

Stakeholders Objections/Comments:

The main point raised by the Joint forum of Industries association of Chandigarh and chamber of Chandigarh industries in brief are as under:

With advancement of technology and with the installation of electronic meters, having, multi reading capabilities, the licensee must change its consumer governance from Connected Load to Contract Demand, both in terms of services and tariff. The neighboring utility of Punjab is already observing this system. Further, this practice was prevalent in UT earlier and was changed in between without consulting other stakeholders.

Petitioner's submission:

The petitioner has submitted that is in the process of implementing the R-APDRP project once the decision by MoP is arrived as to whether UT Chandigarh should share DC (Data Centre)/ DRC (Data Recovery Centre) with utility of Punjab or Haryana, further progress in this regard will certainly help to reduce T&D Loss and improvement in the distribution system. The following shall be the part of R APDRP program:

Preparation of Base-Line Data for the project area covering Consumer Indexing, GIS Mapping, Metering of distribution transformers and feeders and Automatic Data Logging for all distribution transformers and feeders and SCADA/DMS system (only in the project area having more than 4 lakhs population and annual input energy of the order of 350 Million Units). It would include Asset Mapping of the entire distribution network at and below the 11 KV Transformers and include the distribution transformers and feeders, L.T lines, poles and other distribution Network equipment. It will also include adoption of Information Technology application for meter reading, billing and collection; energy accounting and auditing; MIS; redressal of consumer grievances, establishment of Information Technology enabled consumer service centers etc.

Commission's views:

The Commission directs the Petitioner to devise a methodology and give a detailed action plan for category wise phased implementation of such meters. Accordingly, the Commission would consider the same as per amended Supply Code Regulation being notified by the Commission separately.

3.3.18 Solar System of all Government Buildings & Misuse of Power - Street Light

Stakeholders Objections/Comments:

The main point raised by the Chandigarh Beopar Mandal and 504 MIG Flats (RWA) in brief are as under:

All States and Union Territories are having their own Renewal Energy Departments dealing with Solar System. Government be directed to work on time bound schemes for equipping all Government buildings with Roof Top Solar panels for generating electricity because the electricity consumption much higher in Government and Corporate office buildings because the electricity consumption very careless done there. Also the street lights in the city be put on solar system to save the electricity. This step will help in reducing the consumption and increase in electricity tariff yearly.

Petitioner's views:

The petitioner stated that CED is required to purchase 0.40% (6.035 MUs) of solar power, but due to non-availability in the power exchanges, CED is not able to buy solar power. For promoting solar power/ energy in the city, Chandigarh Administration has appointed CREST as a nodal agency and CED will buy solar power from CREST after approval of PPA from JERC. The present rate of solar power is Rs 13/-per unit (approx) which is the highest amongst coal, gas, hydro and other non-solar generation

The street light system in UT Chandigarh is owned by Municipal Corporation, UT Chandigarh. However, CED is only maintaining the street light on V-6 Roads. Further, Automatic On & Off street light system has already been installed at most of the places in UT Chandigarh. However, the proposal to install LED based street light system is under preparation in consultation with Municipal Corporation UT Chandigarh.

Commission's views:

Commission has noted the suggestion of stakeholders and has noted the submissions made by the petitioner.

3.3.19 Steps to recover arrears from consumers – Power Purchase Bills

Stakeholders Objections/Comments:

The main point raised by Chandigarh Business Council and Ajay Jagga in brief is as under:

There is huge outstanding arrears payable in account Electricity consumption by various government department and bulk consumers. These amounts has been publically declared through newspapers many a times as unpaid but no Serious efforts have been to recover outstanding arrears. If these areas are recovered within specified time frame. The hike proposed can be avoided. The Electricity Department has not declared the complete list of arrears on account of Private Defaulters, Government Defaulters and along with the amounts due.

Petitioner's views:

The petitioner stated that it has a special cell called "Enforcement Cell" which raids the premises based on inputs and also undertake other vigilance activities like review of loads, checking of by-passing and tampering of meters, checking the accuracy of electricity meter. Moreover, at sub-division level also, the routine checking of premises is also going on to take care of any theft/regularities. To avoid kundi connections, electricity consumers has been provided to slum dwellers/ unauthorized colonies/ residents outside lal dora to plug revenue leakage and for safety of human beings from electrocution etc. Many consumers who found guilty are penalized by the Department as per notifications issued by the JERC/Electricity Act, 2003

The Chandigarh Electricity Department (CED) has made sincere efforts in reducing the defaulting amount from both Govt. and Pvt. Organizations'. Notices are already issued to the every Organization/Consumer for deposit of their pending dues and for non-payment the supply is disconnected. Further, as per clause 28 of JERC Terms and conditions for determination of Tariff Regulations 2009, a provision of bad debts up to 1% of receivables in the revenue requirement of the CED is allowed and thus, proposed tariff hike does not consider/ include arrears, leakage by power theft etc. Further, CED has booked several offenders under section 135 of EA 2003, in order to prevent theft of energy.

Commission's views:

Commission has noted the suggestion of stakeholders and appreciates the efforts made by the petitioner.

4. PROVISIONAL TRUING UP FOR FY 2011-12

4.1 Petitioner Submission

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. Since CED is operating as a department within the Govt of India, the system of account keeping is on cash receipt and expense basis. As per the accounting principles the revenue and expenditure to be considered for a financial year should be on accrual basis of accounting, CED has considered the accrual methodology for computing the actual revenue and expenditure for FY 2011-12 and submitted the same in the Petition.

4.2 Commission Analysis

Commission in its last tariff orders dated May 07, 2012 and 16th July 2011 had directed the petitioner to prepare annual statement of accounts on commercial account principles for regulated business of electricity. Since, CED is operating as a department within the Govt of India, the system of account keeping is on cash receipt and expense basis i.e. proforma accounts. Further, the expenses/income as mentioned in proforma accounts doesn't matches with the expenses/income for FY 2011-12 in the ARR and Tariff Petition file for FY 2013-14. CED has audited the said proforma accounts and has commented thereon.

CED being an integrated utility in its present form as defined in Regulation 2(9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 as the ED Chandigarh is not restructured and corporatized till date. Further, as per JERC (Terms and Conditions for determination of Tariff) Regulations, 2009:

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 andexpenditure 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'.
Emphasis added

(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.

Since, the audited accounts based on commercial account principles are still awaited, Commission thinks it would be inappropriate to consider provisional true up of FY 2011-12. It would be done once the audited accounts are made available. Since, CED is operating as a department within the Govt of India, the system of account keeping is on cash receipt and expense basis i.e. proforma accounts. Further, the expenses/income as mentioned in proforma accounts doesn't match with the expenses/income for FY 2011-12 in the ARR and Tariff Petition filed for FY 2013-14. The Commission had approved a gap of Rs 45.93 Crores after review of ARR of FY 2011-12 in tariff order dated 07th May 2012. The Commission has brought forward this gap of Rs 45.93 Crs in ARR of FY 2012-13 as reviewed in this Order.

5. REVIEW OF ARR FOR FY 2012-13

5.1 Background

The Commission had approved the Aggregate Revenue Requirement for FY 2012-13 as per the provisions of the tariff regulations 2009. The petitioner had submitted its application of Review along with ARR & Tariff Petition for FY 2013-14 on 15th February 2013 as per the regulation no. 8 of JERC tariff regulations 2009 to review the variations between approvals and revised estimates/pre-actuals of sale of electricity, income and expenditure for FY 2012-13.

1. After initial scrutiny/analysis, Commission took the petition on record on 25th February 2013.
2. The Commission's office interacted with the Petitioner to seek clarifications and justification on various issues as part of the preliminary analysis of the petition, which was asked to be clarified by the petitioner as under:
    a. The utility needs to provide details of long term/short term power purchase, month wise and source wise, for FY 2011-12 (actual for whole year) and FY 2012-13 (actual for first 9 months) and station-wise, month-wise details of FPA/FPPCA, tax, past arrears etc. as per Format 4.
    b. Submit month wise bills for PGCIL charges, NRLDC FC, REC, RPO, LC, including any arrear bills, if any for FY 2011-12 and FY 2012-13 (actual for first 9 months);
    c. UI summary sheet, indicating the over-drawal and under-drawal alongwith the UI payable and receivable amount be submitted as per the claimed amounts in the petition. UI Bills for FY 2011-12 and FY 2012-13 (actual for first 9 months) in support of this to be furnished;
    d. Difference in Interest rate on loan and Interest rate on Working Capital for FY 12 needs to be explained;
    e. Double accounting has been observed for Provision for Bad Debts in FY 12. Included in ARR and again deducted from Revenue from Tariff Categories. The deficiency/basis needs to be explained;
3. The Commission's office interacted with the Petitioner to seek clarifications and justification on various issues necessary for the technical validation of data for analysis of the tariff petition. Technical validation session was reached on February 25th 2013, during validation major gap, inconsistency were discovered, which was asked to be clarified by the petitioner as under:

a. Details of category wise sales and revenue for the FY 2011-12 (8 months & 4 months) actuals.

b. Details of category wise sales and revenue, connected load and number of consumers for the FY 2012-13 (actuals up to November 2012).

c. Details of Sales to common pool of consumers/UI along with supporting documents. The detail should include the frequency at which overdrawl/underdrawl has occurred.

d. Details of banking arrangement for the FY 2011-12 and FY 2012-13.

e. Power Procurement bills for FY 2012-13 (8 months till November).

f. The details of past Power Purchase arrears and rebate received.

g. Sample Calculation on Transmission losses at HP (Nalagarh-440kV) and Kishangarh (220 kV) for Point 3- Losses in FY 11 and 12 (Whenever the metering has started) on input & output.

h. Audited accounts or provisional accounts for the FY 2011-12.

i. Any sample internal report on FAR (if any) along with EI certification;

j. Disparity in Agriculture Sales;

k. CAG Certificate on Proforma Accounts of FY 12 need to furnished at the earliest and also explain the basis for Audit of Proforma Accounts by CAG when itself figures of Petition not tallying with the same;

l. Details of utilization of security deposit held with them;

4. The Petitioner furnished information on data gaps along with supporting data on 22nd February, 27th February and 06th March 2013 to substantiate their claims. Commission observed some erroneous submission in relation to Revenue details, No of Consumers, Sales, Connected load, capital expenditure, additional losses, disparity between proforma accounts and petition etc.

5. In view of various erroneous submissions made by the Petitioner, Commission directed the Petitioner on March 26th 2013 to file reply of additional data gaps by March 28th 2013, which Commission could consider for review & analysis.

6. In reply to the email sent by the Commission's office, the Petitioner furnished its reply, along with supporting data on 02nd April 2013.

The Petitioner has furnished the updated information of actual Power purchase cost, Sales & Revenue for 8 months of FY 2012-13 and provisional Power purchase cost for FY 2012-13 to the Commission on April 02' 2013. The Commission has analyzed the petition and the bills based on the provisions of the regulations and pre-actuals submitted by the petitioner for FY 2012-13.

The Commission has taken into consideration the following for Review of FY 2012-13:

i. Actual Performance in FY 2011-12 (Actual Un-audited[2] Figures);

ii. Provisional figures for FY 2012-13 based on the performance of FY 2011-12 and actual data / information from April 2012 to November 2012;

5.2 Review & Analysis of Performance of FY 2012-13

The review of performance requires assessment of quantum of energy sales, energy loss as well as various cost elements like power purchase cost, O&M expenses, interest cost and depreciation etc. Revised estimates/pre-actuals submitted by the petitioner as regards to various components of ARR, the Commission's analysis thereon and decision in respect of items given below as discussed in the following paras:

- Review of Energy Requirement
  - i. Sales Projections
  - ii. Loss Trajectory
  - iii. Energy Balance
  - iv. Power Purchase Sources
- Review of the Aggregate Revenue Requirement
  - i. Power Purchase Costs & Transmission Charges;
  - ii. Operation and Maintenance Expenses;
    - Employee Expenses
    - Administration & General expenses
    - Repairs & Maintenance Expenses

[2] Audited Accounts of FY 2011-12 not provided. The Petitioner has provided Proforma Accounts.

iii. Capital Expenditure and Asset Capitalization

iv. Gross Fixed Assets;

v. Depreciation;

vi. Interest on Long Term Loans;

vii. Interest on Working Capital & Security Deposits;

viii. Return on Capital Base/ Net Fixed Assets;

ix. Provision for Bad and Doubtful Debts

x. Other expenses.

xi. Non Tariff Income

5.3 Estimations of Consumers growth, Connected Load and Energy Sales

Petitioner's Submission

The petitioner has considered historical trend for estimating the load growth, number of consumers and energy consumption. The petitioner has considered Cumulative Average Growth Rate (CAGR) trends of past 3 years for increase in sales (MUs) from FY 2009-10 to FY 2011-12 to estimate the growth for various consumer categories.

Table 5.3.1 : Details of number of consumers during past six years

Nos

S.No.	Category/Consumption Slab	FY 2006-07 (Actuals)	FY 2007-08 (Actuals)	FY 2008-09 (Actuals)	FY 2009-10 (Actuals)	FY 2010-11 (Actuals)	FY 2011-12 (Actuals)
A	**Domestic**	**160,292**	**162,105**	**165,121**	**167,208**	**168,429**	**170,364**
1	0-150 kWh					100,729	98,000
2	Above 150 kWh					67,700	72,364
B	**Commercial**	**23,354**	**23,536**	**24,066**	**24,420**	**24,837**	**25,359**
1	0-150 kWh					22,802	23,198
2	Above 150 kWh					2,035	2,161
C	**Large Supply**	99	102	103	102	102	104
D	**Small Power**	1,226	1,359	1,371	1,409	1,286	1,291
E	**Medium Supply**	786	865	879	884	1,042	1,076
F	**Agriculture**	164	163	163	167	133	122
G	**Public Lighting**	538	546	554	568	678	775
H	**Bulk Supply**	167	190	219	258	286	348
I	**Others-Temporary Supply**	294	261	265	266	751	903
	Total	**186,920**	**189,127**	**192,741**	**195,282**	**197,544**	**200,342**

Source :Petition submitted by CED

Table 5.3.2 : Details of Connected Load during past six years

kW

S.No.	Category/Consumption Slab	FY 2006-07 (Actuals)	FY 2007-08 (Actuals)	FY 2008-09 (Actuals)	FY 2009-10 (Actuals)	FY 2010-11 (Actuals)	FY 2011-12 (Actuals)
A	**Domestic**	**518,366**	**539,862**	**588,925**	**609,933**	**609,926**	**658,690**
1	0-150 kWh					201,281	209,049
2	Above 150 kWh					408,644	449,642
B	**Commercial**	**240,035**	**252,872**	**260,796**	**274,628**	**301,758**	**318,272**
1	0-150 kWh					98,708	101,193
2	Above 150 kWh					203,051	217,079
C	**Large Supply**	65,160	67,049	64,321	65,937	65,026	65,763
D	**Small Power**	15,513	15,452	17,398	18,484	18,500	18,652
E	**Medium Supply**	37,961	40,631	51,222	53,566	55,564	57,603
F	**Agriculture**	998	987	986	1,006	737	675
G	**Public Lighting**	3,511	3,540	3,845	2,966	5,039	5,455
H	**Bulk Supply**	11,388	11,659	27,119	42,977	28,745	30,378
I	**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**

Source : Petition submitted by CED

Table 5.3.3 : Details of Energy Sales during past six years

MUs

S.No.	Category/Consumption Slab	FY 2006-07 (Actuals)	FY 2007-08 (Actuals)	FY 2008-09 (Actuals)	FY 2009-10 (Actuals)	FY 2010-11 (Actuals)	FY 2011-12 (Actuals)
A	**Domestic**	**425.00**	**450.00**	**433.00**	**471.91**	**518.00**	**525.79**
1	0-150 kWh					74.00	69.00
2	Above 150 kWh					444.00	456.79
B	**Commercial**	**313.00**	**313.00**	**318.00**	**440.55**	**398.00**	**417.36**
1	0-150 kWh					133.00	133.29
2	Above 150 kWh					265.00	284.07
C	**Large Supply**	138.00	142.00	145.00	141.40	140.00	128.72
D	**Small Power**	14.00	16.00	17.00	20.69	21.00	22.02
E	**Medium Supply**	83.00	91.00	101.00	116.51	89.00	103.71
F	**Agriculture**	2.00	1.00	1.00	0.98	2.00	1.27
G	**Public Lighting**	16.00	15.00	14.00	15.12	17.00	17.45
H	**Bulk Supply**	28.00	33.00	39.00	57.71	73.00	74.67
I	**Others-Temporary Supply**	46.00	95.00	124.00	10.49	27.00	10.50
	Total	**1,065.00**	**1,156.00**	**1,192.00**	**1,275.36**	**1,285.00**	**1,301.47**

Source: Petition submitted by CED.

The petitioner has considered the cumulative average growth rate (CAGR) of 3 years for all the categories, for estimating sales for FY 2012-13 over the actuals (unaudited) values till FY 2011-12. Similarly, the petitioner has used cumulative average growth rate (CAGR) of 5 and 3 years for estimating consumer base and connected load.

As discussed in para 4.1 above, Commission had noticed discrepancies in the actual Revenue furnished by the Petitioner for 8 months of FY 2012-13 with the estimated revenue for FY 2012-13 submitted in ARR & Tariff Petition for FY 2013-14.

The petitioner dated 02ndApril 2013 has submitted the 8 month actuals and 4 month assessed data for Sales, total Revenue, Connected Load and Number of Consumers FY 2012-13 for all the categories.

Table 5.3.4 : 8 months actuals and 4 months assessed data for Sales, Revenue, Connected Load and Consumers for FY 2012-13

Sr. No.	Category of Consumer	FY 2012-13							
		No of Consumers (Nos)		Connected Load (kW)		Energy Sales (MUs)		Revenue Assessed (Rs. Cr.)	
		Apr 12-Nov 12	Dec 12-Mar 13	Apr 12- Nov 12	Dec 12- Mar 13	Apr 12-Nov 12	Dec 12-Mar 13	Apr 12-Nov 12	Dec 12-Mar 13
A	**Domestic**	176,694	178,883	714,783	683,736	425.71	135.19	176.07	55.91
	0-150 kWh	66,498	67,322	140,566	134,460	41.41	13.15	9.52	3.02
	151- 400 kWh	70,055	70,923	231,609	221,549	126.79	40.26	53.25	16.91
	Above 400 kWh	40,141	40,638	342,608	327,727	257.51	81.78	113.30	35.98
B	**Commercial**	19,801	25,806	318,714	340,119	282.83	174.06	132.58	81.59
	0-150 kWh	18,136	23,637	101,333	108,139	3.96	2.44	1.70	1.04
	151- 400 kWh	666	868	31,871	34,012	9.31	5.73	4.19	2.58
	Above 400 kWh	999	1,302	185,510	197,968	269.56	165.89	126.69	77.97
C	**Large Supply**	101	104	64,662	66,251	95.02	33.68	44.66	15.83
D	**Small Power**	1,292	1,291	18,798	19,090	14.24	9.76	6.27	4.29
E	**Medium Supply**	1,112	1,152	59,389	59,902	70.94	33.66	31.92	15.15
F	**Agriculture**	123	122	707	675	0.99	0.41	0.23	0.09
G	**Public Lighting**	789	867	5,503	6,130	14.63	4.17	6.29	1.79
H	**Bulk Supply**	499	383	31,270	31,549	58.02	34.68	26.11	15.61
I	**Others - Temporary Supply***	994	994	30,624	30,624		11.60		7.77
J	**Total**	**201,405**	**209,602**	**1,244,450**	**1,238,076**	**973.98**	**425.61**	**431.90**	**190.26**

Temporary for Full year, Breakup not available*

Source : Data Gaps submission dated 02nd April 2013

Commission's analysis of Consumer growth, connected load and Energy Sales

Commission has considered the actual data of past 8 months for FY 2012-13 provided by the petitioner on April 02 '2013 for assessment of consumer growth, connected load and energy sales. The pro-rata estimation approach has been adopted by the Commission for estimating the energy sales for the remaining period of FY 2012-13 and weighted average for estimation of number of consumers & connected load for FY 2012-13, on the basis of actual data of FY 2012-13 for all the categories for FY 2012-13.

Table 5.3.5: No. of Consumers considered by the Commission for FY 2012-13

Nos

S.No.	Category/Consumption Slab	FY 2012-13			
		Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 13-14 petition	Actual till Nov 12	Approved by the Commission
1	2	3	4	5	6
A	**Domestic**	**171,875**	**178,883**	**176,694**	**177,424**
1	*0-150 kWh*	79,602	67,322	66,498	66,773
2	*151- 400 kWh*	92,273	70,923	70,055	70,345
3	*Above 400 kWh*		40,638	40,141	40,306
B	**Commercial**	**25,511**	**25,806**	**19,801**	**21,803**
1	*0-150 kWh*	23,367	23,637	18,136	19,970
2	*151- 400 kWh*	2,145	868	666	733
3	*Above 400 kWh*		1,302	999	1,100
C	**Large Supply**	104	104	101	102
D	**Small Power**	1,308	1,291	1,292	1,292
E	**Medium Supply**	1,143	1,152	1,112	1,125
F	**Agriculture**	127	122	123	123
G	**Public Lighting**	783	867	789	815
H	**Bulk Supply**	367	383	499	460
I	**Others-Temporary Supply**	1,140	994	994	994
J	**Total**	**202,358**	**209,602**	**201,405**	**204,137**

Table 5.3.6 : Connected Load considered by the Commission for FY 2012-13

kW

S.No.	Category/Consumption Slab	FY 2012-13			
		Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 13-14 petition	Actual till Nov 12	Approved by the Commission
1	2	3	4	5	6
A	**Domestic**	**657,833**	**683,736**	**714,783**	**704,434**
1	*0-150 kWh*	162,942	134,460	140,566	138,531
2	*151- 400 kWh*	494,891	221,549	231,609	228,256
3	*Above 400 kWh*		327,727	342,608	337,648
B	**Commercial**	**329,586**	**340,119**	**318,714**	**325,849**
1	*0-150 kWh*	105,875	108,139	101,333	103,602
2	*151- 400 kWh*	223,710	34,012	31,871	32,585
3	*Above 400 kWh*		197,968	185,510	189,662
C	**Large Supply**	65,501	66,251	64,662	65,192
D	**Small Power**	19,490	19,090	18,798	18,895
E	**Medium Supply**	62,649	59,902	59,389	59,560
F	**Agriculture**	700	675	707	696
G	**Public Lighting**	5,811	6,130	5,503	5,712
H	**Bulk Supply**	37,108	31,549	31,270	31,363
I	**Others-Temporary Supply**	47,072	30,624	30,624	30,624
J	**Total**	**1,225,750**	**1,238,076**	**1,244,450**	**1,242,325**

Table 5.3.7 : Energy Sales approved by the Commission for FY 2012-13

MUs

S.No.	Category/Consumption Slab	FY 2012-13			
		Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 13-14 petition	Actual till Nov 12	Approved by the Commission
1	2	3	4	5	6
A	**Domestic**	**618.43**	**560.94**	**425.71**	**638.57**
1	*0-150 kWh*	84.65	54.53	41.38	62.07
2	*151- 400 kWh*	533.78	166.97	126.72	190.08
3	*Above 400 kWh*		339.44	257.61	386.41
B	**Commercial**	**495.48**	**456.95**	**282.84**	**424.26**
1	*0-150 kWh*	155.80	6.40	3.96	5.95
2	*151- 400 kWh*	339.68	15.03	9.30	13.96
3	*Above 400 kWh*		435.51	269.57	404.36
C	**Large Supply**	147.03	128.72	95.02	142.53
D	**Small Power**	28.22	24.00	14.24	21.36
E	**Medium Supply**	119.57	104.62	70.94	106.41
F	**Agriculture**	1.74	1.38	0.99	1.49
G	**Public Lighting**	20.31	18.78	14.63	21.95
H	**Bulk Supply**	106.74	92.72	58.02	87.03
I	**Others-Temporary Supply**	10.50	11.55	11.55	11.55
J	**Total**	**1,548.01**	**1,399.65**	**973.94**	**1,455.14**

5.4 Intra-State Transmission & Distribution Loss

Petitioner's submission

The petitioner has estimated distribution loss 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). Further, the petitioner 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.

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.

Commission's analysis

Commission during the technical validation session held on 25th February 2013 directed the petitioner to provide the basis to arrive on the additional losses for the 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB) network due to unavailability of metering network. The petitioner failed to provide the same and in its data gaps reply dated 06th March 2013 claimed that:

Quote

"The metering at HP (Nalagarh-440kV) is being carried out by NRPC for calculating the energy drawl of UT Chandigarh and wherein the Special energy meters have been provided reading of which is readily available http://www.nrldc.org/Commercial/SemData/WEEK-1/Net%20Drawal%20of%20States/UT%20Chandigarh/. However, there is not provision of Special Energy meters for recording energy meters at the outgoing of 220/66 kV Transformers and only manual readings of the outgoing feeders are being taken by PGCIL (there can be a time difference between the readings of the feeders). As such, the transmission loss at HP (Nalagarh) and UT (Kishangarh) cannot be ascertained to certain accuracy. However, at point no. 3 the notional transmission losses have been considered taking 220 kV (54 Kms D/C) transmission lines from Nalagarh to Kishangarh. Further, the transmission losses does not only include the losses at Nalagarh -Kishangarh but there are also some losses between 66 kV (40 Kms D/C)Dhulkote – Sector- 28 and 66 kV D/C Mohali- Sector 52/39 since the metering is being carried out at Dhulkote and Mohali respectively. Further, the assets pertain to UT Chandigarh and the PoC charges for this segment are not being borne by UT Chandigarh. However, the pooled interstate losses and the withdrawal PoC charges upto UT Chandigarh are being borne by the UT Chandigarh but the interstate point has not been provided to UT Chandigarh within the periphery of UT Chandigarh."

Unquote

In the past, the Commission, while approving T&D losses has considered the power availability at the licensee's periphery and the T&D losses comprise of intra-state distribution and distribution losses. The approved losses were allowed considering the existing infrastructure, input and output point and Abraham Committee Report. Commission has considered the T&D losses of 16% as approved in tariff order dated 07th May 2012 while approving the same the entire network of CED was covered. Further, the mentioned network belongs to the ED—CHD and is accordingly maintained. Accordingly, the Commission does not find any merit in the petitioner's submission and hence has not considered any additional losses for the same.

In absence of adequate justification on account of additional losses proposed by the petitioner and also absence of energy audit as specified in regulation 15 of tariff regulations, 2009; Commission for the purpose of review of ARR for FY 2012-13, retains the T&D loss level of 16% as approved in Tariff order dated May 07'2012. However, the sharing of gain on account of over-achievement of target specified by the Commission will be dealt in the true-up of FY 2012-13 on the basis of actual T&D loss level and audited figures of Quantum of Power purchase and Sales for FY 2012-13.

5.5 Inter-State Transmission Loss

Petitioner's submission

The Inter-state transmission losses of Power Grid Corporation of India Limited have been projected to be 3.35% for FY 2012-13 by the petitioner by considering the actual losses of FY 2011-12.

Commission's analysis

The Commission in its ARR & tariff order for FY 2012-13 had considered the recent 52 weeks moving average of regional losses and approved 3.53% as the inter-state transmission loss for FY 2012-13.

The Commission considers the inter-state transmission losses at the same level of 3.35% as submitted by the petitioner during FY 2012-13 as the inter-state loss and approves the same for review of ARR of FY 2012-13 which would be revised based on actual during the truing up exercise.

5.6 Energy Balance

Petitioner's submission

The Energy Balance submitted by the Petitioner for FY 2012-13 on the basis of Energy Sales (in MUs), T&D Loss (in %) and Source-wise Power purchase (in MUs) being approved by the Hon'ble Commission in its tariff order for FY 2012-13 dated 07th May 2012 and provisional figures being recorded by the petitioner in its ARR & tariff petition for FY 2013-14 is depicted in the table below.

Table 5.6.1 : Energy Balance submitted by the Petitioner for review of FY 2012-13

FY 2012-13			
Sr. No.	**Particulars**	**Approved in T.O. of FY 12-13 dated 07.05.2012**	**Estimates submitted in FY 13-14 petition**
1	2	3	4
A)	**ENERGY REQUIREMENT** (in Mus)		
1	Energy sales within the State/UT (in Mus)	1,548.01	1,399.65
2	Energy sales to Agriculture consumers (included in total sales) (in Mus)		
3	**Total sales within the State/UT**	1,548.01	1,399.65
4a	**Distribution losses**		
i)	%	16.00%	18.00%
ii)	MU	294.86	307.24
4b	Losses due to absence of interstate transmission point		
i)	%		2.00%
ii)	MU		34.83
5	**Energy required at State Periphery for Sale to Retail Consumers**	1,842.87	1,741.72
6	**Add: Sales to common pool consumers/ UI (in Mus)**	-	155.68
A	Sales outside state/UT : UI/Under drawal (in Mus)		83.21
B	Sales (in Mus)		
	a) To electricity traders (in Mus)		
	b) Through PX (in Mus)		48.37
C	Sales to other distribution licensees		
	a) Bilateral Trade (in Mus)		
	b) Banking Arrangement (in Mus)		24.10
7	**Total Energy Requirement for State (5+6)**	1,842.87	1,897.40
8	**Transmission losses**		
i)	%		3.35%
i)	MU	63.31	60.41
	Energy Requirement	1,906.18	1,957.81
B)	**Energy to be purchased**		
1	**Net Generation (Share from CGS) (in MUs)**	1,704.95	1,644.00
a	NTPC	687.17	549.20
b	NHPC	168.29	215.43
c	NPCIL	86.77	121.09
d	SJVNL/NJPC	85.93	76.88
e	BBMB	676.79	681.41
2	**Power Purchased from (Other Sources) (in Mus)**	90.50	313.81
a	THDC	79.80	45.55
b	Jhajjar	10.70	16.14
c	Power Exchange (Buy)		68.24
d	Bilateral Trade (Buy)		120.47
e	UI (Buy)		41.20
f	Banking Arrangements (Buy)		22.21
g	**Power Exchange (Buy) to match the energy requirement**	110.74	
3	**Net power purchase (in MUs)**	1,906.18	1,957.81

Source : Petition submitted by CED

Commission's analysis

As discussed in foregoing para no. 5.3, 5.4. 5.5 and next para 5.7 of this order, the Energy balance approved for FY 2012-13 is mentioned in the table below. Commission has considered the actuals of energy sales & quantum of Power purchase submitted by the petitioner from April to November 2013 after a prudence check and estimates of energy sales & quantum of Power purchase based on the norms specified in the tariff regulations, 2009.

Table 5.6.2 : Energy Balance as approved by the Commission for review of FY 2012-13

FY 2012-13				
Sr. No.	Particulars	Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 13-14 petition	Approved
1	2	3	4	5
A)	**ENERGY REQUIREMENT** (in Mus)			
1	Energy sales within the State/UT (in Mus)	1,548.01	1,399.65	1,455.14
2	Energy sales to Agriculture consumers (included in total sales) (in Mus)	-	-	-
3	**Total sales within the State/UT**	1,548.01	1,399.65	1,455.14
4a	**Distribution losses**	-	-	-
i)	%	16.00%	18.00%	16.00%
ii)	MU	294.86	307.24	277.17
4b	Losses due to absence of interstate transmission point	-	-	
i)	%	0.00%	2.00%	-
ii)	MU	-	34.83	
5	**Energy required at State Periphery for Sale to Retail Consumers**	1,842.87	1,741.72	1,732.30
6	**Add: Sales to common pool consumers/ UI (in Mus)**	-	155.68	155.67
A	Sales outside state/UT : UI/Under drawal (in Mus)	-	83.21	83.21
B	Sales (in Mus)	-	-	-
	a) To electricity traders (in Mus)	-	-	-
	b) Through PX (in Mus)	-	48.37	48.37
C	Sales to other distribution licensees	-	-	-
	a) Bilateral Trade (in Mus)	-	-	-
	b) Banking Arrangement (in Mus)	-	24.10	24.10
7	**Total Energy Requirement for State (5+6)**	1,842.87	1,897.40	1,887.98
8	**Transmission losses**	-	-	-
i)	%	-	3.35%	3.35%
i)	MU	63.31	60.41	60.12
	Energy Requirement	**1,906.18**	**1,957.81**	**1,948.09**
B)	**Energy to be purchased**	**-**	**-**	
1	**Net Generation (Share from CGS) (in MUs)**	**1,704.95**	**1,644.00**	**1,694.74**
a	NTPC	687.17	549.20	524.57
b	NHPC	168.29	215.43	260.81
c	NPCIL	86.77	121.09	116.40
d	SJVNL/NJPC	85.93	76.88	90.73
e	BBMB	676.79	681.41	702.23
2	**Power Purchased from (Other Sources) (in Mus)**	**90.50**	**313.81**	253.35
a	THDC	79.80	45.55	47.36
b	Jhajjar	10.70	16.14	10.76
c	Power Exchange (Buy)	-	68.24	11.35
d	Bilateral Trade (Buy)	-	120.47	120.47
e	UI (Buy)	-	41.20	41.20
f	Banking Arrangements (Buy)	-	22.21	22.21
g	**Power Exchange (Buy) to match the energy requirement**	110.74	-	-
3	**Net power purchase (in MUs)**	**1,906.18**	**1,957.81**	**1,948.09**

5.7 Power Purchase Quantum and Cost

Petitioner's submission

Power Purchase Quantum

The petitioner has submitted that they don't have their own power generation, the Petitioner has to rely on external sources of Power especially energy procured from Central generating stations, Allocation from Shared sources and others including bilateral mechanism, and Power Exchanges.

The major sources from which the petitioner procures power are:

- Central Generating Stations (CGS) viz. NTPC, NHPC, NPCIL.
- Other sources viz.,SJVNL, BBMB, Jhajjar, Sewa II, Koteshwar, tehri, Dehar, Pong, Bilateral, and PX.

Occasionally availability of Power is short due to higher demand. This is met through the short term power purchase, and other trading sources. The petitioner receives the fixed allocated share from Central Generating Stations (CGS) to meet its energy requirements. Moreover, a variable quantum of power from the unallocated share is also allotted in various CGS at different intervals during a year. 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, the petitioner is required to procure power from short-term sources. However, it is submitted that strict care is taken to limit the amount of UI drawals.

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), the petitioner has considered the actual power available during last four months of FY 2011-12.

Under the banking arrangement, the petitioner 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. 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.

The Petitioner further submitted that, since the unallocated share of the Petitioner keeps on changing year to year, the projection of quantum of power purchase has not been done based on past trends. Instead, weighted average allocation has been considered to arrive at projected power availability for FY 2012-13.

Power Purchase Cost

The petitioner, while projecting power purchase cost has considered the following points:

- 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, ithas 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 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;

- It has also included the LC charges incurred towards power purchase in the total power purchase cost for FY 2012-13;

- The petitioner was unable to meet the total RPO in FY 2011-12 as the REC market was under evolving process and availability of REC was inadequate and will meet its consolidated RPO for FY 2011-12 and FY 2012-13 by purchasing additional REC during FY 2012-13.

Table 5.7.1 : Actual Power Purchase cost for FY 2012-13 (April'12 to Nov'12) submitted by the Petitioner

FY 2012-13 (Actual 8 Months)- April 12 to November 12							
Sr.No.	Source	Purchase (MU)	Capacity Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Other Charges (Rs. Cr)	Arrears / Supplementary Charges (Rs. Cr)	Total (Rs. Cr)
1	2	3	4	5	6	7	8
I	NTPC Stations						
1	Anta	21.30	3.02	6.33	0.01	0.05	9.41
2	Auraiya	14.09	2.34	4.72	0.00	0.03	7.09
3	Dadri GPP	21.29	2.68	6.56	(0.00)	0.05	9.29
4	Dadri II TPP	22.43	5.24	6.39	(0.00)	0.05	11.68
5	Kahalgaon II	10.54	1.51	2.31	0.00	0.03	3.86
6	Rihand I	64.66	5.54	7.92	0.48	0.23	14.17
7	Rihand II	76.54	7.03	9.55	(0.00)	0.25	16.84
8	Rihand III	0.22	0.14	0.03	0.00	0.00	0.17
9	Singrauli	66.62	3.60	7.85	0.01	0.19	11.66
10	Unchahar I	12.51	1.29	3.04	0.00	0.05	4.37
11	Unchahar II	25.20	3.11	6.03	0.08	0.09	9.31
12	Unchahar III	10.94	1.70	2.60	0.00	0.04	4.35
		346.35	37.21	63.34	0.58	1.06	102.19
		-	-	-	-	-	-
II	NHPC Stations	-	-	-	-	-	-
2	Chamera I	82.75	4.44	7.42	0.01	1.31	13.19
3	Chamera II	21.98	2.56	2.83	0.00	0.43	5.83
4	Chamera III	8.61	1.00	1.13	0.00	0.25	2.38
5	Dhauliganga	16.64	1.93	2.32	0.00	0.37	4.63
6	Dulhasti	24.65	5.57	6.88	0.00	0.74	13.20
7	Salal	7.42	0.33	0.35	0.00	0.16	0.83
8	Sewa II	5.39	1.21	1.06	0.00	0.10	2.37
9	Tanakpur	4.10	0.50	0.47	0.00	0.22	1.19
10	Uri	13.86	1.22	1.09	0.00	0.33	2.64
	Subtotal	185.41	18.76	23.55	0.02	3.92	46.25
		-	-	-	-	-	-
III	NPCIL	-	-	-	-	-	-
1	NAPP	29.15	-	6.94	0.27	0.05	7.26
2	RAPP B	14.80	-	4.07	0.08	-	4.15
3	RAPP C	40.29	-	13.89	0.15	(0.12)	13.93
	Subtotal	84.24	-	24.90	0.51	(0.07)	25.33
		-	-	-	-	-	-
IV	SJVNL	-	-	-	-	-	-
1	SJVNL/NJPC	67.59	7.15	7.74	0.84	0.09	15.82
	Subtotal	67.59	7.15	7.74	0.84	0.09	15.82
		-	-	-	-	-	-
V	BBMB	-	-	-	-	-	-
1	BBMB 3.5 %	199.75	4.21	-	-	5.36	9.57
2	BBMB 1 LU	24.40	-	7.78	-	-	7.78
3	BBMB 10 LU	244.00	-	112.68	0.29	1.18	114.15
	Subtotal	468.15	4.21	120.46	0.29	6.54	131.51
		-	-	-	-	-	-
VI	APCPL	-	-	-	-	-	-
1	IGSTPP	10.76	3.09	3.65	0.01	-	6.76
	Subtotal	10.76	3.09	3.65	0.01	-	6.76
		-	-	-	-	-	-
VII	THDC	-	-	-	-	-	-
1	Koteshwar	7.57	1.64	1.66	-	0.00	3.30
2	Tehri	25.40	4.42	6.35	0.19	0.71	11.66
	Subtotal	32.96	6.06	8.01	0.19	0.71	14.96
		-	-	-	-	-	-
VIII	Power purchase from Other Sources	-	-	-	-	-	-
1	Bilateral	120.47	-	49.30	-	-	49.30
2	Power Exchange	11.35	-	4.53	-	-	4.53
3	Banking	22.21	-	-	-	-	-
4	UI	41.20	-	13.97	-	-	13.97
	Subtotal	195.23	-	67.79	-	-	67.79
		-	-	-	-	-	-
	Power Purchase Cost	1,390.69	76.48	319.45	2.44	12.24	410.61
IX	Other Charges	-	-	-	-	-	-
1	PGCIL Charges	-	-	-	24.01	-	24.01
2	NRLDC F&C	-	-	-	0.32	-	0.32
3	Reactive Energy Charges	-	-	-	0.40	-	0.40
4	REC Cost	-	-	-	11.51	-	11.51
5	LC Charges	-	-	-	0.58	-	0.58
	Grand Total of Charges	-	-	-	-	-	**447.43**

The provisional power purchase cost provided by the petitioner which includes 8 months as given in table 4.7.1 and 4 months projections calculated by the utility for Dec 2012.to March 2013 is as given in the table below:

Table 5.7.2 : Provisional Power Purchase Cost for FY 2012-13 submitted by the Petitioner

Sr.No.	Source	Purchase (MU)	Capacity Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Other Charges (Rs. Cr)	Arrears / Supplementary Charges (Rs. Cr)	Total (Rs. Cr)
1	2	3	4	5	6	7	8
I	NTPC Stations	-	-	-	-	-	-
1	Anta	32.85	4.52	9.76	0.01	0.05	14.35
2	Auraiya	24.40	3.50	8.18	0.00	0.03	11.71
3	Dadri GPP	34.55	4.02	10.64	(0.00)	0.05	14.71
4	Dadri II TPP	35.42	7.86	10.10	(0.00)	0.05	18.00
5	Kahalgaon II	16.81	2.27	3.69	0.00	0.03	6.00
6	Rihand I	103.13	8.31	12.63	0.77	0.23	21.94
7	Rihand II	115.02	10.55	14.35	(0.00)	0.25	25.16
8	Rihand III	13.40	2.44	1.68	0.03	0.00	4.16
9	Singrauli	97.71	5.41	11.52	0.02	0.19	17.13
10	Unchahar I	19.79	1.93	4.81	0.00	0.05	6.79
11	Unchahar II	39.36	4.67	9.42	0.12	0.09	14.31
12	Unchahar III	16.76	2.56	3.99	0.00	0.04	6.59
	Subtotal	549.20	58.04	100.76	0.96	1.06	160.82
		-	-	-	-	-	-
II	NHPC Stations	-	-	-	-	-	-
2	Chamera I	94.39	6.66	8.47	0.01	1.31	16.45
3	Chamera II	25.06	3.84	3.23	0.00	0.43	7.50
4	Chamera III	10.38	1.49	1.36	0.00	0.25	3.11
5	Dhauliganga	18.49	2.90	2.57	0.00	0.37	5.85
6	Dulhasti	28.15	8.35	7.86	0.00	0.74	16.96
7	Parbati III	-	-	-	-	-	-
7	Salal	8.75	0.50	0.41	0.00	0.16	1.06
8	Sewa II	7.71	1.82	1.52	0.00	0.10	3.43
9	Tanakpur	4.67	0.75	0.53	0.00	0.22	1.50
10	Uri	17.83	1.83	1.41	0.00	0.33	3.57
	Subtotal	215.43	28.14	27.35	0.03	3.92	59.44
		-	-	-	-	-	-
III	NPCIL	-	-	-	-	-	-
1	NAPP	39.93	-	9.50	0.37	0.05	9.92
2	RAPP B	22.81	-	6.27	0.13	-	6.40
3	RAPP C	58.34	-	20.12	0.22	(0.12)	20.23
	Subtotal	121.09	-	35.89	0.72	(0.07)	36.54
		-	-	-	-	-	-
IV	SJVNL	-	-	-	-	-	-
1	SJVNL/NJPC	76.88	10.73	8.80	0.95	0.09	20.58
	Subtotal	76.88	10.73	8.80	0.95	0.09	20.58
		-	-	-	-	-	-
V	BBMB	-	-	-	-	-	-
1	BBMB 3.5 %	279.91	6.31	-	-	5.36	11.68
2	BBMB 1 LU	36.50	-	11.64	-	-	11.64
3	BBMB 10 LU	365.00	-	168.56	0.43	1.18	170.17
	Subtotal	681.41	6.31	180.20	0.43	6.54	193.49
		-	-	-	-	-	-
VI	APCPL	-	-	-	-	-	-
1	IGSTPP	16.14	4.63	5.48	0.02	-	10.14
	Subtotal	16.14	4.63	5.48	0.02	-	10.14
		-	-	-	-	-	-
VII	THDC	-	-	-	-	-	-
1	Koteshwar	10.06	2.46	2.20	-	0.00	4.66
2	Tehri	35.49	6.63	8.87	0.26	0.71	16.47
	Subtotal	45.55	9.08	11.08	0.26	0.71	21.13
		-	-	-	-	-	-
VIII	Power purchase from Other Sources	-	-	-	-	-	-
1	Bilateral	120.47	-	49.30	-	-	49.30
2	Power Exchange	68.24	-	27.21	-	-	27.21
3	Banking	22.21	-	-	-	-	-
4	UI	41.20	-	13.97	-	-	13.97
	Subtotal	252.11	-	90.47	-	-	90.47
		-	-	-	-	-	-
	Power Purchase Cost	1,957.82	116.95	460.05	3.37	12.24	592.61
IX	Other Charges	-	-	-	-	-	-
1	PGCIL Charges	-	-	-	36.02	-	36.02
2	NRLDC F&C	-	-	-	0.47	-	0.47
3	Reactive Energy Charges	-	-	-	0.40	-	0.40
4	REC Cost	-	-	-	14.63	-	14.63
5	LC Charges	-	-	-	0.58	-	0.58
	Grand Total of Charges	-	-	-	-	-	**644.72**

Source : CED Petition/Formats

Commission's Analysis of Power Purchase Quantum and Cost

As brought out in the section on energy balance, the power purchase quantum approved by the Commission in its last Tariff Order dated May 07'2012 for FY 2012-13 was 1906.18 million units at an approved power purchase cost of Rs. 563.09 Crores including transmission charges.

The Commission as part of prudence verified the station-wise Power purchase bills on random selection basis for FY 2012-13 (eight months) from April to November. Commission considered the submissions made by the petitioner after verification of power purchase bills of eight months from April to November of FY 2012-13. The verified quanta of Power Purchase units and cost including transmission charges is mentioned in the table below as per the Power purchase bills submitted by the petitioner for eight months of FY 2012-13:

Table 5.7.3 : Summary Sheet: Quantum of Power Purchase and Cost for FY 2012-13 (April to November) as verified from power purchase bills

Sr. No.	Source	Procured till November 2012-Actuals (units verified from REA and amount verified from bills)				
		Energy Units(MU)	Fixed Charges (Rs. Crores)	Variable Cost (Rs. Crores)	Other Charges including WPC,MAT, Arrears (Rs. Crores)	Total (Rs. Crores)
1	2	3	4	5	6	7
A	**Central Sector Power Stations**					
I	**NTPC**	**346.35**	**37.21**	**63.34**	**1.64**	**102.19**
	Anta	*21.30*	*3.02*	*6.33*	*0.06*	*9.41*
	Auraiya	*14.09*	*2.34*	*4.72*	*0.03*	*7.09*
	Dadri GPP	*21.29*	*2.68*	*6.56*	*0.05*	*9.29*
	Dadri II TPP	*22.43*	*5.24*	*6.39*	*0.05*	*11.68*
	Kahalgaon II	*10.54*	*1.51*	*2.31*	*0.04*	*3.86*
	Rihand I	*64.66*	*5.54*	*7.92*	*0.71*	*14.17*
	Rihand II	*76.54*	*7.03*	*9.55*	*0.25*	*16.84*
	Rihand III	*0.22*	*0.14*	*0.03*	*0.00*	*0.17*
	Singrauli	*66.62*	*3.60*	*7.85*	*0.20*	*11.66*
	Unchahar I	*12.51*	*1.29*	*3.04*	*0.05*	*4.37*
	Unchahar II	*25.20*	*3.11*	*6.03*	*0.17*	*9.31*
	Unchahar III	*10.94*	*1.70*	*2.60*	*0.04*	*4.35*
II	***NHPC***	**185.41**	**18.76**	**23.55**	**3.94**	**46.25**
	Chamera I	*82.75*	*4.44*	*7.42*	*1.32*	*13.19*
	Chamera II	*21.98*	*2.56*	*2.83*	*0.43*	*5.83*
	Chamera III	*8.61*	*1.00*	*1.13*	*0.25*	*2.38*
	Dhauliganga	*16.64*	*1.93*	*2.32*	*0.38*	*4.63*

Sr. No.	Source	Procured till November 2012-Actuals (units verified from REA and amount verified from bills)				
		Energy Units(MU)	Fixed Charges (Rs. Crores)	Variable Cost (Rs. Crores)	Other Charges including WPC,MAT, Arrears (Rs. Crores)	Total (Rs. Crores)
1	2	3	4	5	6	7
	Dulhasti	*24.65*	*5.57*	*6.88*	*0.75*	*13.20*
	Salal	*7.42*	*0.33*	*0.35*	*0.16*	*0.83*
	Sewa II	*5.39*	*1.21*	*1.06*	*0.10*	*2.37*
	Tanakpur	*4.10*	*0.50*	*0.47*	*0.22*	*1.19*
	Uri	*13.86*	*1.22*	*1.09*	*0.33*	*2.64*
III	***NPCIL***	**84.24**	**-**	**24.90**	**0.44**	**25.33**
	NAPP	*29.15*	*0.00*	*6.94*	*0.32*	*7.26*
	RAPP B	*14.80*	*0.00*	*4.07*	*0.08*	*4.15*
	RAPP C	*40.29*	*0.00*	*13.89*	*0.03*	*13.93*
IV	**SJVNL**	**67.59**	**7.15**	**7.74**	**0.93**	**15.82**
	SJVNL/NJPC	*67.59*	*7.15*	*7.74*	*0.93*	*15.82*
V	**BBMB**	**468.15**	**4.21**	**120.46**	**6.83**	**131.51**
	BBMB 3.5 % (including dehar & pong)	*199.75*	*4.21*	*-*	*5.36*	*9.57*
	BBMB 1 LU	*24.40*	*-*	*7.78*	*0.00*	*7.78*
	BBMB 10 LU	*244.00*	*-*	*112.68*	*1.47*	*114.15*
VI	***APCPL***	**10.76**	**3.09**	**3.65**	**0.01**	**6.76**
	IGSTPP	*10.76*	*3.09*	*3.65*	*0.01*	*6.76*
VII	**THDC**	**32.96**	**6.06**	**8.01**	**0.89**	**14.96**
	Koteshwar	*7.57*	*1.64*	*1.66*	*0.00*	*3.30*
	Tehri	*25.40*	*4.42*	*6.35*	*0.89*	*11.66*
B	**Power purchase from other sources**	**195.23**	**-**	**71.34**	**0.03**	**71.37**
	(2.60% for - Non Solar)			*8.74*		*8.74*
	(0.40% for Solar)			*2.77*		*2.77*
	Power purchase from Power Exchange (BUY)	*11.35*	*0.00*	*4.36*	*0.00*	*4.36*
	Bilateral	*120.47*	*0.00*	*50.11*	*0.03*	*50.14*
	Banking	*22.21*	*0.00*	*0.00*	*0.00*	*0.00*
	UI overdrawl	*41.20*	*0.00*	*5.36*	*0.00*	*5.36*
C	**Power Purchase Cost**	**1,390.69**	**76.48**	**323.00**	**14.71**	**414.19**
D	**OTHER CHARGES**	**0.00**	**0.04**	**24.21**	**0.48**	**24.73**
	PGCIL Charges			*24.01*		*24.01*
	NRLDC F&C		*0.04*	*0.20*	*0.08*	*0.32*
	Reactive Energy Charges				*0.40*	*0.40*
E	**Total Power Purchase Cost**	**1,390.69**	**76.53**	**347.21**	**15.19**	**438.92**

Power Purchase Quantum and Cost for remaining four months of FY 2012-13

- **Central Generating Stations –NTPC**

While estimating the energy availability from NTPC Stations for remaining four months of FY 2012-13, the following is considered:

- **Allocation of Share**: The Commission has considered the gross %age of firm allocation and allocation of the unallocated quota from the various generating stations including Singrauli, Rihand I,II & III, Unchahar I,II and III, Kahalgaon, Dadri-II, Anta-G, Anta-RLNG, Auraiya, Auraiya-RLNG, Dadri-G, and Dadri-RLNG as specified in the REA of November 2012 based on latest revised allocation orders of Govt. of India;
- **Gross Energy Availability:** The Commission has estimated the gross energy availability from the existing NTPC stations based on the installed capacity and the average of figures of Plant Load Factor for the past two years (FY 2010-11 and FY 2011-12). The Net energy sent out is worked out after considering the applicable auxiliary consumption as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009;
- **New Station:** Further, it is also pertinent to mention here that the allocation from Rihand Stage-3 (Unit-1) has been considered (as per petitioner's submission) as per their schedule COD and actual generated units in FY 2012-13 as notified by CEA. The Commission has considered the PLF at 85% for new station, which is equivalent to the Normative Availability specified in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009;
- **Energy Available to the Petitioner:** The effective share from the station has been applied on the energy sent out to arrive at the energy to be purchased by the petitioner from respective stations. Accordingly, the Commission has approved the availability from NTPC stations based on the merit order dispatch principles;

The Commission has considered the following assumptions to arrive at the Power purchase cost for remaining four months of the FY 2012-13 from the NTPC stations:

- **Fixed Charges:** The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Annual Fixed Charges for each station have been taken as per the latest Tariff orders for the respective stations.

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2012 to November 2012 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2012-13.

Central Generating Stations –NHPC

While estimating the energy availability from NHPC Stations for remaining four months of FY 2012-13, the following is considered:

- **Allocation of Share**: The Commission has considered the gross %age of firm allocation and allocation of the unallocated quota from the various generating stations including Salal, Tanakpur, Chamera I, II & III, Uri, Dhauliganga, Dulhasti, Sewa II as specified in the REA of November 2012 based on latest revised allocation orders of Govt. of India;
- **Gross Energy Availability:** The Commission has estimated the gross energy availability from the existing NHPC stations based on the average of actual energy generation for FY 2010-11 and FY 2011-12. The Net energy sent out is worked out after considering the applicable auxiliary consumption as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009;
- **New Station:** Further, it is also pertinent to mention here that the allocation from Chamera Stage-3 (231 MW) has been considered (as per petitioner's submission) as per their schedule COD and actual generated units in FY 2012-13 as notified by CEA.
- **Energy Available to the Petitioner:** The effective share from the station has been applied on the energy sent out to arrive at the energy to be purchased by the petitioner from respective stations.

The Commission has considered the following assumptions to arrive at the Power purchase cost for remaining four months of the FY 2012-13 from the NHPC stations:

- **Fixed Charges:** The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Annual Fixed Charges for each station have been taken as per the latest Tariff orders for the respective stations.
- **Variable Charges:** The Commission has considered the average variable cost for the period September 2012 to November 2012 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2012-13.

- **Central Generating Stations –NPCIL**

While estimating the energy availability from NPCIL Stations for remaining four months of FY 2012-13, the following is considered:

- **Allocation of Share**: The Commission has considered the gross %age of firm allocation and allocation of the unallocated quota from the various generating stations including NAPS, RAPP (Unit3, 4, 5 & 6) as specified in the REA of November 2012 based on latest revised allocation orders of Govt. of India;
- **Gross Energy Availability:** The Commission has estimated the gross energy availability from the existing NPCIL stations based on the installed capacity and the average of figures of Plant Load Factor for the past two years (FY 2010-11 and FY 2011-12). The Net energy sent out is worked out after considering the applicable auxiliary consumption as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009;

- **Energy Available to the Petitioner:** The effective share from the station has been applied on the energy sent out to arrive at the energy to be purchased by the petitioner from respective stations.

- **Merit order Dispatch**: The Commission has considered the nuclear plants as must run and has not subjected them for merit order dispatch.

The Commission has considered the following assumptions to arrive at the Power purchase cost for remaining four months of the FY 2012-13 from the NPCIL stations:

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2012 to November 2012 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2012-13.

- **Other Generating Stations –Naptha Jhakri (SJVNL),BBMB (including Dehar & Pong), Koteshwar and Tehri (THDC) and Jhajjar**

While estimating the energy availability from above hydro generating Stations for remaining four months of FY 2012-13, the following is considered:

- **Allocation of Share**: The Commission has considered the gross %age of firm allocation and allocation of the unallocated quota from the above mentioned generating stations except BBMB(including Dehar & Pong) as specified in the REA of November 2012 based on latest revised allocation orders of Govt. of India. The petitioner has an allocation of 11 lakh units (1

LU + 10 LU) from BBMB in addition to an allocation of 3.5% from BBMB (including Dehar & Pong).

- **Gross Energy Availability:** The Commission has estimated the gross energy availability from the existing hydro generating stations based on the average of actual energy generation for FY 2010-11 and FY 2011-12. The Net energy sent out is worked out after considering the applicable auxiliary consumption as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009;

- **Energy Available to the Petitioner:** The effective share from the station has been applied on the energy sent out to arrive at the energy to be purchased by the petitioner from respective stations.

- **Availability from APCPL-IGSTPP:** The Commission for the purpose of power purchase for remaining four months of FY 2012-13 has not considered the energy availability from this source, due to adequate availability of power from central generating stations to meet the estimated power requirements of the utility for the purpose of ARR of FY 2012-13.

The Commission has considered the following assumptions to arrive at the Power purchase cost for remaining four months of the FY 2012-13 from the above mentioned hydro generating stations and APCPL-IGSTPP:

- **Fixed Charges:** The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Annual Fixed Charges for each hydro generating station and IGSTPP have been taken as per the latest Tariff orders for the respective stations.

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2012 to November 2012 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2012-13.

➢ **Renewable Energy Obligation**

As per JERC (Procurement of Renewable Energy) Regulations 2010 clause 1 sub clause (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 Petitioner has to purchase 3% of total energy purchase from renewable sources for FY 2012-13 including 0.40% for Solar and 2.60% for Non-Solar. The petitioner has submitted that 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.

Based on the purchase of REC (Solar and Non-Solar) in the first eight months from April 2012 to November 2012 to meet the carryover requirement of 16.58 million units of FY 2011-12 as specified from Tariff order dated May 07'2012 (in the proportion of 4.10 million units from solar and 12.48 million units from non-solar). The petitioner has procured the 52.73 million units as against the consolidated target of 50.32 million units from non-solar plants and has procured 2.20 million units as against the consolidated target of 9.92 million units from solar plants. In view of the total requirement of 60.24 million units and non-solar RECs procured during FY 2012-13, the petitioner is required to procure 5.30 million units of RECs from solar plants, which is estimated to be available at the latest twelve months average rate of Rs. 12.70 per kWh, at a net cost of Rs. 6.74 Crores.

- **Transmission Charges (PGCIL, NRLDC F&C and Reactive Energy Charges)**

The Commission has considered the PoC rates as specified by the Central Electricity Regulatory Commission vide its order no L-1/44/2010- CERC dated 30.11.2012 applicable for October 2012 to March 2013 for approving the Transmission charges for the remaining months of FY 2012-13. Accordingly the Transmission charges for usage of PGCIL network is approved at **Rs. 19.01 Crores.**

Commission also allows the petitioner's claim of other charges for remaining months of FY 2012-13 including NRLDC, Reactive Energy Charges on pro-rata basis amounting to **Rs. 0.36 Crores**.

Accordingly, the total Transmission charges approved for the remaining four months of FY 2012-13 is **Rs. 19.37 Crores.**

Table 5.7.4: Approved Power purchase quantum from above mentioned stations under merit order dispatch for remaining four months of FY 2012-13

Sr. No.	Source	Capacity (MW)	Average PLF/Gross Generation	Latest entitlement as per REA of November 2012		Gross Generation (MUs)	Auxiliary Consumption (%)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery (MUs)
				%	MW					
A	**Central Sector Power Stations**									
I	**NTPC**	**9,929.00**			**87.67**			**178.23**	**5.50**	**172.73**
	Anta	*419*	2,591	1.87%	7.84	859.02	3.00%	15.60	*0.48*	15.12
	Auraiya	*663*	4,124	1.22%	8.09	1,367.13	3.00%	-	*0.00*	-
	Dadri GPP	*817*	5,388	0.93%	7.58	1,786.15	3.00%	14.34	*0.44*	13.90

Sr. No.	Source	Capacity (MW)	Average PLF/Gross Generation	Latest entitlement as per REA of November 2012		Gross Generation (MUs)	Auxiliary Consumption (%)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery (MUs)
				%	MW					
	Dadri II TPP	*980*	85.55	0.55%	5.41	2,434.68	6.00%	12.63	*0.39*	12.24
	Kahalgaon II	*1,500*	68.56	0.20%	3.00	2,986.47	6.50%	5.58	*0.17*	5.41
	Rihand I	*1,000*	89.22	1.55%	15.46	2,590.95	7.50%	37.05	*1.14*	35.91
	Rihand II	*1,000*	89.22	1.35%	13.52	2,590.95	9.00%	31.88	*0.98*	30.89
	Rihand III	*500*	85.00	1.11%	5.53	955.71	9.00%	9.61	*0.30*	9.31
	Singrauli	*2,000*	90.57	0.55%	11.04	5,260.31	7.25%	26.93	*0.83*	26.10
	Unchahar I	*420*	91.24	0.66%	2.76	1,112.84	9.00%	6.64	*0.20*	6.44
	Unchahar II	*420*	91.24	1.26%	5.30	1,112.84	9.00%	12.78	*0.39*	12.39
	Unchahar III	210	91.24	1.02%	2.15	556.42	9.00%	5.18	*0.16*	5.02
II	***NHPC***	**3,151.00**			**45.09**			**75.41**	**2.33**	**73.08**
	Chamera I	*540*	2,551	3.90%	21.06	845.61	1.2%	32.58	*1.01*	31.58
	Chamera II	*300*	1,477	1.49%	4.46	489.59	1.2%	7.19	*0.22*	6.97
	Chamera III	231	719	1.28%	2.96	718.89	1.2%	9.11	*0.28*	8.83
	Dhauliganga	280	1,147	1.40%	3.93	380.13	1.2%	5.27	*0.16*	5.10
	Dulhasti	390	2,120	1.15%	4.49	702.69	1.2%	8.00	*0.25*	7.75
	Salal	690	3,245	0.27%	1.86	1,075.59	1%	2.88	*0.09*	2.79
	Sewa II	120	523	1.51%	1.81	173.42	1.2%	2.59	*0.08*	2.51
	Tanakpur	120	484	1.28%	1.54	160.50	1%	2.03	*0.06*	1.97
	Uri	480	2,834	0.62%	2.98	939.33	1.2%	5.75	*0.18*	5.58
III	***NPCIL***	**1,320.00**			**16.82**			**32.17**	**0.99**	**31.17**
	NAPP	440	58.67	1.80%	7.92	749.66	10%	12.14	*0.37*	11.76
	RAPP B	440	86.09	0.66%	2.91	1,100.02	10%	6.54	*0.20*	6.34
	RAPP C	440	86.09	1.36%	5.99	1,100.02	10%	13.48	*0.42*	13.07
IV	**SJVNL**	**1,500.00**			**15**			**23**	**1**	**22**
	SJVNL/NJPC	1,500	7,194	0.98%	14.73	2,384.93	1.20%	23.14	*0.71*	22.42
V	**BBMB**	**2,956.00**			**103.46**			**234.08**	**7.22**	**226.85**
0	*BBMB 3.5 % (including dehar & pong)*	2,956	10,527	3.50%	103.46	3,489.93	2%	99.88	*3.08*	96.79
3.2	*BBMB 1 LU*							12.20	*0.38*	11.82
4.6	*BBMB 10 LU*							122.00	*3.76*	118.24
VI	***APCPL***	**1,500.00**			**5**			**0**	**0**	**0**
	IGSTPP	1,500	57	0.35%	5.18	2,465.50	9%	0.00	*0.00*	0.00
VII	**THDC**	**1,400.00**			**14**			**14.39**	**0.44**	**13.95**
	Koteshwar	400	888	0.81%	3.23	294.37	2%	2.33	*0.07*	2.26
	Tehri	1,000	3,542	1.05%	10.48	1,174.30	2%	12.06	*0.37*	11.69

Sr. No.	Source	Capacity (MW)	Average PLF/Gross Generation	Latest entitlement as per REA of November 2012		Gross Generation (MUs)	Auxiliary Consumption (%)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery (MUs)
				%	MW					
B	**Power purchase from other sources**	**-**						**-**	**-**	**-**
	(2.60% for - Non Solar)	-							*0.00*	-
	(0.40% for Solar)	-							*0.00*	-
	Power purchase from Power Exchange (BUY)								*0.00*	-
	Bilateral								*0.00*	-
	Banking								*0.00*	-
	UI overdrawl								*0.00*	-
C	**Power Purchase Quantum**	**21,756.00**			**286.66**			**557.41**	**17.20**	**540.21**

Table 5.7.5: Approved Power purchase cost from above mentioned stations under merit order dispatch for remaining four months of FY 2012-13

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of last three months	Variable Charges (Rs. Crores)	Power Purchase Cost excluding Tx Charges (Rs. Crores)	Total Transmission charges for four months
1	2	3	4	5	6	7	8
A	**Central Sector Power Stations**						
I	**NTPC**	**178.23**	**18.71**		**31.28**	**49.99**	**6.13**
	Anta	15.60	1.30	*281*	4.38	5.68	0.50
	Auraiya	-	1.15	*297*	-	1.15	0.52
	Dadri GPP	14.34	1.25	*284*	4.07	5.32	0.49
	Dadri II TPP	12.63	2.10	*280*	3.53	5.63	0.35
	Kahalgaon II	5.58	0.74	*187*	1.04	1.78	0.23
	Rihand I	37.05	3.14	*112*	4.16	7.30	1.17
	Rihand II	31.88	3.04	*120*	3.81	6.85	1.03
	Rihand III	9.61	1.98	*126*	1.21	3.19	0.42
	Singrauli	26.93	1.34	*115*	3.10	4.44	0.77
	Unchahar I	6.64	0.58	257	1.71	2.29	0.18
	Unchahar II	12.78	1.34	238	3.04	4.38	0.34
	Unchahar III	5.18	0.75	238	1.23	1.98	0.14
II	***NHPC***	**75.41**	**7.89**		**9.70**	**17.59**	**2.88**
	Chamera I	32.58	1.87	89	2.90	4.77	1.35
	Chamera II	7.19	1.03	124	0.89	1.92	0.29
	Chamera III	9.11	0.59	185	1.68	2.27	0.19

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of last three months	Variable Charges (Rs. Crores)	Power Purchase Cost excluding Tx Charges (Rs. Crores)	Total Transmission charges for four months
1	2	3	4	5	6	7	8
	Dhauliganga	5.27	0.79	138	0.73	1.51	0.25
	Dulhasti	8.00	2.24	272	2.17	4.41	0.29
	Salal	2.88	0.13	47	0.14	0.27	0.12
	Sewa II	2.59	0.52	195	0.51	1.02	0.12
	Tanakpur	2.03	0.24	110	0.22	0.46	0.10
	Uri	5.75	0.49	79	0.45	0.95	0.19
III	***NPCIL***	**32.17**			**9.38**	**9.38**	**1.23**
	NAPP	12.14	-	*237*	2.88	2.88	0.55
	RAPP B	6.54	-	*275*	1.80	1.80	0.22
	RAPP C	13.48	-	*349*	4.71	4.71	0.46
IV	**SJVNL**	**23**	**3**		**3**	**6**	**1**
	SJVNL/NJPC	23.14	3.14	114	2.64	5.78	0.94
V	**BBMB**	**234.08**	**2.10**		**60.23**	**62.34**	**6.62**
	BBMB 3.5 % (including dehar & pong)	99.88	2.10	0	-	2.10	6.62
	BBMB 1 LU	12.20	-	319	3.89	3.89	-
	BBMB 10 LU	122.00	-	462	56.34	56.34	-
VI	***APCPL***	**0**	**1**		**0**	**1**	**0**
	IGSTPP	0.00	1.30	340	0.00	1.30	0.33
VII	**THDC**	**14.39**	**2**		**3.53**	**5.46**	**0.88**
	Koteshwar	2.33	0.65	219	0.51	1.16	0.21
	Tehri	12.06	1.29	250	3.02	4.30	0.67
B	**Power purchase from other sources**	**-**	**-**		**6.74**	**6.74**	**-**
	(2.60% for - Non Solar)				-	-	-
	(0.40% for Solar)				6.74	6.74	-
	Power purchase from Power Exchange (BUY)				-		-
	Bilateral				-		-
	Banking				-		-
	UI overdrawl				-		-
C	**Power Purchase Quantum and Cost**	**557.41**	**35.08**	**-**	**123.50**	**158.58**	**19.01**
D	**OTHER CHARGES**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**19.37**
	PGCIL Charges						19.01
	NRLDC F&C						0.16
	Reactive Energy Charges						0.20

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of last three months	Variable Charges (Rs. Crores)	Power Purchase Cost excluding Tx Charges (Rs. Crores)	Total Transmission charges for four months
1	2	3	4	5	6	7	8
E	**Total Power Purchase Cost**	**557.41**	**35.08**		**123.50**	**158.58**	**38.38**

- **Power Purchase Cost Approved for FY 2012-13**

For determining the power purchase cost, merit order dispatch principles have been applied. The must-run stations have been assumed at the top of the merit order and variable cost incurred for meeting the energy requirement within the state has been calculated from the plants at the top of the merit order. The transmission charges for FY 2012-13 for remaining four months have been considered as per the POC charges applicable for FY 2012-13 and first eight months as per the submissions made by the petitioner based on the actuals.

The Commission has considered the actual transmission charges paid by the licensee from April 2012 to November 2012 and has estimated the transmission charges from December 2012 to March 2013 on the basis of applicable POC rates.

In accordance with the foregoing paragraphs the Commission has approved the following Power Purchase Cost.

Based on the above, the total Power purchase quantum and cost from various sources (including over-drawl of Power under UI mechanism and transmission charges) as approved for review of FY 2012-13 is mentioned below:

Table 5.7.6: Power Purchase cost approved for FY 2012-13 after considering MOD principles

Sr. No.	Source	Total Power Purchase Cost				
		Energy Purchased (MU)	Fixed Charges (Rs. Crores)	Variable Cost (Rs. Crores)	Other Charges (Rs. Crores)	Total (Rs. Crores)
1	2	3	4	5	6	7
A	**Central Sector Power Stations**					
I	**NTPC**	**524.57**	**55.92**	**94.62**	**1.64**	**152.18**
	Anta	*37*	*4.32*	*10.71*	*0.06*	*15.09*
	Auraiya	*14*	*3.48*	*4.72*	*0.03*	*8.24*
	Dadri GPP	*36*	*3.93*	*10.62*	*0.05*	*14.61*
	Dadri II TPP	*35*	*7.33*	*9.93*	*0.05*	*17.31*
	Kahalgaon II	*16*	*2.25*	*3.36*	*0.04*	*5.64*
	Rihand I	*102*	*8.68*	*12.07*	*0.71*	*21.47*
	Rihand II	*108*	*10.07*	*13.37*	*0.25*	*23.69*
	Rihand III	*10*	*2.12*	*1.24*	*0.00*	*3.36*
	Singrauli	*94*	*4.95*	*10.95*	*0.20*	*16.09*
	Unchahar I	*19*	*1.87*	*4.75*	*0.05*	*6.66*
	Unchahar II	*38*	*4.45*	*9.08*	*0.17*	*13.70*
	Unchahar III	*16*	*2.45*	*3.83*	*0.04*	*6.32*
II	***NHPC***	**260.81**	**26.66**	**33.25**	**3.94**	**63.84**
	Chamera I	*115*	*6.31*	*10.33*	*1.32*	*17.96*
	Chamera II	*29*	*3.59*	*3.72*	*0.43*	*7.75*
	Chamera III	*18*	*1.58*	*2.81*	*0.25*	*4.64*
	Dhauliganga	*22*	*2.72*	*3.04*	*0.38*	*6.14*
	Dulhasti	*33*	*7.81*	*9.06*	*0.75*	*17.61*
	Salal	*10*	*0.46*	*0.48*	*0.16*	*1.10*
	Sewa II	*8*	*1.73*	*1.56*	*0.10*	*3.40*
	Tanakpur	*6*	*0.74*	*0.69*	*0.22*	*1.65*
	Uri	*20*	*1.71*	*1.55*	*0.33*	*3.59*
III	***NPCIL***	**116.40**	**-**	**34.28**	**0.44**	**34.72**
	NAPP	*41*	*0.00*	*9.82*	*0.32*	*10.13*
	RAPP B	*21*	*0.00*	*5.86*	*0.08*	*5.95*
	RAPP C	*54*	*0.00*	*18.60*	*0.03*	*18.64*
IV	**SJVNL**	**91**	**10**	**10**	**1**	**22**
	SJVNL/NJPC	*91*	*10.29*	*10.38*	*0.93*	*21.60*
V	**BBMB**	**702.23**	**6.31**	**180.70**	**6.83**	**193.84**
	BBMB 3.5 % (including dehar & pong)	*300*	*6.31*	*0.00*	*5.36*	*11.68*
	BBMB 1 LU	*37*	*0.00*	*11.68*	*0.00*	*11.68*

Sr. No.	Source	Total Power Purchase Cost				
		Energy Purchased (MU)	Fixed Charges (Rs. Crores)	Variable Cost (Rs. Crores)	Other Charges (Rs. Crores)	Total (Rs. Crores)
1	2	3	4	5	6	7
	BBMB 10 LU	*366*	*0.00*	*169.02*	*1.47*	*170.49*
VI	***APCPL***	**11**	**4**	**4**	**0**	**8**
	IGSTPP	*11*	*4.39*	*3.65*	*0.01*	*8.05*
VII	**THDC**	**47.36**	**7.99**	**11.53**	**0.89**	**20.42**
	Koteshwar	*10*	*2.29*	*2.17*	*0.00*	*4.46*
	Tehri	*37*	*5.70*	*9.36*	*0.89*	*15.96*
B	**Power purchase from other sources**	**195.23**	**-**	**78.08**	**0.03**	**78.10**
	(2.60% for - Non Solar)	*0*	*0.00*	*8.74*	*0.00*	*8.74*
	(0.40% for Solar)	*0*	*0.00*	*9.51*	*0.00*	*9.51*
	Power purchase from Power Exchange (BUY)	*11*	*0.00*	*4.36*	*0.00*	*4.36*
	Bilateral	*120*	*0.00*	*50.11*	*0.03*	*50.14*
	Banking	*22*	*0.00*	*0.00*	*0.00*	*0.00*
	UI overdrawl	*41*	*0.00*	*5.36*	*0.00*	*5.36*
C	**Power Purchase Quantum and Cost**	**1,948.09**	**111.57**	**446.49**	**14.71**	**572.77**
D	**OTHER CHARGES**	**0.00**	**0.04**	**43.58**	**0.48**	**44.10**
	PGCIL Charges	*0*	*0.00*	*43.02*	*0.00*	*43.02*
	NRLDC F&C	*0*	*0.04*	*0.36*	*0.08*	*0.47*
	Reactive Energy Charges	*0*	*0.00*	*0.20*	*0.40*	*0.61*
E	**Total Power Purchase Cost including transmission charges**	**1,948.09**	**111.61**	**490.07**	**15.19**	**616.87**

Commission considers the Power purchase cost for Review of ARR for FY 2012-13 of Rs. 616.87 Crores for procurement of 1948.09 million units of energy and Renewable Energy Certificates to meet the RPO compliance for FY 2012-13 and carryover RECs of FY 2011-12 as reasonable and approves the same for Review of FY 2012-13.

5.8 Operation and Maintenance Expenses

Petitioner's submission

The Operation and Maintenance (O&M) expenses comprise of three components namely:

a) Employee cost

b) Repairs & Maintenance expenses and
c) Administrative and General Expenses

The petitioner submits that it does not maintain its accounts purely in the above categorization of O&M heads. It has various heads such as salaries, medical treatment, domestic travelling, office expense, other charges towards supply materials; minor repair works etc. which are categorized into O&M heads for the purpose of estimation of Aggregate Revenue Requirement as per the JERC (Tariff regulations), 2009.

JERC under its (Terms and Condition for Determination of Distribution Tariff) Regulations, 2009 has stated that

O&M expenses as approved by the Commission for the first time for a year shall be considered as base O&M expenses for determination of O&M expenses for subsequent years;

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;

The increase in wholesale price index submitted by the petitioner is 9.69% for FY 2012-13. It is based on the actual WPI data available till September 2012 on the website of Economic Advisor, Ministry of Commerce and Industry.

5.8.1 Number of Employees

Petitioner's submission

The petitioner has submitted the number of Employees projected in preceding tariff petition, approved by Hon'ble Commission in last tariff order and provisional figures for FY 2012-13.

Table 5.8.1.1 : Number of Employees submitted by the petitioner and approved for FY 2012-13

Nos

Sr. No.	Particulars	Actual (FY 2011-12)	Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 14 petition (FY 2012-13)	Approved (FY 2012-13)
1	2	3	4	5	6
1	Number of employees as on 1st April *	1127	1088	1085	1085
2	Posts filled during the year/to be recruited/deputation	2	209	3	3
3	Total number of employees (1+2+3) including deputation	0	1297	1088	1088
4	Number of employees retired/retiring during the year	44	57	36	36
5	Number of employees at the end of the year (4-5)	1085	1240	1052	1052

Source: Petition submitted for FY 2013-14

Commission's Analysis

The petitioner had projected the recruitment of 207 employees in its earlier petition for FY 2012-13, the Commission had noted that 209 employees was approved to be recruited for FY 2012-13 in its tariff order dated May 07'2012. As can be observed from the above table, despite approval for recruitment of 209 employees during FY 2012-13, only 3 employees have been proposed to be recruited by the petitioner. It means that 206 employees are not required by the Petitioner. Commission observes that the approval was given for the period of FY 2012-13, since the period is already over and it seems the work is going fine. They do not require additional manpower. The utility was overstaffed in 1990-1991, when one employee was catering to only 73 consumers. Even today the physical area of Chandigarh is the same whereas the density of consumers per sq. km has increased. As of now, one employee is catering to 199 consumers as shown by the Petitioner.

Considering an All India average number of employee per thousand consumers is 0.40[3] as per the annual plan of FY 2011-12. It can be construed that the Electricity Department of Chandigarh is still overstaffed. Hence, the Commission as projected by the petitioner allows only 3 employees to be recruited by the petitioner for FY 2012-13. However a few IT, Commercial and Accounts Officers may be considered for recruitments including equal number of employees to fill the vacancies created due to superannuation of employees and who will continue to provide the service in line with the Standard of Performance of Distribution Code Regulations.

[3] Annexure 4.20 of Annual Report on the working of State Power Utilities & Electricity Departments published by Planning Commission, Government of India in October 2011.

5.8.2 Employee Cost

Petitioner's submission

The petitioner has submitted that the employee cost include the 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 cost of pensioners includes, pension, DA relief in cash & CGHS benefit in kind on contribution basis. The employees who retire are eligible for terminal benefits of Leave Encashment, Pension and Gratuity.

The details of the salary expenses approved for FY 2011-12, projected in preceding tariff petition, approved by Hon'ble Commission in last tariff order for FY 2012-13 dated May 07' 2012 and provisional figures for FY 2012-13 are given in the below table. The electricity allowance is also given to employees as an additional allowance.

Table 5.8.2.1 : Employee Cost submitted by the petitioner and approved for FY 2012-13

Rs Crs

Sr. No.	Particulars	Approved (FY 2011-12)	Proposed in FY 13 petition (FY 2012-13)	Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 14 petition (FY 2012-13)
1	2	3	4	5	6
A	Salaries& Allowances	-	-	-	-
1	Pay in Band	32.81	36.29	35.68	23.83
2	Grade Pay	3.18	3.52	3.46	1.80
3	Dearness allowance	9.05	10.01	9.84	17.50
4	House rent allowance	2.93	3.24	3.18	2.73
5	Field Duty Allowance	0.16	0.18	0.18	0.06
6	Washing Allowance	0.01	0.01	0.01	0.01
7	Salary to CGRF Staff	0.00	0.00	0.00	-
8	Personal Pay	0.00	0.00	0.00	0.04
9	Travelling Allowance	0.01	0.01	0.01	0.03
10	Conveyance Allowance	0.45	0.50	0.49	0.89
11	Apprentice	0.00	0.00	0.00	0.01
12	Fixed Medical	0.41	0.45	0.44	0.71
13	Medical Reimburshment	0.31	0.35	0.34	0.33
14	General Incentive	0.04	0.04	0.04	0.02
15	Special Allowance etc	0.67	0.74	0.73	0.05
16	City Compensatory Allowance	0.04	0.05	0.05	0.17
17	Electricity Allowance	0.01	1.79	0.01	0.05
18	Handicap Allowance	0.00	0.00	0.00	0.01
19	Leave Travel Concession	0.01	0.01	0.01	0.01
20	Leave Salary and Pension Contribution	0.01	0.01	0.01	-
21	Others	0.04	0.04	0.04	0.13
	Sub-Total - A	50.14	57.20	54.53	48.39
B	Terminal Benefits	-	-	-	-
22	Leave encashment	1.66	1.84	1.81	1.77
23	Gratuity	2.85	3.15	3.10	1.61
24	Commutation of Pension	1.15	1.27	1.25	1.29
25	Workmen Compensation	0.04	0.04	0.04	-
26	Ex - gratia	0.03	0.03	0.03	0.05
		-	-	-	-
	Sub-Total - B	5.73	6.34	6.23	4.71
C	Other Salary payments	-	-	-	-
27	Arrears on account of Vth Pay Commission	-	-	-	0.39
28	Contractual basis	0.20	0.22	0.22	0.40
		-	-	-	-
	Sub-Total- C	0.20	0.22	0.22	0.79
	Total (A+B+C)	56.07	63.75	60.98	53.89
29	Less: Amount capitalized	-	-	-	-
30	Net amount	56.07	63.75	60.98	53.89
31	Add : prior period expenses	-	-	-	-
32	Total Employee Expenses	56.07	63.75	60.98	53.89

Commission's analysis

As per the regulation 27 of JERC tariff regulations 2009

"

27. Operation and Maintenance Expenses

1) 'Operation & Maintenance expenses' or 'O&M expenses' shall mean & include repair and maintenance (R&M) expenses, employee expenses and administrative & general (A&G) expenses including insurance.

While determining the O&M expenses for generation functions within the State, the Commission shall be guided, as far as feasible, by the principles and methodologies of CERC on the manner, as amended from time to time.

2) While determining the O&M expenses for transmission functions within the State, the Commission shall be guided, as far as feasible by the principles and methodologies specified by CERC on the matter, as amended from time to time:

Provided further that the Commission may, if it considers it just, practical and proper considering the size of the total transmission system of, and the quantum of electricity handled by, an integrated utility, treat its transmission system as an integral part of its distribution system itself.

3) O&M expenses for distribution functions shall be determined by the Commission as follows:

a) O&M expenses as approved by the Commission for the first time for a year shall be considered as base O&M expenses for determination of O&M expenses for subsequent years;

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;

c) In case of unbundling of the Electricity Department and formation of separate distribution companies, the Commission will make suitable assessment of base O&M expenses of individual distribution companies separately and allow O&M expenses for subsequent years for individual companies on the basis of such estimation and above principle.

4) O&M expenses of assets taken on lease/hire-purchase and those created out of the consumers' contribution shall be considered in case the generating company or the licensee has the responsibility for its operation and maintenance and bear O&M expenses.

5) *O&M expenses for gross fixed assets added during the year shall be considered from the date of commissioning on pro-rata basis.*

6) *O&M expenses for integrated utility shall be determined by the Commission on the norms and principles indicated above.*

Commission observes the employee expenses approved for FY 2011-12 via order dated 07 May 2012 as Rs. 56.07 Crores and the actuals data of FY 2011-12 (including arrears of 6th pay Commission) submitted by the petitioner as Rs. 47.46 Crores. Further, the Petitioner for the review of FY 2012-13 has proposed Rs. 53.89 Crores, which is less than the Commission approval of Rs. 60.98 approved in the order for FY 2012-13. Commission appreciates the petitioner efforts to reduce the same and accordingly the Commission has considered the revised estimates of FY 2012-13 (excluding arrears of 6th pay Commission) while approving the employee expenses for FY 2012-13. The arrears of sixth pay commission would be considered at the time of truing up based on actual.

The Commission considers the employee cost of Rs. 53.50 Crores as reasonable and approves the same for Review of ARR for FY 2012-13.

5.8.3 Administration & General Expenses

Petitioner's submission

The A&G expenses comprise of the following broad subheads' of expenditure, viz.

- Domestic Travelling Expenses, Office Expenses
- Legal, Regulatory & Consultancy Fees
- Insurance etc.

The details of A&G expenses estimated for FY 2012-13 are provided in the table below:

Table 5.8.3.1 : Details of A&G expenses submitted by the petitioner for Review for FY 2012-13

Rs Crs

Sr. No.	Particulars	Approved in FY 13 Order (FY 2011-12)	Proposed in FY 13 petition (FY 2012-13)	Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 14 petition (FY 2012-13)
1	2	3	4	5	6
1	Rent, rates & taxes	-	-	-	-
2	Domestic Travel Allowances	0.00	0.00	0.00	-
3	Office Expenses	0.49	0.54	0.53	0.75
4	Insurance	0.00	0.00	0.00	-
5	Regulatory Expenses (License + Petition Fees)	0.48	0.53	0.52	0.55
6	Consultancy Fees and other professional fees	0.20	0.85	0.21	0.15
7	Electricity & Water Charges	0.11	0.12	0.11	0.32
8	Advertisement & Publicity	0.05	0.05	0.05	0.14
9	Legal, Professional & Special Service Charges	0.02	0.02	0.02	0.01
10	Expenses of CGRF (Office)	0.11	0.12	0.12	-
11	PGCIL Registration Charges/others	-	-	-	-
12	Other material related expenses	-	-	-	-
13	Total	1.45	2.24	1.57	1.92
14	Add/Deduct share of others (to be specified)	-	-	-	0.39
15	Total expenses	1.45	2.24	1.57	2.31
16	Less: Capitalized	-	-	-	-
17	Net expenses	1.45	2.24	1.57	2.31
18	Add: Prior period	-	-	-	-
19	**Total A&G Expenses**	**1.45**	**2.24**	**1.57**	**2.31**

Commission's analysis

Commission observes that the revised estimates data of FY 2012-13 submitted by the petitioner is higher than the approved A&G expenses for FY 2012-13. The actual A&G expenses submitted for the period April to November 2012 is Rs 1.66 Crores against which the total A&G for the year has been proposed at Rs 2.31 Crores. The Commission feels that the activities covered under the A&G expenses are essential for the working of the utility and as the total A&G expenses proposed form 0.31 % of the total ARR the Commission finds the estimates of the Petitioner to be prudent. Commission has analyzed the past trends and the A&G expense approved in the tariff order for FY 2012-13 dated 07 May 2012 & the actual expenditure submitted for the FY 2012-13 and is of the view that the revised data of FY 2012-13 shows true depiction of expenses incurred by the utility. The Commission has considered the revised estimates of FY 2012-13 while approving the employee expenses for FY 2012-13

Accordingly, the Commission considers the A&G expenses of Rs. 2.31 Crores as reasonable and approves the same for Review of ARR for FY 2012-13.

5.8.4 Repair & Maintenance Expenses

Petitioner's submission

The petitioner submitted that it has been undertaking various Repairs and Maintenance activities as a step towards improvement of systems, reduction in breakdowns, reduction in response time and increasing preventive maintenance. The details of R&M expenses estimated for FY 2012-13 are provided in the table below:

Table 5.8.4.1 : Details of R&M expenses submitted by the petitioner and approved for FY 2012-13

Rs Crs

Sr. No.	Particulars	Approved in FY 13 Order (FY 2011-12)	Proposed in FY 13 petition (FY 2012-13)	Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 14 petition (FY 2012-13)
1	2	3	4	5	6
1	Plant & machinery *	2.47	2.73	2.68	2.25
	-Plant & Apparatus	-	-	-	-
	-EHV substations	0.01	0.01	0.01	0.20
	- 33kV substation	0.19	0.21	0.21	0.28
	- 11kV substation	0.57	0.63	0.62	0.01
	- Switchgear and cable connections	1.23	1.37	1.34	0.85
	- Others	0.22	0.25	0.24	0.20
	Total	4.70	5.20	5.11	3.79
2	Buildings (Electricity Residential & Non-Residential)	0.44	0.48	0.48	2.01
3	Hydraulic works & civil works	0.16	0.18	0.18	0.12
4	Line cable & network	-	-	-	-
	-EHV Lines	-	-	-	-
	- 33kV lines	-	-	-	-
	- 11kV lines	0.06	0.06	0.06	0.03
	- LT lines	3.01	3.33	3.27	1.85
	- Meters and metering equipment	-	-	-	-
	- Others	0.23	0.25	0.25	0.16
	Total	3.29	3.64	3.58	2.05
5	Vehicles	0.88	0.97	0.95	0.95
6	Furniture & fixtures	-	-	-	-
7	Office equipments	-	-	-	-
8	Minor R&M Works	0.11	0.12	0.12	0.32
9	Total	9.57	10.59	10.41	9.25
10	Add/Deduct share of others (To be specified)	-	-	-	0.32
11	Total expenses	9.57	10.59	10.41	9.56
12	Less : Capitalized	-	-	-	-
13	Net expenses	9.57	10.59	10.41	9.56
14	Add: prior period	-	-	-	-
15	**Total R&M expenses**	**9.57**	**10.59**	**10.41**	**9.56**

Commission's analysis

Commission observes that the revised estimates data of FY 2012-13 submitted by the petitioner is lower than the approved expenses for FY 2012-13 and the Commission appreciates the petitioner efforts to reduce the same. Commission has analyzed the past trends and the R&M expense approved in the tariff order for FY 2012-13 dated 07 May 2012 & is of the view that the revised data of FY 2012-13 shows true depiction of expenses incurred by the utility. The Commission has considered the revised estimates of FY 2012-13 while approving the employee expenses for FY 2012-13

Commission considers R&M expenses of Rs. 9.56 Crores as reasonable and approves the same for the Review of ARR for FY 2012-13.

5.8.5 Summary of O&M Expenses

The overall summary of O&M expenditure estimated by the petitioner vis-à-vis approved by the Commission in its previous tariff order for FY 2012-13 and revised estimates submitted by the Petitioner for review for FY 2012-13 is given below. Out of the total Operation & Maintenance expenses, the A&G are on the higher side.

Table 5.8.5.1 : Summary of O&M expenses submitted by the petitioner and approved for FY 2012-13

Rs Crs

Sr. No.	Particulars	Proposed in FY 13 petition (FY 2012-13)	Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 14 petition (FY 2012-13)	Approved (FY 2012-13)
1	2	4	5	6	7
1	Employee Expenses including arrears	63.75	60.98	53.89	53.50
2	A&G Expenses	2.24	1.57	2.31	2.31
3	R&M Expenses	10.59	10.41	9.56	9.56
4	Sub-Total	76.58	72.96	65.77	65.38
5	Less:Expenses Capitalised	-	-	-	-
6	**Total O&M Expenses**	**76.58**	**72.96**	**65.77**	**65.38**

Source: Tariff order for FY 2012-13 dated May 07'2012 and CED Petition for FY 2013-14

5.9 Capital Expenditure and Capitalization

Petitioner's submission

The petitioner submitted, "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". Further it is submitted that upto November of FY 2012-13 CED has incurred Rs. 10.18 Crores towards capital expenditure and would incur a total capital expenditure of Rs. 20.50 Crores for the full year of FY 2012-13 and proposes to capitalize the whole capital expenditure during the same year.

The objective of incurring the capital expenditure is also to upgrade and strengthen the distribution network to meet the standards of performance as per the Standard of Performance regulations issued by JERC and to provide better network reliability and sustainable performance to the consumers of UT Chandigarh. Majority of CED capex schemes are on annual ongoing basis. The petitioner further submitted that the works during the year will be fully capitalized by the end of the year and transferred to into Gross Fixed Assets (GFA) leaving no balance under CWIP.

Commission's analysis

Commission observes that the capital expenditure and the capitalization submitted by the petitioner for FY 2012-13 is required to maintain the reliable supply for the consumers of Chandigarh.

As per the Regulation 21, of JERC for the states of Goa and UTs (Terms and conditions for determination of Tariff), Regulation 2009 specifies that the licensee shall propose in their filings, a detailed capital investment plan, showing separately ongoing projects that will spill into the Ensuing Year and new projects (along with their justification) that will commence in the ensuing year. The petitioner had not submitted the capital investment plan as per the regulations and did not give the present status of the capital expenditure incurred/capitalized. However, for the purpose of this ARR computation, **Commission provisionally approves the capital expenditure of Rs. 20.50 Crores proposed by the petitioner for Review of ARR for FY 2012-13. A detailed statement of the capital expenditure incurred quarterly and the asset capitalized up to 31.03.2013 on different dates during the year be provided for true-up.**

This expenditure is being permitted as a special case to ensure the creation of infrastructure for adherence to Standard of Performance and Supply Code Regulations.

5.10 GFA and Depreciation

Petitioner's submission

The petitioner submits that the funding for the capital expenditure is normally through the internal reserves/ equity contribution from Government of India. According to Regulation 26 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specifies *that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time*. The effective rate of depreciation for distribution assets is 5.28% vide Appendix-III (Depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009.

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".

Commission disallowed the GFA and depreciation on the absence of Fixed Asset register. The Petitioner submits that in the absence of fixed asset register (FAR),asset-wise detail is currently not available but requests the Hon'ble Commission to approve the above GFA & depreciation charges. The petitioner submits that the asset-wise details are being integrated and will be made available with the future filings. Gross Fixed Assets (GFA) and the depreciation on GFA for FY 2012-13 are discussed hereunder. 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 Petitioner. The table below summarizes the Gross Fixed Assets and Depreciation for FY 2012-13 projected by the Petitioner in the preceding Tariff Petition, approved by the Hon'ble Commission in its Tariff Order for FY 2012-13 dated May 07' 2012 and the provisional figures based on the unaudited books of accounts of FY 2010-11.

Table 5.10.1 : GFA &Depreciation submitted by the petitioner and approved in Tariff order for FY 2012-13

Rs Crs

Sr. No.	Particulars	Approved in FY 13 Order (FY 2011-12)	Proposed in FY 13 petition (FY 2012-13)	Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 14 petition (FY 2012-13)
1	2	3	4	5	6
1	Opening Value of Assets at the beginning of the year	-	384.74	25.00	383.88
2	Additions during the year	25.00	20.50	20.50	20.50
3	Gross Fixed Assets at the end of year	25.00	405.24	45.50	404.38
4	Average Assets	12.50	394.99	35.25	394.13
5	Rate of Depreciation	5.28%	5.28%	5.28%	5.28%
6	Depreciation for the year	0.66	20.86	1.86	20.81

Source: Tariff order for FY 2012-13 dated May 07'2012 and CED Petition for FY 2013-14

Commission's analysis

The petitioner has stated that in the absence of fixed asset registers (FAR), the asset wise details are not available and the details are being integrated and will be furnished in future filings. Further, a sample value of fixed assets duly signed by Electrical Inspector was provided by the petitioner. Commission is of the view that in absence of fixed asset registers, the opening and sample value of fixed assets is on assumption basis.

As per Regulation 26 of JERC for the states of Goa and UTs (Terms and conditions for determination of Tariff), Regulation 2009 *depreciation shall be computed on historical cost of the assets including additions during the year*.

In the instant case, the Petitioner is unable to arrive at the actual value of the fixed assets. Commission had directed in its previous tariff order for FY 2012-13 dated May 07'2012 to conduct the physical inventory of assets and construct asset /depreciation registers and file the same along with next tariff petition but the same has not been submitted till date by the petitioner and In absence of the same, Commission has not approved any depreciation on the opening Gross Fixed Assets. However, the Petitioner has projected the capital expenditure of Rs. 20.50 Crores for the FY 2012-13 and stated that most of the schemes initiated in the year get capitalized by the end of the same year. The Commission therefore has approved the capitalization of Rs. 20.50 Crores for the FY 2012-13.

The Regulation 26 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The effective rate of depreciation for distribution assets is 5.28% vide Appendix-III (Depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009. Further Commission is of the view that

"*Depreciation is a charge for use of assets deployed in rendering the service for which Tariff is being determined. Say total assets are 100 Crores, obsolete unusable assets are of Rs. 20 Crores plus assets written off plus assets not written off or not declared obsolete but not usable lying in store. The asset that will qualify for depreciation is only the net value which is being used to provide service to the consumer. This value will also be further adjusted for depreciation already claimed"*

The depreciation calculation are as given in the table below:

Table 5.10.2 : GFA & Depreciation submitted by the petitioner and approved in the review for FY 2012-13

Rs Crs

Sr. No.	Particulars	Proposed in FY 13 petition (FY 2012-13)	Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 14 petition (FY 2012-13)	Approved (FY 2012-13)
1	2	3	4	5	6
1	Opening Value of Assets at the beginning of the year	384.74	25.00	383.88	25.00
2	Additions during the year	20.50	20.50	20.50	20.50
3	Gross Fixed Assets at the end of year	405.24	45.50	404.38	45.50
4	Average Assets	394.99	35.25	394.13	35.25
5	Rate of Depreciation	5.28%	5.28%	5.28%	5.28%
6	Depreciation for the year	20.86	1.86	20.81	1.86

Commission considers the depreciation of Rs. 1.86 Crores as reasonable and approves the same for Review of ARR of FY 2012-13.

5.11 Interest on Loan

Petitioner’s submission

The petitioner submitted that the entire capital expenditure incurred by CED had been funded through equity infusion by GOI through budgetary support without any external borrowings. The Hon’ble Commission has disallowed the GFA and depreciation on the absence of Fixed Asset register; as a result Interest on loan was disallowed.

As per JERC Regulations, 2009 Clause 25 for the purpose of determining the ARR, the Petitioner has considered debt equity ratio of 70:30 for projecting normative loan. The Petitioner has considered repayment to be equal to depreciation. The interest at the State Bank of India (SBI) Prime Lending Rate (PLR) rate which is now substituted as SBI advance rate, is applied on the average normative debt in order to project the normative interest on long term loans for FY 2012-13.

Commission’s analysis

The Petitioner has claimed interest on normative loan considering the repayment be equal to depreciation charge by considering debt-equity ratio of 70:30 of gross fixed assets, but the asset value indicated in the absence of FAR and the opening value of Fixed Asset Register is on assumption basis. As per the JERC tariff regulations 2009 -

"25. Interest and Finance Charges on Loan

(1) For existing loan capital, interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreements.

(2) Interest and finance charges on loan capital for new investments shall be computed on the loans, duly taking into account the rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall, however, be restricted to the prevailing Prime Lending Rate of the State Bank of India.

(3) 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:

Provided that interest and finance charges of renegotiated loan agreements shall not be considered, if they result in higher charges:

Provided further that interest and finance charges on works in progress shall be excluded and shall be considered as part of the capital cost.

(4) Interest charges on security deposits, if any, made by the consumers with a generating company/licensee, shall be equivalent to the bank rate or at the rate , if any, specified by the Commission whichever is higher.

(5) In case any moratorium period is availed of, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

(6) The Commission shall allow obligatory taxes on interest, commitment charges, finance charges and any exchange rate difference arising from foreign currency borrowings, as finance cost.

(7) Any saving in costs on account of subsequent restructuring of debt shall be passed on to the consumers."

In the instant case, the licensee has not provided the actual value of fixed assets, Hence the servicing of assets in the form of interest on loan and return on assets is indeterminate at this stage on the opening GFA, hence has not been considered on the assumed value of assets. The same shall be considered at true-up stage if full details are made available.

The Commission has considered a normative loan of Rs. 14.35 Cr for FY 2012-13 (being 70% of Rs. 20.50 Cr provisionally considered to be capitalized during FY 2012-13) to calculate the interest on normative loan amount. Commission has considered the SBAR of 14.75% as the interest rate to allow the interest cost. The table below shows the computation of the normative interest for FY 2012-13 approved by the Commission:

Table 5.11.1 : Interest on Loan submitted by the petitioner and approved in the review for FY 2012-13

Sr. No.	Particulars	Proposed in FY 13 petition (FY 2012-13)	Approved (FY 2012-13)	Estimates submitted in FY 14 petition (FY 2012-13)	Approved (FY 2012-13)
1	2	4	5	6	7
1	Opening Normative Loan	213.57	25.00	249.08	25.00
2	Add: Normative Loan during the year	14.35	20.50	14.35	14.35
3	Less: Normative Repayment	21.36	2.50	20.81	2.50
4	Closing Normative Loan	**206.56**	**43.00**	**242.62**	**36.85**
5	Average Normative Loan	210.07	34.00	245.85	30.93
6	Rate of Interest (@SBI PLR rate)	13.25%	14.75%	14.75%	14.75%
7	Interest on Normative Loan including letter of credit charges	28.53	5.72	36.26	4.56

As discussed in para 5.9 and 5.10, Commission has considered the capitalization of Rs. 20.50 Crores proposed by the petitioner for FY 2012-13, approved opening balance of GFA of Rs 25.00 Crores as per TO dated 07 May 2012 and has allowed the interest of Rs. 4.56 Crores, at the SBI Advance Rate as on 1st April 2012..

5.12 Interest on Working Capital

Petitioner's submission

In accordance with Clause 29 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 the rate of interest on working capital has been considered as SBI Prime lending rate which is now substituted as SBI advance rate as on 1stApril of the respective years, which was 14.75% as on 1st April 2012. Accordingly, the Petitioner requests the Hon'ble Commission to approve Interest on Normative Working Capital at Rs. 8.73 Crores as against which the Hon'ble Commission approved an amount of Rs 2.75 Crores in its last Tariff Order dated May 07'2012.

Commission's analysis

As per the regulation 29 of JERC tariff Regulations

29. WORKING CAPITAL AND INTEREST RATE ON WORKING CAPITAL

1) *For generation and transmission business, the working capital shall be as per CERC norms.*
2) *Subject to prudence check, the working capital for distribution business shall be the sum of one month requirement for meeting:*
    a. *Power purchase cost.*
    b. *Employees cost.*
    c. *Administration & general expenses and*
    d. *Repair & Maintenance expenses.*
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."*

Commission has observed that the working capital proposed for FY 2012-13 in ARR & tariff petition for FY 2012-13 and has considered the amount collected from the consumers as security deposit available with the petitioner. Further the petitioner is not paying any interest on the security deposit to the consumers; it is available with the petitioner. In accordance with *Clause 47(4) of the Electricity Act 2003, the distribution licenses are required to pay interest on security deposit collected from the consumers.* Thus, the security deposit available with the petitioner can be treated as available to meet part of working capital required for FY 2012-13. Commission has therefore considered the security deposit available with the Petitioner as a source to meet working capital requirements and has deducted this amount from the working capital considered for interest for review of FY 2012-13.

Further, Commission clarifies that SBI PLR rate has now been substituted as SBI Advance Rate. The Commission has considered the SBI advance rate of 14.75% as on 1st April 2012 for Review of ARR of FY 2012-13. The detailed calculation for the calculation of interest on working capital is mentioned below:

Table 5.12.1 : Interest on working capital submitted by the petitioner and approved in Review for FY 2012-13

Rs Crs

Sr. No.	Particulars	Proposed in FY 13 petition (FY 2012-13)	Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 14 petition (FY 2012-13)	Approved (FY 2012-13)
1	**2**	**3**	**4**	**5**	**6**
1	Fuel Cost for 2 months	-	-	-	-
2	Power Purchase Cost for one month	54.49	46.92	53.73	48.38
3	Employee Cost for one month	5.31	5.08	4.49	4.46
4	A&G Expenses for one month	0.19	0.13	0.19	0.19
5	R&M Expenses for one month	0.88	0.87	0.80	0.80
6	Total Working Capital for one month	60.87	53.00	59.21	53.83
7	Closing Security Deposit	-	-	-	34.31
8	Total Working after deduction of Security Deposit from Working Capital Requirement	26.52	18.66	-	19.51
9	SBI PLR Rate	13.25%	14.75%	14.75%	14.75%
10	**Interest on Working Capital**	**3.51**	**2.75**	**8.73**	**2.88**

The Commission considers Rs. 2.88 Crores as Interest on Working Capital as reasonable and approves the same for Review of ARR for FY 2012-13.

5.13 Interest on Security Deposit

Petitioner's submission

The petitioner submitted that in accordance with Clause 47(4) of the 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*. CED has proposed addition in consumer security deposit during FY 2012-13 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.

Further, the petitioner stated that it has prepared a detailed list of consumers and their security amount for FY 2011-12 and FY 2012-13 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. It is further submitted that no interest have been paid to the consumers for the security deposited during the year 2011-12. However, the same shall be provided to the consumer during the next financial year.

Commission's analysis

In terms of the section 47 (4) of the Electricity Act, 2003 '*the distribution licensee is required to pay interest on security deposit collected from consumers equivalent to bank rate or more as may be specified by the Commission.'* The Commission in its previous order has also directed the petitioner to comply with the provisions of the above referred section of the Electricity Act 2003. The Commission has observed that the petitioner has not paid any interest to the consumers on the security deposit held during FY 2012-13. The Commission would like to reiterate its direction that the distribution licensee should deliver its obligation under the Section 47(4) of the Electricity Act, 2003 and it must pay the interest on security deposit w.e.f. April 1'2011 at the rate of 6% per annum (Being the Bank Rate as on 1st April 2011) and at the rate of 9.50% (Being the Bank Rate as on 1st April 2012) and should explicitly mention the same as the 'Interest on security deposit for FY 2011-12' on the bills of the consumers.

In view of the above, the Commission allowed Rs. 3.26 Crores as the interest on security deposits claimed by the petitioner and considered as an expenditure in ARR in Review for FY 2012-13.

5.14 Return on Equity

Petitioner's submission

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.

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.

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

Commission's analysis

ED Chandigarh is an integrated utility in its present form as defined in Regulation 2(9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. As of now, it is an integrated utility and it is entitled to return on capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide proviso under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement for consideration of either return on capital base or return on equity for historical assets is the basic information in the form of the assets and depreciation registers besides other data. ED Chandigarh has not provided the requirement data and details to the Commission.

As discussed in para 5.9 and 5.10, Commission has approved opening balance of GFA of Rs 25.00 Crores as per TO dated 07 May 2012 and has allowed Return on Equity or Return on Capital Base of Rs. 0.73 Crores. The Department has no separate audited accounts for the regulated business, there are no assets and depreciation registers to determine the historical value of assets at the beginning of FY 2011-12. Till such time the Department prepares and maintains the asset and depreciation registers and get them duly audited, it is not feasible for the Commission to consider return on equity or return on capital base in accordance with Regulations 23 and 24 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. Accordingly, Commission approves Rs 0.69 Crores for FY 2012-13 based on accumulated depreciation and opening balance of GFA as approved as 3%Return on Capital Base.

5.15 Provisional for Bad and Doubtful debts

Petitioner's submission

In accordance with Clause 28 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009:

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.

Accordingly, CED has proposed the provision for bad and doubtful debts on 1% of the receivables for FY 2012-13.

Commission's analysis

Commission observed the submissions made by the petitioner on collection efficiency proposed for FY 2012-13 as 99%. Further the petitioner has not submitted any audited details of bad & doubtful debts and the reasons & justification criteria for classifying the same as 'bad & doubtful' in the past nor they have mentioned the same for review of FY 2012-13. As specified in the regulation no. 28 of JERC Tariff regulations read with the format is explained below.

"28. Bad and Doubtful Debts

*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. (Information to be furnished in format 18)"*

Format -18

S.No.	*Particulars*	*Amount (Rs. in Crores)*
1.	*2.*	*3.*
1.	*Amount of receivable bad and doubtful debts (audited)*	
2.	*Provision made for debts in ARR*	

Commission has observed that the petitioner has not actually written off any bad and doubtful debts in the first 8 months of FY 2012-13. Thus, the expenses on account of bad and doubtful debts will be considered on availability of audited accounts of receivable bad and doubtful debts which will be taken up at the time of true up of ARR.

Meanwhile, Commission has considered the provision for bad & doubtful debt for Review of ARR for FY 2012-13 @ 0.50 % of Receivable i.e. Rs 3.28 Crores.

5.16 Non-Tariff Income

Petitioner's submission

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

The petitioner had projected Rs. 10.88 Crores as its Non-Tariff Income for FY 2012-13 in its previous Tariff Petition; However Hon'ble Commission approves Rs. 11.96 Crores in its Tariff Order dated 07 May 2012 for FY 2012-13. As against the same the provisional Non-Tariff Income is Rs 14.63 Crores for FY 2012-13, which the licensee requests the Hon'ble Commission to approve.

Commission's analysis

Commission observes that the submissions made by the petitioner for FY 2011-12 and review of FY 2012-13 & considered the revised estimates figures of FY 2012-13. The detailed calculations have been presented in the table below:

Table 5.16.1 : Non-Tariff Income submitted by petitioner and approved in Review by the Commission for FY 13

Rs Crs

S.No.	Particulars	Proposed in petition-FY 13	Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 14 Petition	Approved
1	Sale Proceeds of dead stock, waste paper etc	-	-	1.94	1.94
2	Receipt from State Electrical Inspectorate	-	-	-	-
3	Theft/pilferage of energy	0.32	0.35	1.10	1.10
4	Wheeling charges under open access	-	-	0.36	0.36
5	Interest on staff loans & advance	-	-	0.03	0.03
6	Income from trading	-	-	-	-
7	Income staff welfare activities	-	-	-	-
8	Investment & bank balances	-	-	-	-
9	Misc. Receipts/income	4.09	4.50	6.51	6.51
10	Meter/Service Rent	5.11	5.62	3.58	3.58
11	Late Payment Surcharge	1.36	1.49	1.12	1.12
12	Total income	10.88	11.96	14.63	14.63
13	Add: prior period income	-	-	-	-
14	**Total Non Tariff Income**	**10.88**	**11.96**	**14.63**	**14.63**

The Commission considers Non-Tariff Income of Rs. 14.63 Crores as reasonable and approves the same for Review of ARR for FY 2012-13.

5.17 Revenue from Sale of Surplus Power

Petitioner's submission

The petitioner has submitted for the purpose of determination of revenue from sale of surplus power for FY 2012-13, it has considered actual eight months power sold under exchange and UI. For the balance months, it 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.

Commission's analysis

The Petitioner has submitted the actual revenue from sale of power through UI under drawl and power exchange for the first eight months of FY 2012-13. The Commission has considered the actual revenue for the period April to November 2012. However, the Commission has not considered any surplus sale in the remaining 4 months of the FY 2012-13 as it has considered the availability as per the merit order dispatch.

Table 5.17.1 : Summary of Sale UI and Power Exchange for FY 2012-13 as submitted by the Petitioner and approved by the Commission

Sr No	Particulars	FY 2012-13 (Mus)- RE	FY 2012-13 (Rs Crs)- RE	FY 2012-13 (Approved)- MUS	FY 2012-13 (Aprroved)- Rs Crs
1	Revenue from Sale of Power- Exchange	48.37	14.75	48.37	14.75
2	Revenue from UI	83.21	21.56	83.21	21.56
3	**Total Revenue from Sale of Surplus Power**	**131.58**	**36.31**	**131.58**	**36.31**

After verification of statement/bills, the Commission considers the total sale of Surplus Power for FY 2012-13 at Rs. 36.31 Crores for Sale of 131.58 MUs as reasonable and approves for Review of ARR for FY 2012-13.

5.18 Revenue at approved retail tariff of FY 2012-13

Petitioner's submission

The petitioner has submitted the actual revenue for FY 2011-12 and revised estimates for FY 2012-13 along with 8 months actuals of FY 2012-13 for all the categories.

Commission's analysis

As discussed in para 4.1, Commission observed major variations in the actual revenue submitted by the Petitioner for FY 2011-12 & 8 months of FY 2012-13 with the estimated revenue shown for FY 2012-13 in the ARR & Tariff Petition for FY 2013-14 submitted by the Petitioner on February 15' 2012. The Petitioner had submitted Rs. 622.20 Crores as the actual revenue assessed for 12 months for FY 2012-13 and total revenue projected by the Petitioner for FY 2011-12 in the Petition based on eight months actuals is Rs. 650.63 Crores.

Commission has accepted the actual revenue submitted by the Petitioner on April 02' 2013 for 8 months of FY 2012-13 and has projected the revenue for the remaining period (December to March) of FY 2012-13 based on estimated energy sales during that period. The detail of revenue considered by the Commission for review of ARR of FY 2012-13 is given below:

Table 5.18.1 : Revenue submitted by petitioner and considered by the Commission for FY 13

Rs Crs

S.No.	Category/Consumption Slab	Estimates submitted in FY 14 petition	Actual-8 Months April 12 to Nov 12	Projected - 4 Months Dec 12 to Mar 13	Approved
1	2	3	4	5	6
A	Domestic	230.14	176.07	88.04	264.11
1	*0-150 kWh*	*12.72*	*9.52*	*4.76*	*14.28*
2	*151 kWh-400 kWh*	*77.05*	*53.25*	*26.61*	*79.86*
3	*Above 400 kWh*	*140.37*	*113.30*	*56.67*	*169.97*
B	Commercial	232.39	132.58	73.05	205.63
4	*0-150 kWh*	*7.17*	*1.70*	*1.11*	*2.81*
5	*151 kWh-400 kWh*	*18.38*	*4.19*	*3.05*	*7.24*
6	*Above 400 kWh*	*206.85*	*126.69*	*68.89*	*195.58*
C	Large Supply	65.31	44.66	24.18	68.84
D	Small Power	10.65	6.27	3.18	9.45
E	Medium Supply	51.68	31.92	17.64	49.56
F	Agriculture	0.32	0.23	0.11	0.34
G	Public Lighting	8.54	6.29	3.32	9.61
H	Bulk Supply	44.11	26.11	13.94	40.05
I	Others-Temporary Supply	7.49	7.77	-	7.77
J	**Total**	**650.63**	**431.90**	**223.46**	**655.36**

The Commission has estimated the Revenue from Sale of Power at existing tariff of Rs. 655.36 Crores for FY 2012-13 as reasonable and approves the same for FY 2012-13.

5.19 FPPCA billed during the year

The petitioner has submitted the FPPCA billed during the FY 2012-13 and the Commission found it correct. Accordingly, Commission approves Rs 5.54 Crores as FPPCA for the FY 2012-13.

5.20 Aggregate revenue Requirement and Revenue Surplus/Deficit for Review of FY 2012-13

The Commission has considered and approved the review of ARR for FY 2012-13 based on the items of expenditure discussed in the preceding sections& updated information submitted by the Petitioner on April 02'2013. The revised estimates of Aggregate revenue Requirement submitted by the petitioner and approved by the Commission for FY 2012-13 in Tariff order dated May 07' 2012, revised estimates submitted for review of FY 2012-13 submitted by the petitioner and approved by the Commission are given in the table below:

Table 5.20.1 : Aggregate Revenue Requirement for Review for FY 2012-13 – Petitioner Vs. Approved

Rs Crs

Sr. No.	Particulars	Proposed in FY 13 petition (FY 2012-13)	Approved in T.O. of FY 12-13 dated 07.05.2012	Estimates submitted in FY 14 petition (FY 2012-13)	Approved (FY 2012-13)
1	2	3	4	5	6
1	Cost of fuel	-	-	-	-
2	Cost of power purchase for full year	653.88	563.09	644.72	616.87
3	Employees Expenses	63.75	60.98	53.89	53.50
4	R&M expenses	10.59	10.41	9.56	9.56
5	Administration and general expenses	2.24	1.57	2.31	2.31
6	Depreciation	20.86	1.86	20.81	1.86
7	Interest and finance charges	28.53	5.72	36.26	4.56
8	Interest on working capital & Interest on Security Deposit	5.58	6.01	11.36	6.14
9	Return on NFA /Equity	8.24	0.73	8.76	0.69
10	Provision for Bad Debt	6.06	6.48	6.51	3.28
11	Advance Against Depreciation	18.15	-	-	-
12	Total Revenue Requirement	817.88	656.85	794.19	698.78
13	Less: Non Tariff Income	10.88	11.96	14.63	14.63
14	Less: Revenue from Sale through UI	7.24	-	14.75	14.75
15	Less: Revenue from Sale of Power-Exchanges	35.52	-	21.56	21.56
16	**Net Revenue Requirement (12-13-14-15)**	**764.24**	**644.89**	**743.25**	**647.84**

The revenue deficit projected by the petitioner and approved by the Commission for FY 2012-13 are mentioned below:

Table 5.20.2 : Estimation of Deficit approved for FY 12-13

Rs Crs

Sr. No.	Particulars	Estimates submitted in FY 14 petition (FY 2012-13)	Approved (FY 2012-13)
1	2	3	4
1	Net Revenue Requirement	743.25	647.84
2	Revenue from Retail Sales at Existing Tariff	650.63	655.36
3	FPPPCA billed during the FY	5.54	5.54
4	Net Gap	87.08	(13.06)
5	Gap for the previous year	154.85	45.93
6	Total Gap	241.93	32.87
7	Additional revenue from proposed tariff	-	-
8	Revenue Gap/(Surplus) if any after proposed tariff	241.93	32.87
9	Budgetary Support from Government	-	-
10	**Net Final Revenue Gap/(Surplus)**	**241.93**	**32.87**

6. AGGREGATE REVENUE REQUIREMENT OF FY 2013-14

6.1 Background

The ARR & Tariff Petition filed by the ED Chandigarh for FY 2013-14 on February 15' 2013 as per the relevant provisions mentioned in the tariff regulations 2009. The petitioner has submitted its Aggregate Revenue Requirement and Tariff Application as per the Regulation no. 12 & 13 of JERC Tariff regulations 2009 to estimate the revenue requirement for FY 2013-14 on the basis of un-audited accounts/actuals of previous year i.e. FY 2011-12 and forecasted figures for the ensuing year i.e. FY 2012-13.

The Petitioner in its petition has submitted its Aggregate Revenue Requirement for FY 2013-14 and requested for a considerable hike in the tariff approved for FY 2012-13. In this chapter, the Commission has analyzed the petition of CED based on the provisions mentioned in the regulations, actuals for FY 2011-12, pre-actuals of FY 2012-13 submitted by the petitioner. The Commission has taken into consideration the following:

i. Actual Performance in FY 2011-12 (Actual Un-audited[4] Figures);

ii. Approved figures of FY 2011-12 in ARR and Tariff Petition for FY 2012-13 dated 07th May, 2012

iii. Provisional figures for FY 2012-13 based on the performance of FY 2011-12;

iv. Revised estimates submitted by the petitioner along with actuals of 8 months corresponding to Power purchase, Sales and Revenue for FY 2012-13;

6.2 Analysis of Aggregate Revenue Requirement of FY 2013-14

The determination of Aggregate Revenue Requirement requires assessment of quantum of energy sales, loss as well as various cost elements like power purchase cost, O&M expenses, interest cost and depreciation etc. Revised estimates/pre-actuals submitted by the petitioner as regards to various components of ARR of previous year, the Commission's analysis thereon and decision in respect of items given below as discussed in the following paras:

- Assessment of Energy Requirement

  i. Sales Projections

  ii. Loss Trajectory

[4]Audited Accounts of FY 2011-12 (Proforma Accounts provided) not provided by the Petitioner.

iii. Energy Balance

iv. Power Purchase Sources

- Assessment of the Aggregate Revenue Requirement

i. Power Purchase Costs & Transmission Charges;

ii. Operation and Maintenance Expenses;

- Employee Expenses
- Administration & General expenses
- Repairs & Maintenance Expenses

iii. Capital Expenditure and Asset Capitalization

iv. Gross Fixed Assets;

v. Depreciation;

vi. Interest on Long Term Loans;

vii. Interest on Working Capital & Security Deposits;

viii. Return on Capital Base/ Net Fixed Assets;

ix. Provision for Bad and Doubtful Debts

x. Other expenses.

xi. Non Tariff Income

As per the regulation no. 13 of JERC Tariff regulations 2009,
"

1) *The Aggregate Revenue Requirement of the generating company or the licensee shall comprise of the following:*

   i. *Fuel Cost for own generation, if applicable.*

   ii. *Cost of Power Purchase, if any*

   iii. *Operation and Maintenance Expenses,*

   iv. *Depreciation, including Advance Against Depreciation,* *v. Interest and Cost of Finance,*

vi. Return on Equity,

vii. Income Tax

viii. Provision for Bad & Doubtful Debts

ix. Other Expenses.

2) The data should be provided for three years

i. Audited figures for the previous year; Information for the previous year shall be based on the audited accounts; in the absence thereof, the audited accounts for the immediately preceding year shall be filed along with the un-audited accounts for the previous year.

ii. Estimated figures for the current financial year should be based on actual figures for the first six months and the estimated figures for the second six-months of the year. The estimated figures for the second half year of the current financial year should be based on the actual audited figures for the second half of the previous year with adjustments that reflect known and measurable changes expected to occur between them. These adjustments must be specifically documented and justified.

iii. Forecasted figures for the ensuing year should be based on the current year figures with adjustments that reflect known and measurable changes expected to occur between them. These adjustments must be specifically documented and justified."

"

4) The Aggregate Revenue Requirement of the generating company or the licensee shall be worked out by adjusting the following in the revenue requirement computed under Clause (1) above:

i. Necessary adjustments under Regulation 9 'Review and Truing Up'.

ii. Income from surcharge and additional surcharge from Open Access Consumers, if any ;

iii. Transmission and/or Wheeling Charges recovered from the Open Access Customers, if any ;

iv. Authorized portion of Income/revenue from Other Business engaged in by the licensee for optimum utilization of assets, if any, in accordance. "

6.3 Estimations of Consumers growth, Connected Load and Energy Sales

Petitioner's Submission

The petitioner has considered historical trend for estimating the load growth, number of consumers and energy consumption. The petitioner has considered Cumulative Average Growth Rate (CAGR) based on the past growth trends and actual number of consumers and load addition during the eight months of FY 2012-13 to estimate the growth for various consumer categories for FY 2013-14.

The petitioner has considered sales projections for 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. 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.

The energy sales for 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.

The projected number of consumers, connected load and Energy Sales for FY 2013-14 are given in the tables below:

Table 6.3.1 : Number of Consumers projected for FY 2013-14

Nos

S.No.	Category/Consumption Slab	FY 2013-14 (Projected)
1	2	3
A	**Domestic**	187,828
1	*0-150 kWh*	70,688
2	*151- 400 kWh*	74,470
3	*Above 400 kWh*	42,670
B	**Commercial**	26,261
1	*0-150 kWh*	9,486
2	*151- 400 kWh*	5,460
3	*Above 400 kWh*	11,315
C	**Large Supply**	104
D	**Small Power**	1,291
E	**Medium Supply**	1,233
F	**Agriculture**	122
G	**Public Lighting**	970
H	**Bulk Supply**	422
I	**Others-Temporary Supply**	1,094
J	**Total**	**219,325**

Source :Tariff Formats for FY 2013-14 submitted by CED.

Table 6.3.2 : Connected Load projected for FY 2013-14

kW

S.No.	Category/Consumption Slab	FY 2013-14 (Projected)
1	2	3
A	**Domestic**	709,734
1	*0-150 kWh*	139,573
2	*151- 400 kWh*	229,973
3	*Above 400 kWh*	340,188
B	**Commercial**	363,466
1	*0-150 kWh*	115,562
2	*151- 400 kWh*	36,347
3	*Above 400 kWh*	211,558
C	**Large Supply**	66,743
D	**Small Power**	19,539
E	**Medium Supply**	62,293
F	**Agriculture**	675
G	**Public Lighting**	6,887
H	**Bulk Supply**	32,765
I	**Others-Temporary Supply**	33,686
J	**Total**	**1,295,788**

Source :Tariff Formats for FY 2013-14 submitted by CED.

Table 6.3.3 : Energy Sales projected for FY 2013-14

Mus

S.No.	Category/Consumption Slab	FY 2013-14 (Projected)
1	2	3
A	**Domestic**	598.44
1	*0-150 kWh*	58.17
2	*151- 400 kWh*	178.14
3	*Above 400 kWh*	362.13
B	**Commercial**	500.30
1	*0-150 kWh*	7.01
2	*151- 400 kWh*	16.46
3	*Above 400 kWh*	476.82
C	**Large Supply**	128.72
D	**Small Power**	26.16
E	**Medium Supply**	105.55
F	**Agriculture**	1.50
G	**Public Lighting**	20.21
H	**Bulk Supply**	115.13
I	**Others-Temporary Supply**	12.71
J	**Total**	**1,508.70**

Source :Tariff Formats for FY 2013-14 submitted by CED.

6.4 Commission's analysis of Consumer growth, connected load and Energy Sales

The Commission has considered the actual (un-audited) figures of FY 2011-12 & the estimates of FY 2012-13 (including actual data till November 30, 2012 for all categories) for projecting the category wise connected load, number of consumers and Energy sales for FY 2013-14.

The modified CAGR (%) for a period of five years (from FY 2011-2012 over FY 2007-2008) for different consumer categories and the growth rate, accordingly adopted by the Commission on the estimates of FY 2012-13 to assess the Energy Sales, Consumer base and Connected Load for FY 2013-14 except for the estimation of connected load for category 'Others-Temporary Supply', where modified CAGR for a period of five years (FY 2012-2013 over FY 2008-2009) has been used. **The modified CAGR as approved in the table below has been applied on the approved figures of Sales, Connected Load and No of Consumers for FY 2012-13 as detailed in Chapter 5 to arrive at the figures of FY 2013-14.** The details are given in the tables below:

Table 6.4.1 :CAGR (%) considered by the Commission for estimation of Sales, Consumer Base and Connected load for FY 13-14

S. No.	Category	Sales	Consumer Base	Connected Load
1	Domestic	3.97%	1.25%	5.10%
2	Commercial	7.46%	1.88%	5.92%
3	Large Supply	0.00%	0.49%	0.00%
4	Small Power	8.31%	0.00%	4.82%
5	Medium Supply	3.32%	5.61%	9.12%
6	Agriculture	6.37%	0.00%	0.00%
7	Public Lighting	3.85%	9.15%	11.42%
8	Bulk Supply	22.65%	16.33%	27.05%
9	Others – Temporary Supply	0.00%	36.38%	78.24%

Table 6.4.2 : No. of Consumers considered by the Commission for FY 2013-14

Nos

S.No.	Category/Consumption Slab	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	2	3	4
A	**Domestic**	187,828	179,642
1	*0-150 kWh*	70,688	67,607
2	*151- 400 kWh*	74,470	71,224
3	*Above 400 kWh*	42,670	40,810
B	**Commercial**	26,261	22,213
1	*0-150 kWh*	9,486	20,346
2	*151- 400 kWh*	5,460	747
3	*Above 400 kWh*	11,315	1,120
C	**Large Supply**	104	102
D	**Small Power**	1,291	1,292
E	**Medium Supply**	1,233	1,188
F	**Agriculture**	122	123
G	**Public Lighting**	970	890
H	**Bulk Supply**	422	536
I	**Others-Temporary Supply**	1,094	1,356
J	**Total**	**219,325**	**207,341**

The modified CAGR as approved in the table 6.4.1 has been applied on the approved No of Consumers for FY 2012-13 as detailed in Chapter 5, para 5.3 to arrive at the figures of FY 2013-14.

Table 6.4.3 : Connected Load considered by the Commission for FY 2013-14

kW

S.No.	Category/Consumption Slab	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	2	3	4
A	**Domestic**	709,734	740,355
1	*0-150 kWh*	139,573	145,595
2	*151- 400 kWh*	229,973	239,895
3	*Above 400 kWh*	340,188	354,865
B	**Commercial**	363,466	345,136
1	*0-150 kWh*	115,562	109,734
2	*151- 400 kWh*	36,347	34,514
3	*Above 400 kWh*	211,558	200,889
C	**Large Supply**	66,743	65,192
D	**Small Power**	19,539	19,806
E	**Medium Supply**	62,293	64,991
F	**Agriculture**	675	696
G	**Public Lighting**	6,887	6,364
H	**Bulk Supply**	32,765	39,847
I	**Others-Temporary Supply**	33,686	54,585
J	**Total**	**1,295,788**	**1,336,971**

The modified CAGR as approved in the table 6.4.1 has been applied on the approved Connected Load for FY 2012-13 as detailed in Chapter 5, para 5.3 to arrive at the figures of FY 2013-14.

Table 6.4.4 : Energy Sales considered by the Commission for FY 2013-14

Mus

S.No.	Category/Consumption Slab	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	2	3	4
A	**Domestic**	598.44	663.90
1	*0-150 kWh*	58.17	64.54
2	*151- 400 kWh*	178.14	197.62
3	*Above 400 kWh*	362.13	401.74
B	**Commercial**	500.30	455.90
1	*0-150 kWh*	7.01	6.39
2	*151- 400 kWh*	16.46	15.00
3	*Above 400 kWh*	476.82	434.52
C	**Large Supply**	128.72	142.53
D	**Small Power**	26.16	23.14
E	**Medium Supply**	105.55	109.94
F	**Agriculture**	1.50	1.58
G	**Public Lighting**	20.21	22.79
H	**Bulk Supply**	115.13	106.74
I	**Others-Temporary Supply**	12.71	11.55
J	**Total**	**1,508.70**	**1,538.08**

The modified CAGR as approved in the table 6.4.1 has been applied on the approved Energy Sales for FY 2012-13 as detailed in Chapter 5, para 5.3 to arrive at the figures of FY 2013-14.

6.5 Intra-State Transmission & Distribution Loss

Petitioner's submission

The petitioner has estimated higher transmission and distribution 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). Further, the petitioner 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.

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.

The petitioner expects to achieve the T&D loss level of 17.00% for FY 2013-14 and corresponding AT&C loss level of 17.83%, by targeting the average collection efficiency of 99.00% during FY 2013-14.

Commission's analysis

The petitioner has not estimated intra-state transmission and distribution loss and energy requirement for FY 2013-14 in line with the methodology adopted by Hon'ble Commission in the previous tariff order for FY 2012-13 dated May 07' 2012.

Commission during the technical validation session held on 25th February 2013 directed the petitioner to provide the basis to arrive on the additional losses for the 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB) network due to unavailability of metering network. The petitioner failed to provide the same and in its data gaps reply dated 06th March 2013 claimed that:

The metering at HP (Nalagarh-440kV) is being carried out by NRPC for calculating the energy drawl of UT Chandigarh and wherein the Special energy meters have been provided reading of which is readily available http://www.nrldc.org/Commercial/SemData/WEEK-1/Net%20Drawal%20of%20States/UT%20Chandigarh/. However, there is not provision of Special Energy meters for recording energy meters at the outgoing of 220/66 kV Transformers and only manual readings of the outgoing feeders are being taken by PGCIL (there can be a time difference between the readings of the feeders). As such, the transmission loss at HP (Nalagarh) and UT (Kishangarh) cannot be ascertained to certain accuracy. However, at point no. 3 the notional transmission losses have been considered taking 220 kV (54 Kms D/C) transmission lines from Nalagarh to Kishangarh. Further, the transmission losses does not only include the losses at Nalagarh -Kishangarh but there are also some losses between 66 kV (40 Kms D/C)Dhulkote – Sector- 28 and 66 kV D/C Mohali- Sector 52/39 since the metering is being carried out at Dhulkote and Mohali respectively. Further, the assets pertain to UT Chandigarh and the PoC charges for this segment are not being borne by UT Chandigarh. However, the pooled interstate losses and the withdrawal PoC charges upto UT Chandigarh are being borne by the UT Chandigarh but the interstate point has not been provided to UT Chandigarh within the periphery of UT Chandigarh.

As discussed in para 5.5 of this order and the fact that the Petitioner has not provided the energy audit, report neither of FY 2010-11, FY 2011-12 nor of FY 2012-13.

As per the regulation 15 of JERC Tariff regulations, 2009

"15. AT& C Losses

1. *The licensee shall give information of total AT&C losses in Previous Year and Current Year and the basis on which such losses have been worked out.*

2. *The licensee shall also propose a loss reduction programme for the Ensuing Year as well as for the next three years giving details of the measures proposed to be taken for achieving the same.*

3. *Based on the information furnished and field studies carried out and the loss reduction program proposed by the licensee, the Commission shall fix separate targets for reduction of Transmission and Distribution losses and for commercial efficiency for the period specified by the Commission:*

   Provided further that in the event of unbundling of the integrated utility, the Commission may fix separate transmission and distribution loss targets and commercial efficiency targets, as the case may be, for each successor licensee taking into account its area of operation, its consumer mix, state of the network, level of metering, metering initiatives planned, etc.

4. *The licensee shall conduct regular energy audit to substantiate its estimation of T&D losses. The licensee shall also furnish six monthly energy audit reports to the Commission.*

   The energy audit report for the first six months of the year shall be provided by November end of the same year. Similarly energy audit report for the last six months of the year shall be provided by May end of the next year.

5. *In the absence of energy audit, the Commission may not accept the claim of the licensee and may proceed to fix the loss levels on the basis of any other information available and its own judgment.*

The Commission had approved T&D loss of 16% for FY 2012-13. In the absence of energy audit, the Commission is not accepting the claim of the licensee and **therefore Commission considered the normative T&D loss level, in line with the recommendations of Abraham Committee, at 15.00% as reasonable and approves the same for FY 2013-14.**

6.6 Inter-State Transmission Loss

Petitioner's submission

The Inter-state transmission losses of Power Grid Corporation of India Limited have been projected to be 3.35% for FY 2013-14 in line with actual losses for FY 2011-12.

Commission's view

Commission has considered the recent 52-week moving average of regional losses available and found the inter-state transmission losses to be 3.35% for FY 2013-14.

Commission considers inter-state transmission losses for FY 2013-14 of 3.35% as reasonable and approves the same for FY 2013-14 and same will be subject to further consideration at the time of true-up when actual data becomes available.

6.7 Power Purchase Quantum and Cost

Petitioner's submission

<u>**Power Purchase Quantum**</u>

The petitioner has submitted that they don't have their own power generation, the Petitioner has to rely on external sources of Power especially energy procured from Central generating stations, Allocation from Shared sources and others including bilateral mechanism, and Power Exchanges.

The major sources from which the petitioner procures power are:

- Central Generating Stations (CGS) viz. NTPC, NHPC, NPCIL.
- Other sources viz.,SJVNL,BBMB, Jhajjar, Sewa II, Koteshwar, tehri, Dehar, Pong, Bilateral, and PX.

Occasionally availability of Power is short due to higher demand. This is met through the short term power purchase, and other trading sources. The petitioner receives the fixed allocated share from Central Generating Stations (CGS) to meet its energy requirements. Moreover, a variable quantum of power from the unallocated share is also allotted in various CGS at different intervals during a year. 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 drawals

Considering this the Petitioner has estimated the availability of provisional power purchase details of FY 2012-13, the estimation of power availability for FY 2013-14 has been done as below:

- Average allocation (including fixed and variable allocation) of last 12 months for computing the allocation of power from various sources;
- 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;
- 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;
- It 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;
- 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.
- 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;

On the basis of the above mentioned projections from external and internal sources, the energy to be purchased from various CGHS and other long-term sources by the petitioner, after intra state losses of 3.35% as per actuals of FY 2011-12, has been projected to be 1,919.15 MUs for FY 2013-14.

Power Purchase Cost

The estimation of power purchase cost for FY 2013-14 has been done in the steps to include:

- 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;

- 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.

Table 6.7.1 : Power Purchase Cost estimated by the petitioner for FY 2013-14

Sr.No.	Source	Purchase (MU)	Capacity Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Other Charges (Rs. Cr)	Total (Rs. Cr)
1	2	3	4	5	6	7
I	NTPC Stations	-	-	-	-	-
1	Anta	48.29	4.25	15.40	0.01	19.67
2	Auraiya	47.52	3.83	17.09	0.00	20.92
3	Dadri GPP	46.40	3.75	15.34	-	19.09
4	Dadri II TPP	45.24	7.45	13.85	-	21.30
5	Kahalgaon II	15.12	1.04	3.57	0.00	4.61
6	Rihand I	121.10	9.55	15.92	0.90	26.37
7	Rihand II	107.01	9.66	14.34	-	24.00
8	Rihand III	69.72	6.89	9.41	0.17	16.47
9	Singrauli	100.25	5.07	12.69	0.02	17.77
10	Unchahar I	21.44	1.75	5.59	0.00	7.35
11	Unchahar II	42.72	3.61	10.98	0.13	14.72
12	Unchahar III	17.66	2.28	4.51	0.00	6.80
	Subtotal	682.49	59.13	138.70	1.25	199.07
II	NHPC Stations	-	-	-	-	-
2	Chamera I	64.94	10.46	6.12	0.01	16.58
3	Chamera II	24.97	5.59	3.38	0.00	8.97
4	Chamera III	17.04	0.52	2.35	0.00	2.87
5	Dhauliganga	17.25	4.12	2.52	0.00	6.65
6	Dulhasti	24.22	12.14	7.10	0.00	19.25
7	Salal	8.32	0.68	0.41	0.00	1.09
8	Sewa II	8.70	3.06	1.80	0.00	4.86
9	Tanakpur	5.79	1.13	0.69	0.00	1.82
10	Uri	16.04	2.11	1.33	0.00	3.44
	Subtotal	187.27	39.82	25.69	0.02	65.53
III	NPCIL	-	-	-	-	-
1	NAPP	37.98	-	9.49	0.35	9.84
2	RAPP B	18.91	-	5.46	0.11	5.56
3	RAPP C	51.21	-	18.55	0.20	18.74
	Subtotal	108.10	-	33.49	0.65	34.15
IV	SJVNL	-	-	-	-	-
1	SJVNL/NJPC	68.31	10.73	8.21	0.85	19.79
	Subtotal	68.31	10.73	8.21	0.85	19.79
V	BBMB	-	-	-	-	-
1	BBMB 3.5 %	279.91	6.95	-	-	6.95
2	BBMB 1 LU	36.50	-	12.23	-	12.23
3	BBMB 10 LU	365.00	-	176.99	0.43	177.42
	Subtotal	681.41	6.95	189.21	0.43	196.59
VI	APCPL	-	-	-	-	-
1	IGSTPP	15.63	3.81	5.70	0.02	9.53
	Subtotal	15.63	3.81	5.70	0.02	9.53
VII	THDC	-	-	-	-	-
1	Koteshwar	10.07	2.46	2.32	-	4.77
2	Tehri	31.26	6.63	8.20	0.23	15.06
	Subtotal	41.33	9.08	10.52	0.23	19.84
VIII	Power purchase from Other Sources	-	-	-	-	-
1	Bilateral	94.23	-	40.49	-	40.49
2	Power Exchange	40.38	-	16.91	-	16.91
	Subtotal	134.61	-	57.40	-	57.40
	Power Purchase Cost	1,919.15	129.52	468.92	3.45	601.90
IX	Other Charges	-	-	-	-	-
1	PGCIL Charges	-	-	-	39.62	39.62
2	NRLDC F&C	-	-	-	0.52	0.52
3	REC Cost	-	-	-	21.03	21.03
4	LC Charges	-	-	-	0.60	0.60
	Grand Total of Charges	-	-	-	-	**663.67**

Commission's Analysis of Power Purchase Quantum and Cost

➢ **Central Generating Stations –NTPC**

While estimating the energy availability from NTPC Stations for FY 2013-14, the following is considered:

- **Allocation of Share**: The Commission has considered the gross %age of firm allocation and allocation of the unallocated quota from the various generating stations including Singrauli, Rihand I,II & III, Unchahar I,II and III, Kahalgaon, Dadri-II, Anta-G, Anta-RLNG, Auraiya, Auraiya-RLNG, Dadri-G, and Dadri-RLNG as specified in the REA of November 2012 based on latest revised allocation orders of Govt. of India;
- **Gross Energy Availability:** The Commission has estimated the gross energy availability from the existing NTPC stations based on the installed capacity and the average of figures of Plant Load Factor for the past two years (FY 2011-12 and FY 2012-13). The Net energy sent out is worked out after considering the applicable auxiliary consumption as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009;
- **Energy Available to the Petitioner:** The effective share from the station has been applied on the energy sent out to arrive at the energy to be purchased by the petitioner from respective stations. Accordingly, the Commission has approved the availability from NTPC stations based on the merit order dispatch principles;

The Commission has considered the following assumptions to arrive at the Power purchase cost for FY 2013-14 from the NTPC stations:

- **Fixed Charges:** The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Annual Fixed Charges for each station have been taken as per the latest Tariff orders for the respective stations.
- **Variable Charges:** The Commission has considered the average variable cost for the period September 2012 to November 2012 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2013-14.

➢ **Central Generating Stations –NHPC**

While estimating the energy availability from NHPC Stations for FY 2013-14, the following is considered:

- **Allocation of Share**: The Commission has considered the gross %age of firm allocation and allocation of the unallocated quota from the various generating stations including Salal, Tanakpur, Chamera I, II & III, Uri, Dhauliganga, Dulhasti, Sewa II as specified in the REA of November 2012 based on latest revised allocation orders of Govt. of India;
- **Gross Energy Availability:** The Commission has estimated the gross energy availability from the existing NHPC stations based on the average of actual energy generation for FY 2011-12 and FY 2012-13 as per CEA. The Net energy sent out is worked out after considering the applicable auxiliary consumption as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009;
- **Energy Available to the Petitioner:** The effective share from the station has been applied on the energy sent out to arrive at the energy to be purchased by the petitioner from respective stations.

The Commission has considered the following assumptions to arrive at the Power purchase cost for FY 2013-14 from the NHPC stations:

- **Fixed Charges:** The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Annual Fixed Charges for each station have been taken as per the latest Tariff orders for the respective stations.
- **Variable Charges:** The Commission has considered the average variable cost for the period September 2012 to November 2012 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2013-14.

➢ **Central Generating Stations –NPCIL**

While estimating the energy availability from NPCIL Stations for FY 2013-14, the following is considered:

- **Allocation of Share**: The Commission has considered the gross %age of firm allocation and allocation of the unallocated quota from the various generating stations including NAPS, RAPP (Unit3, 4, 5 & 6) as specified in the REA of November 2012 based on latest revised allocation orders of Govt. of India;
- **Gross Energy Availability:** The Commission has estimated the gross energy availability from the existing NPCIL stations based on the installed capacity and the average of figures of Plant Load Factor for the past two years (FY 2011-12 and FY 2012-13). The Net energy sent out is worked out after considering the applicable auxiliary consumption as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009;

- **Energy Available to the Petitioner:** The effective share from the station has been applied on the energy sent out to arrive at the energy to be purchased by the petitioner from respective stations.

- **Merit order Dispatch**: The Commission has considered the nuclear plants as must run and has not subjected them for merit order dispatch.

The Commission has considered the following assumptions to arrive at the Power purchase cost for FY 2013-14 from the NPCIL stations:

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2012 to November 2012 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2013-14.

➢ **Other Generating Stations –Naptha Jhakri (SJVNL),BBMB (including Dehar & Pong), Koteshwar and Tehri (THDC) and APCPL-IGSTPP**

While estimating the energy availability from above hydro generating Stations for FY 2013-14, the following is considered:

- **Allocation of Share**: The Commission has considered the gross %age of firm allocation and allocation of the unallocated quota from the above mentioned generating stations except BBMB (including Dehar & Pong) as specified in the REA of November 2012 based on latest revised allocation orders of Govt. of India. The petitioner has an allocation of 11 lakh units (1 LU + 10 LU) from BBMB in addition to an allocation of 3.5% from BBMB (including Dehar & Pong).
- **Gross Energy Availability:** The Commission has estimated the gross energy availability from the above mentioned generating stations based on the average of actual energy generation or average plant load factor for FY 2011-12 and FY 2012-13. The Net energy sent out is worked out after considering the applicable auxiliary consumption as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009;

- **Energy Available to the Petitioner:** The effective share from the station has been applied on the energy sent out to arrive at the energy to be purchased by the petitioner from respective stations.

The Commission has considered the following assumptions to arrive at the Power purchase cost for FY 2013-14 from the above mentioned generating stations:

- **Fixed Charges:** The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Annual Fixed Charges for each hydro generating station and IGSTPP have been taken as per the latest Tariff orders for the respective stations.

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2012 to November 2012 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2013-14.

➢ **Renewable Energy Obligation**

As per JERC (Procurement of Renewable Energy) Regulations 2010 clause 1 sub clause (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 Petitioner has to purchase 3% of total energy purchase from renewable sources for FY 2013-14 including 0.40% for Solar and 2.60% for Non-Solar. The petitioner is required to procure a total of 46.14 million units from RE sources. Out of which 39.99 million units from non-solar sources, which is estimated to be available at the latest twelve months average rate of Rs. 1.75 per kWh and 6.15 million units of RECs from solar plants, which is estimated to be available at the latest twelve months average rate of Rs. 12.70 per kWh. Thus the total cost of RECs is estimated at Rs. 14.83 Crores for FY 2013-14.

➢ **Short Term Power Purchase for meeting the energy shortfall**

The Commission has considered the power purchase of power of 140.90 million units for meeting the shortfall of energy, which is likely to be met at the rate of Rs. 3.88 per kWh as per the petitioner's submission for FY 2013-14.

➢ **Transmission Charges (PGCIL, NRLDC F&C and Reactive Energy Charges)**

The Commission has considered the PoC rates as specified by the Central Electricity Regulatory Commission vide its order no L-1/44/2010- CERC dated 30.11.2012 applicable for October 2012 to March 2013 for approving the Transmission charges for FY 2013-14. Accordingly the Transmission charges for usage of PGCIL network is approved at **Rs. 57.03 Crores.**

Commission also allows the claim of other charges for FY 2013-14 including NRLDC, Reactive Energy Charges based on the actuals of previous year, amounting to **Rs. 1.30 Crores**.

Accordingly the total Transmission charges approved for FY 2013-14 is **Rs. 58.32 Crores.**

Table 6.7.2: Approved Power purchase quantum for FY 2013-14

Sr. No.	Source	Capacity (MW)	Average PLF/Gross Generation	Latest entitlement as per REA of November 2012 %	Latest entitlement as per REA of November 2012 MW	Gross Generation (MUs)	Auxiliary Consumption (%)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery (MUs)
A	**Central Sector Power Stations**									
I	**NTPC**	**9,929.00**			**87.67**			**583.43**	**19.56**	**563.87**
	Anta	*419*	2,435	1.87%	7.84	2,434.68	3.00%	44.21	*1.48*	42.73
	Auraiya	*663*	3,327	1.22%	8.09	3,326.76	3.00%	39.37	*1.32*	38.05
	Dadri GPP	*817*	4,897	0.93%	7.58	4,896.96	3.00%	44.08	*1.48*	42.60
	Dadri II TPP	*980*	85.55	0.55%	5.41	7,344.30	6.00%	38.11	*1.28*	36.83
	Kahalgaon II	*1,500*	68.56	0.20%	3.00	9,008.78	6.50%	16.85	*0.56*	16.28
	Rihand I	*1,000*	89.22	1.55%	15.46	7,815.67	7.50%	111.77	*3.75*	108.02
	Rihand II	*1,000*	89.22	1.35%	13.52	7,815.67	9.00%	96.16	*3.22*	92.93
	Rihand III	*500*	85.00	1.11%	5.53	3,723.00	9.00%	37.44	*1.26*	36.18
	Singrauli	*2,000*	90.57	0.55%	11.04	15,867.86	7.25%	81.24	*2.72*	78.52
	Unchahar I	*420*	91.24	0.66%	2.76	3,356.90	9.00%	20.04	*0.67*	19.37
	Unchahar II	*420*	91.24	1.26%	5.30	3,356.90	9.00%	38.55	*1.29*	37.26
	Unchahar III	210	91.24	1.02%	2.15	1,678.45	9.00%	15.63	*0.52*	15.10
II	***NHPC***	**3,151.00**			**45.09**			**212.12**	**7.11**	**205.01**
	Chamera I	*540*	2,551	3.90%	21.06	2,550.82	1.2%	98.29	*3.30*	94.99
	Chamera II	*300*	1,477	1.49%	4.46	1,476.88	1.2%	21.70	*0.73*	20.97
	Chamera III	231	959	1.28%	2.96	958.52	1.2%	12.15	*0.41*	11.74
	Dhauliganga	280	1,147	1.40%	3.93	1,146.66	1.2%	15.88	*0.53*	15.35
	Dulhasti	390	2,120	1.15%	4.49	2,119.69	1.2%	24.13	*0.81*	23.32
	Salal	690	3,245	0.27%	1.86	3,244.54	1%	8.67	*0.29*	8.38
	Sewa II	120	523	1.51%	1.81	523.13	1.2%	7.81	*0.26*	7.55
	Tanakpur	120	484	1.28%	1.54	484.16	1%	6.14	*0.21*	5.93
	Uri	480	2,834	0.62%	2.98	2,833.53	1.2%	17.36	*0.58*	16.78
III	***NPCIL***	**1,320.00**			**16.82**			**97.03**	**3.25**	**93.78**
	NAPP	440	58.67	1.80%	7.92	2,261.38	10%	36.61	*1.23*	35.39
	RAPP B	440	86.09	0.66%	2.91	3,318.25	10%	19.74	*0.66*	19.08
	RAPP C	440	86.09	1.36%	5.99	3,318.25	10%	40.68	*1.36*	39.31
IV	**SJVNL**	**1,500.00**			**15**			**70**	**2**	**67**
	SJVNL/NJPC	1,500	7,194	0.98%	14.73	7,194.21	1.20%	69.80	*2.34*	67.46
V	**BBMB**	**2,956.00**			**103.46**			**702.23**	**23.54**	**678.68**
0	*BBMB 3.5 % (including dehar & pong)*	2,956	10,527	3.50%	103.46	10,527.48	2%	299.63	*10.05*	289.58
3.	*BBMB 1 LU*							36.60	*1.23*	35.37

Sr. No.	Source	Capacity (MW)	Average PLF/Gross Generation	Latest entitlement as per REA of November 2012		Gross Generation (MUs)	Auxiliary Consumption (%)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery (MUs)
				%	MW					
2										
4.6	*BBMB 10 LU*							366.00	*12.27*	353.73
VI	***APCPL***	**1,500.00**			**5**			**23**	**1**	**23**
	IGSTPP	1,500	57	0.35%	5.18	7,437.24	9%	23.35	*0.78*	22.57
VII	**THDC**	**1,400.00**			**14**			**43.41**	**1.46**	**41.96**
	Koteshwar	400	888	0.81%	3.23	887.98	2%	7.03	*0.24*	6.80
	Tehri	1,000	3,542	1.05%	10.48	3,542.31	2%	36.38	*1.22*	35.16
B	**Power purchase from other sources**	**-**						**140.90**	**4.72**	**136.18**
	(2.60% for - Non Solar)	-						0	*0.00*	-
	(0.40% for Solar)	-						0	*0.00*	-
	Power purchase from Power Exchange (BUY)							-	*0.00*	-
	Bilateral							140.90	*4.72*	136.18
	Banking							-	*0.00*	-
	UI overdrawl							-	*0.00*	-
C	**Power Purchase Quantum**	**21,756.00**			**286.66**			**1,872.27**	**62.77**	**1,809.51**

Table 6.7.3: Approved Power purchase cost from above mentioned stations for FY 2013-14

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of last three months	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores) excluding transmission charges	Total Transmission charges	Total Cost (Rs. Crores) including transmission charges
1	2	3	4	5	6	7	8	9
A	**Central Sector Power Stations**							
I	**NTPC**	**583.43**	**58.15**		**106.54**	**164.68**	**18.38**	
	Anta	44.21	4.32	*281*	12.41	16.73	1.51	18.24
	Auraiya	39.37	3.87	*297*	11.68	15.54	1.55	17.10
	Dadri GPP	44.08	4.27	*284*	12.50	16.78	1.46	18.23
	Dadri II TPP	38.11	6.45	*280*	10.66	17.11	1.04	18.15
	Kahalgaon II	16.85	2.32	*187*	3.14	5.46	0.68	6.14
	Rihand I	111.77	9.34	*112*	12.54	21.88	3.52	25.40

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of last three months	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores) excluding transmission charges	Total Transmission charges	Total Cost (Rs. Crores) including transmission charges
1	2	3	4	5	6	7	8	9
	Rihand II	96.16	9.14	*120*	11.51	20.65	3.08	23.73
	Rihand III	37.44	6.14	*126*	4.71	10.84	1.26	12.10
	Singrauli	81.24	4.49	*115*	9.34	13.83	2.32	16.14
	Unchahar I	20.04	1.84	257	5.15	6.99	0.53	7.52
	Unchahar II	38.55	3.73	238	9.18	12.92	1.02	13.94
	Unchahar III	15.63	2.23	238	3.72	5.95	0.41	6.36
II	***NHPC***	**212.12**	**24.64**		**26.42**	**51.06**	**8.65**	
	Chamera I	98.29	6.11	89	8.75	14.86	4.04	18.90
	Chamera II	21.70	3.05	124	2.70	5.75	0.86	6.61
	Chamera III	12.15	2.56	185	2.24	4.80	0.57	5.37
	Dhauliganga	15.88	2.39	138	2.19	4.58	0.75	5.33
	Dulhasti	24.13	6.32	272	6.55	12.87	0.86	13.73
	Salal	8.67	0.41	47	0.41	0.82	0.36	1.18
	Sewa II	7.81	1.50	195	1.53	3.03	0.35	3.38
	Tanakpur	6.14	0.75	110	0.67	1.43	0.29	1.72
	Uri	17.36	1.56	79	1.37	2.93	0.57	3.50
III	***NPCIL***	**97.03**			**28.31**	**28.31**	**3.69**	
	NAPP	36.61	-	*237*	8.68	8.68	1.66	10.34
	RAPP B	19.74	-	*275*	5.42	5.42	0.66	6.09
	RAPP C	40.68	-	*349*	14.21	14.21	1.37	15.57
IV	**SJVNL**	**70**	**10**		**8**	**18**	**3**	
	SJVNL/NJPC	69.80	9.99	114	7.96	17.95	2.83	20.78
V	**BBMB**	**702.23**	**6.31**		**180.70**	**187.01**	**19.86**	
	BBMB 3.5 % (including dehar & pong)	299.63	6.31	0	-	6.31	19.86	26.17
	BBMB 1 LU	36.60		319	11.68	11.68	-	11.68
	BBMB 10 LU	366.00	-	462	169.02	169.02	-	169.02
VI	***APCPL***	**23**	**4**		**8**	**12**	**1**	
	IGSTPP	23.35	3.91	340	7.94	11.85	0.99	12.84
VII	**THDC**	**43.41**	**6**		**10.64**	**16.65**	**2.63**	
	Koteshwar	7.03	2.03	219	1.54	3.57	0.62	4.19
	Tehri	36.38	3.99	250	9.10	13.08	2.01	15.10
B	**Power purchase from other sources**	**140.90**	**-**		**69.50**	**69.50**	**-**	

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of last three months	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores) excluding transmission charges	Total Transmission charges	Total Cost (Rs. Crores) including transmission charges
1	2	3	4	5	6	7	8	9
	(2.60% for - Non Solar)	0			7.01	7.01	-	7.01
	(0.40% for Solar)	0			7.82	7.82	-	7.82
	Power purchase from Power Exchange (BUY)	-			-		-	0.00
	Bilateral	140.90		388	54.67	54.67	-	54.67
	Banking	-			-		-	0.00
	UI overdrawl	-			-		-	0.00
C	**Power Purchase Cost**	**1,872.27**	**109.01**	**-**	**438.00**	**547.02**	**57.03**	
D	**OTHER CHARGES**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**58.32**	
	PGCIL Charges						57.03	
	NRLDC F&C						0.57	
	Reactive Energy Charges						0.73	
E	**Total Power Purchase Cost**	**1,872.27**	**109.01**		**438.00**	**547.02**	**58.32**	**605.34**

Commission considers the Power purchase cost for ARR for FY 2013-14 of Rs. 605.34 Crores for procurement of 1872.27 million units of energy and Renewable Energy Certificates to meet the RPO compliance for FY 2013-14 as reasonable and approves the same for Review of FY 2012-13.

Further, any variation on account of Fuel and Power Purchase cost shall be calculated as per the formula specified by the Commission separately and any impact shall be passed directly to the consumers. The formula will be applicable from FY 2013-14.

The licensee will compute fuel and power procurement cost variations on quarterly basis and adjustment shall be made in consumer bills starting after a month following the end of the quarter based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula notified separately by the Commission. For the purpose of calculation using FPPCA formula notified by the Commission, **the approved per unit cost of power purchase ($R_{Approved}$) for use in the FPPCA formula (paisa per unit) is 292 paisa per unit for FY 2013-14**. The approved per unit cost of power purchase for FY 2013-14 to be considered in the FPPCA formula excludes transmission charges of PGCIL, SLDC charges, RLDC charges and charges for reactive energy.

6.8 Energy Balance

Petitioner's submission

The Energy Balance submitted by the Petitioner for FY 2013-14 is based on the Energy Availability from its various sources of power duly taking into account their endeavor to supply 24 hours uninterrupted power supply to the consumers in its licensed area. The power availability from the main and cheapest source has been projected based upon the projections given in the last Tariff Petition for FY 2012-13. The Energy Balance submitted by the Petitioner for FY 2013-14 on the basis of Energy Sales (in MUs), T&D Loss(in %) and Source-wise Power purchase (in MUs) is given below:

Table 6.8.1 : Energy Balance for FY 2013-14 Projected by petitioner

Sr. No.	Particulars	FY 2013-14 (Projected)
1	2	3
A)	**ENERGY REQUIREMENT** (in Mus)	1,508.70
1	Energy sales within the State/UT (in Mus)	
2	Energy sales to Agriculture consumers (included in total sales) (in Mus)	
3	**Total sales within the State/UT**	1,508.70
4a	**Distribution losses**	
i)	%	17.00%
ii)	MU	309.01
4b	Losses due to absence of interstate transmission point	
i)	%	2.00%
ii)	MU	37.10
5	**Energy required at State Periphery for Sale to Retail Consumers**	1,854.81
6	**Add: Sales to common pool consumers/ UI (in Mus)**	
A	Sales outside state/UT : UI/Under drawal (in Mus)	
B	Sales (in Mus)	
	a) To electricity traders (in Mus)	
	b) Through PX (in Mus)	
C	Sales to other distribution licensees	
	a) Bilateral Trade (in Mus)	
	b) Banking Arrangement (in Mus)	
7	**Total Energy Requirement for State (5+6)**	1,854.81
8	**Transmission losses**	
i)	%	3.35%
i)	MU	64.34
	Energy Requirement	**1,919.15**
B)	**Energy to be purchased**	
1	**Net Generation (Share from CGS) (in MUs)**	1,727.58
a	NTPC	682.49
b	NHPC	187.27
c	NPCIL	108.10
d	SJVNL/NJPC	68.31
e	BBMB	681.41
2	**Power Purchased from (Other Sources) (in Mus)**	191.57
a	THDC	41.33
b	Jhajjar	15.63
c	Power Exchange(Buy)	40.38
d	Bilateral Trade (Buy) / Short term power purchase	94.23
e	UI (Buy)	
f	Banking Arrangements (Buy)	
g	**Power Exchange (Buy) to match the energy requirement**	
3	**Net power purchase (in MUs)**	**1,919.15**

Source : Petition submitted by CED

Commission's analysis

Based on the Energy requirement, Energy availability and Transmission & Distribution Losses for FY 2013-14 as discussed in earlier paras. The Energy balance for FY 2013-14 is presented below. As can be seen, there will be an additional power requirement to meet the energy requirement for FY 2013-14. The power from short-term sources/power exchanges has been considered to balance the energy requirement for FY 2013-14.

Table 6.8.2 : Energy Balance for FY 2013-14 as approved by the Commission

Sr. No.	Particulars	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	2	3	4
A)	ENERGY REQUIREMENT (in Mus)	1,508.70	1,538.08
1	Energy sales within the State/UT (in Mus)	-	-
2	Energy sales to Agriculture consumers (included in total sales) (in Mus)	-	
3	Total sales within the State/UT	1,508.70	1,538.08
4a	Distribution losses	-	-
i)	%	17.00%	15.00%
ii)	MU	309.01	271.43
4b	Losses due to absence of interstate transmission point	-	
i)	%	2.00%	
ii)	MU	37.10	
5	Energy required at State Periphery for Sale to Retail Consumers	1,854.81	1,809.50
6	Add: Sales to common pool consumers/ UI (in Mus)	-	-
A	Sales outside state/UT : UI/Under drawal (in Mus)	-	-
B	Sales (in Mus)	-	-
	a) To electricity traders (in Mus)	-	-
	b) Through PX (in Mus)	-	-
C	Sales to other distribution licensees	-	-
	a) Bilateral Trade (in Mus)	-	-
	b) Banking Arrangement (in Mus)	-	-
7	Total Energy Requirement for State (5+6)	1,854.81	1,809.50
8	Transmission losses		
i)	%	3.35%	3.35%
i)	MU	64.34	62.77
0	Energy Requirement	1,919.15	1,872.27
B)	Energy to be purchased	-	
1	Net Generation (Share from CGS) (in MUs)	1,727.58	1,664.61
a	NTPC	682.49	583.43
b	NHPC	187.27	212.12
c	NPCIL	108.10	97.03
d	SJVNL/NJPC	68.31	69.80
e	BBMB	681.41	702.23
2	Power Purchased from (Other Sources) (in Mus)	191.57	207.66
a	THDC	41.33	43.41
b	Jhajjar	15.63	23.35
c	Power Exchange(Buy)	40.38	
d	Bilateral Trade (Buy) / Short term power purchase	94.23	140.90
e	UI (Buy)	-	-
f	Banking Arrangements (Buy)	-	-
g	Power Exchange (Buy) to match the energy requirement	-	-
3	Net power purchase (in MUs)	1,919.15	1,872.27

6.9 Operation and Maintenance Expenses

Petitioner's submission

The Operation and Maintenance (O&M) expenses comprise of three components namely:

a) Employee cost
b) Repairs & Maintenance expenses and
c) Administrative and General Expenses

JERC under its (Terms and Condition for Determination of Distribution Tariff) Regulations, 2009 has stated that

O&M expenses as approved by the Commission for the first time for a year shall be considered as base O&M expenses for determination of O&M expenses for subsequent years;

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;

The increase in wholesale price index submitted by the petitioner is 9.69% to be considered for FY 2013-14. It is based on the actual WPI data available September 2012 on the website of Economic Advisor, Ministry of Commerce and Industry.

6.9.1 Employee Cost

Petitioner's submission

The petitioner has submitted that the employee cost include the 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 cost of pensioners includes, pension, DA relief in cash & CGHS benefit in kind on contribution basis. The employees who retire are eligible for terminal benefits of Leave Encashment, Pension and Gratuity.

The details of the salary expenses projected for FY 2013-14 is given in the below table. The electricity allowance is also given to employees as an additional allowance. The total employee cost estimated for FY 12-13, has been escalated by WPI factor of 9.69%.

Table 6.9.1.1 : Employee Cost projected by the petitioner for FY 2013-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)
1	2	3
A	Salaries& Allowances	-
1	Pay in Band	26.14
2	Grade Pay	1.97
3	Dearness allowance	19.19
4	House rent allowance	3.00
5	Field Duty Allowance	0.06
6	Washing Allowance	0.01
7	Salary to CGRF Staff	-
8	Personal Pay	0.05
9	Travelling Allowance	0.03
10	Conveyance Allowance	0.97
11	Apprentice	0.01
12	Fixed Medical	0.78
13	Medical Reimburshment	0.36
14	General Incentive	0.02
15	Special Allowance etc	0.06
16	City Compensatory Allowance	0.19
17	Electricity Allowance	0.06
18	Handicap Allowance	0.01
19	Leave Travel Concession	0.01
20	Leave Salary and Pension Contribution	-
21	Others	0.15
0	Sub-Total - A	53.08
B	Terminal Benefits	-
22	Leave encashment	1.94
23	Gratuity	1.76
24	Commutation of Pension	1.41
25	Workmen Compensation	-
26	Ex - gratia	0.05
		-
	Sub-Total - B	5.16
C	Other Salary payments	-
27	Arrears on account of Vth Pay Commission	0.43
28	Contractual basis	0.44
		-
	Sub-Total- C	0.87
	Total (A+B+C)	59.11
29	Less: Amount capitalized	-
30	Net amount	59.11
31	Add : prior period expenses	-
32	**Total Employee Expenses**	**59.11**

Commission's analysis

As per the regulation 27 of JERC tariff regulations 2009

"

27. Operation and Maintenance Expenses

1) *'Operation & Maintenance expenses' or 'O&M expenses' shall mean repair and maintenance (R&M) expenses, employee expenses and administrative & general (A&G) expenses including insurance.*

2) *While determining the O&M expenses for transmission functions within the State, the Commission shall be guided, as far as feasible by the principles and methodologies specified by CERC on the matter, as amended from time to time:*

   Provided further that the Commission may, if it considers it just, practical and proper considering the size of the total transmission system of, and the quantum of electricity handled by, an integrated utility, treat its transmission system as an integral part of its distribution system itself.

3) *O&M expenses for distribution functions shall be determined by the Commission as follows:*

   a) *O&M expenses as approved by the Commission for the first time for a year shall be considered as base O&M expenses for determination of O&M expenses for subsequent years;*

   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;*

   c) *In case of unbundling of the Electricity Department and formation of separate distribution companies, the Commission will make suitable assessment of base O&M expenses of individual distribution companies separately and allow O&M expenses for subsequent years for individual companies on the basis of such estimation and above principle.*

4) *O&M expenses of assets taken on lease/hire-purchase and those created out of the consumers' contribution shall be considered in case the generating company or the licensee has the responsibility for its operation and maintenance and bear O&M expenses.*

5) *O&M expenses for gross fixed assets added during the year shall be considered from the date of commissioning on pro-rata basis.*

6) *O&M expenses for integrated utility shall be determined by the Commission on the norms and principles indicated above. "*

As discussed in para 5.8.1, it is stated that considering an All India average number of employee per thousand consumers is 0.40[5] (i.e. one employee per 2500 number of consumers). It can be construed that the Electricity Department of Chandigarh is not understaffed. Hence, the Commission does not consider & does not approve the manpower recruitment of nearly 129 employees for FY 2013-14. However a few IT, Commercial and Accounts Officers may be considered for recruitments in equal number as employees to fill the vacancies created due to superannuation of employees and who will continue to provide the service in line with the Standard of Performance of Distribution Code Regulations.

As may be seen from para 5.8.2, Commission has considered Employee cost as Rs 53.50 Crores for Review of ARR for FY 2012-13 for reasons explained therein. Taking Rs 53.50 Crores as base for FY 2012-13 and applying escalation of 8.94 as on 1st April 2012%, employee Cost for FY 2013-14 works out to Rs 58.28 Crs.

Commission considers the employee cost of Rs. 58.28 Crores as reasonable and approves the same for FY 2013-14.

6.9.2 Administration & General Expenses

Petitioner's submission

The A&G expenses comprise of the following broad sub-heads of expenditure, viz.

- Domestic Travelling Expenses, Office Expenses
- Legal, Regulatory & Consultancy Fees
- Insurance etc.

The details of A&G expenses estimated for FY 2013-14 are provided in the table below:

[5] Annexure 4.20 of Annual Report (FY 2011-12) on the working of State Power Utilities & Electricity Departments published by Planning Commission, Government of India in October 2011.

Table 6.9.2.1 : Details of A&G expenses projected by the petitioner for FY 2013-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)
1	2	3
1	Rent, rates & taxes	-
2	Domestic Travel Allowances	-
3	Office Expenses	0.83
4	Insurance	-
5	Regulatory Expenses (License + Petition Fees)	0.60
6	Consultancy Fees and other professional fees	0.17
7	Electricity & Water Charges	0.35
8	Advertisement & Publicity	0.15
9	Legal, Professional & Special Service Charges	0.01
10	Expenses of CGRF (Office)	-
11	PGCIL Registration Charges/others	-
12	Other material related expenses	-
13	Total	2.11
14	Add/Deduct share of others (to be specified)	0.43
15	Total expenses	2.54
16	Less: Capitalized	-
17	Net expenses	2.54
18	Add: Prior period	-
19	**Total A&G Expenses**	**2.54**

Commission's analysis

As may be seen from para 5.8.3, Commission has considered A&G expenses as Rs 2.31 Crores for Review of ARR for FY 2012-13 for reasons explained therein. Taking Rs 2.31 Crores as base for FY 2012-13 and applying escalation of 8.94% as on 1st April 2012, the A&G expense works out to Rs. 2.52 Crores for FY 2013-14.

The Commission considers the A&G expenses of Rs. 2.52 Crore as reasonable and approves the same for FY 2013-14.

6.9.3 Repair & Maintenance Expenses

Petitioner's submission

The petitioner submitted that it has been undertaking various Repairs and Maintenance activities as a step towards improvement of systems, reduction in breakdowns, reduction in response time and increasing preventive maintenance. The details of R&M expenses estimated for FY 2013-14 are provided in the table below:

Table 6.9.3.1 : Details of R&M expenses submitted by the petitioner for FY 2013-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)
1	2	3
1	Plant & machinery *	2.69
	-Plant & Apparatus	-
	-EHV substations	0.24
	- 33kV substation	0.34
	- 11kV substation	0.01
	- Switchgear and cable connections	1.02
	- Others	0.24
	Total	4.53
2	Buildings (Electricity Residential & Non-Residential)	2.40
3	Hydraulic works & civil works	0.15
4	Line cable & network	-
	-EHV Lines	-
	- 33kV lines	-
	- 11kV lines	0.04
	- LT lines	2.21
	- Meters and metering equipment	-
	- Others	0.19
	Total	2.44
5	Vehicles	1.14
6	Furniture & fixtures	-
7	Office equipments	-
8	Minor R&M Works	0.38
9	Total	11.04
10	Add/Deduct share of others (To be specified)	0.38
11	Total expenses	11.42
12	Less : Capitalized	-
		-
13	Net expenses	11.42
14	Add: prior period	-
15	**Total R&M expenses**	**11.42**

Commission's analysis

As may be seen from para 5.8.4, Commission has considered R&M expenses as Rs 9.56 Crores for Review of ARR for FY 2012-13 for reasons explained therein. Taking Rs 9.56 Crores as base for FY 2012-13 and applying escalation of 8.94% as on 1st April 2012, the R&M expense works out to Rs. 10.42 Crores for FY 2013-14.

The Commission considers the R&M expenses of Rs. 10.42 Crores as reasonable and approves the same for FY 2013-14.

6.9.4 Summary of Operation & Maintenance Expenses

The overall summary of O&M expenditure estimated by the petitioner vis-à-vis approved by the Commission for FY 2013-14 is given below:

Table 6.9.4.1 : Summary of O&M expenses submitted by the petitioner and approved for FY 2013-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	2	3	4
1	Employee Expenses	59.11	58.28
2	A&G Expenses	2.54	2.52
3	R&M Expenses	11.42	10.42
4	Sub-Total	73.07	71.22
5	Less:Expenses Capitalised	-	-
6	**Total O&M Expenses**	**73.07**	**71.22**

6.10 Capital Expenditure and Capitalization

Petitioner's submission

The petitioner submitted that "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".

The objective of incurring the capital expenditure is also to upgrade and strengthen the distribution network to meet the standards of performance as per the Standard of Performance regulations issued by JERC and to provide better network reliability and sustainable performance to the consumers of UT Chandigarh. Majority of CED capex schemes are on annual ongoing basis. The petitioner projected the capital expenditure of Rs. 22.50 Crores during FY 2013-14 and proposes to capitalize the whole capital expenditure. The petitioner further submitted that the works during the year will be fully capitalized by the end of the year and transferred to into Gross Fixed Assets (GFA) leaving no balance under CWIP.

Commission's analysis

Commission observes that the capital expenditure and the capitalization submitted by the petitioner for FY 2013-14 is required to maintain the reliable supply for the consumers of Chandigarh.

As per the regulation 21 of JERC for the states of Goa and UTs (Terms and conditions for determination of Tariff), Regulation 2009 specifies that the licensee shall propose in their filings, a detailed capital investment plan, showing separately ongoing projects that will spill into the Ensuing Year and new projects (along with their justification) that will commence in the ensuing year. The petitioner has not submitted the capital investment plan as per the regulations.

Therefore, Commission provisionally approves the capitalization of Rs. 22.50 Crores proposed by the petitioner for FY 2013-14. Further, Petitioner is directed to submit the detailed statement of the capital expenditure incurred quarterly and asset capitalization during the year for review and true up.

6.11 GFA and Depreciation

Petitioner's submission

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.

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.

According to Regulation 26 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specifies *that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time*. The effective rate of depreciation for distribution assets is 5.28% vide Appendix-III (Depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009.

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".

Commission disallowed the GFA and depreciation on the absence of Fixed Asset register. The Petitioner submits that in the absence of fixed asset register (FAR), asset-wise detail is currently not available but requests the Hon'ble Commission to approve the above GFA & depreciation charges on provisional basis. The petitioner submits that the asset-wise details are being integrated and will be made available with the future filings.

Gross Fixed Assets (GFA) and the depreciation on GFA for FY 2013-14 are discussed hereunder. 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 the Petitioner. The depreciation claimed by the Petitioner for FY 2013-14 is given below:

Table 6.11.1 : GFA & Depreciation projected by the petitioner for FY 2013-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)
1	2	3
1	Opening Value of Assets at the beginning of the year	404.38
2	Additions during the year	22.50
3	Gross Fixed Assets at the end of year	426.88
4	Average Assets	415.63
5	Rate of Depreciation	5.28%
6	Depreciation for the year	21.95

Commission's analysis

The petitioner has stated that in the absence of fixed asset registers (FAR), the asset wise details are not available and the details are being integrated and will be furnished in future filings. Commission is of the view that in absence of fixed asset registers, the opening value of fixed asset register is on assumption basis.

As per Regulation 26 of JERC for the states of Goa and UTs (Terms and conditions for determination of Tariff), Regulation 2009 *depreciation shall be computed on historical cost of the assets including additions during the year*.

In the instant case, the Petitioner is unable to arrive at the value of historical fixed assets. Commission had directed in its previous tariff order for FY 2012-13 dated May 07' 2012 to conduct the physical inventory of assets and construct asset /depreciation registers and file the same along with next tariff petition but the same has not been submitted till date by the petitioner. The Petitioner has projected the capital expenditure of Rs. 22.50 Crores for the FY 2013-14. As discussed in earlier para, it is provisionally considered to capitalize Rs 22.50 Crores during the FY 2013-14.

Regulation 26 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The effective rate of depreciation for distribution assets is 5.28% vide Appendix-III (Depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009. The depreciation for the FY 2013-14 has been worked out at Rs. 3.00 Crores. Further Commission is of the view that

"*Depreciation is a charge for use of assets deployed in rendering the service for which Tariff is being determined. Say total assets are 100 Crores, obsolete unusable assets are of Rs. 20 Crores plus assets written off plus assets not written off or not declared obsolete but not usable lying in store. The asset that will qualify for depreciation is only the net value which is being used to provide service to the consumer. This value will also be further adjusted for depreciation already claimed*"

Commission considers the depreciation of Rs. 3.00 Crores as reasonable considering Rs. 45.50 Crores as the opening value of assets at the beginning of the year considered in the Review of FY 2012-13 as given below:

Table 6.11.2 : GFA & Depreciation approved by the Commission for FY 2013-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	2	3	4
1	Opening Value of Assets at the beginning of the year	404.38	45.50
2	Additions during the year	22.50	22.50
3	Gross Fixed Assets at the end of year	426.88	68.00
4	Average Assets	415.63	56.75
5	Rate of Depreciation	5.28%	5.28%
6	Depreciation for the year	21.95	3.00

The Commission therefore considers the depreciation of Rs. 3.00 Crores as reasonable and approves the same for FY 2013-14.

6.12 Interest on Loan

Petitioner's submission

The petitioner submitted that the entire capital expenditure incurred by CED had been funded through equity infusion by GOI through budgetary support without any external borrowings. The Hon'ble Commission has disallowed the GFA and depreciation on the absence of Fixed Asset register; as a result Interest on loan was disallowed.

As per JERC Regulations, 2009 Clause 25 for the purpose of determining the ARR, the Petitioner has considered debt equity ratio of 70:30 for projecting normative loan. The Petitioner has considered repayment to be equal to depreciation for the year. The interest at the State Bank of India (SBI) Prime Lending Rate (PLR) rate which is now substituted as SBI advance rate, is applied on the average normative debt in order to project the normative interest on long term loans for FY 2013-14.

Table 6.12.1 : Interest on loans submitted by the petitioner for FY 2013-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)
1	2	3
1	Opening Normative Loan	242.62
2	Add: Normative Loan during the year	15.75
3	Less: Normative Repayment	21.95
4	Closing Normative Loan	236.42
5	Average Normative Loan	239.52
6	Rate of Interest (@SBI PLR rate)	14.75%
7	Interest on Normative Loan	35.33

Commission's analysis

The Petitioner has claimed interest on normative loan considering the repayment to be equal to depreciation charge by considering debt-equity ratio of 70:30 of gross fixed assets.

As per the JERC tariff regulations 2009 -

"25. Interest and Finance Charges on Loan

(1) For existing loan capital, interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreements.

(2) Interest and finance charges on loan capital for new investments shall be computed on the loans, duly taking into account the rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall, however, be restricted to the prevailing Prime Lending Rate of the State Bank of India.

(3) 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:

Provided that interest and finance charges of renegotiated loan agreements shall not be considered, if they result in higher charges:

Provided further that interest and finance charges on works in progress shall be excluded and shall be considered as part of the capital cost.

(4) Interest charges on security deposits, if any, made by the consumers with a generating company/licensee, shall be equivalent to the bank rate or at the rate , if any, specified by the Commission whichever is higher.

(5) In case any moratorium period is availed of, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

(6) The Commission shall allow obligatory taxes on interest, commitment charges, finance charges and any exchange rate difference arising from foreign currency borrowings, as finance cost.

(7) Any saving in costs on account of subsequent restructuring of debt shall be passed on to the consumers."

In the instant case, the licensee has not provided the actual value of fixed assets, Hence the servicing of assets in the form of interest on loan and return on assets is indeterminate at this stage on the opening GFA, hence has not been considered on the assumed value of assets. The same shall be considered at true-up stage if full details are made available.

The Commission has considered a normative loan of Rs. 15.75 Cr for FY 2013-14 (being 70% of Rs. 22.50 Cr provisionally considered to be capitalized during FY 2013-14) to calculate the interest on normative loan amount. Commission has considered the SBAR of 14.45% as the interest rate to allow the interest cost. The table below shows the computation of the normative interest for FY 2013-14 approved by the Commission:

Table 6.12.2 : Interest on loans considered by the Commission for FY 2013-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	2	3	4
1	Opening Normative Loan	242.62	36.85
2	Add: Normative Loan during the year	15.75	15.75
3	Less: Normative Repayment	21.95	3.69
4	Closing Normative Loan	236.42	48.92
5	Average Normative Loan	239.52	42.88
6	Rate of Interest (@ SBI PLR rate)	14.75%	14.45%
7	Interest on Normative Loan	35.33	6.20

The Commission therefore considers the depreciation of Rs. 6.20 Crores as reasonable and approves the same for FY 2013-14.

6.13 Interest on Working Capital

Petitioner's submission

In accordance with Clause 29 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 the interest on working capital shall be allowed to meet the shortfall in collections over and above the target approved by the Hon'ble Commission. The rate of interest on working capital has been considered as SBI Prime lending rate which is now substituted as SBI advance rate, as on 1st April of the respective years, which was 14.75% as on 1st April 2012. Accordingly, the Petitioner requests the Hon'ble Commission to approve an amount of Rs. 9.06 Crores for FY 2013-14 as an Interest on Normative Working Capital.

Commission's analysis

As per the regulation 29 of JERC tariff regulations

"

29. WORKING CAPITAL AND INTEREST RATE ON WORKING CAPITAL

1) For generation and transmission business, the working capital shall be as per CERC norms.

2) Subject to prudence check, the working capital for distribution business shall be the sum of one month requirement for meeting:

a. Power purchase cost.

b. Employees cost.

c. Administration & general expenses and

d. Repair & Maintenance expenses.

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."

Commission has considered the SBI PLR rate which is now substituted as SBI advance rate, at 14.45%as on 04th February 2013 for FY 2013-14. Commission has computed requirement of working capital based on the provisions of the regulations. Working capital has been reduced by the amount of Consumer Security Deposit available with the petitioner considering its usage for meeting part of working capital requirements.

Table 6.13.1 : Interest on working capital submitted by the petitioner and approved by the Commission for FY 2013-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	2	3	4
1	Fuel Cost for 2 months	-	
2	Power Purchase Cost for one month	55.31	50.44
3	Employee Cost for one month	4.93	4.86
4	A&G Expenses for one month	0.21	0.21
5	R&M Expenses for one month	0.95	0.87
6	Total Working Capital for one month	61.39	56.38
7	Closing Security Deposit	-	35.92
8	Total Working after deduction of Security Deposit from Working Capital Requirement	61.39	20.46
9	SBI PLR Rate	14.75%	14.45%
10	**Interest on Working Capital**	**9.06**	**2.96**

The Commission considers the Interest on Working Capital of Rs. 2.96 Crores as reasonable and approves the same for FY 2013-14.

6.14 Interest on Security Deposit

Petitioner's submission

The petitioner submitted that *"in accordance with Clause 47(4) of the 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"*. The petitioner has submitted addition in consumer security deposit during FY 2013-14 equivalent to the addition during FY 2011-12 and the interest on security deposit to be paid to the consumer will be Rs. 2.88 Crores at the available interest rate of bank i.e. 9.50% per annum.

Commission's analysis

As can be observed, the petitioner has not paid any interest on the security deposit to the consumers in FY 2011-12. As per Clause 47(4) of the Electricity Act, 2003 and as specified in Regulation 25, of JERC Tariff Regulations 2009, *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*.

It is submitted by the Petitioner in the data gaps reply dated 06th March 2013 that *"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. Further M/S NIELIT has suggested some need based amendments/modification in the billing software besides the change of complete bill design format as per supply code regulations which may take some more time and likely to be completed by September 2013"*

On account of provisions mentioned in the Act and regulation, Commission re-directs the Petitioner to pay the interest on security deposit collected from the consumers with effect from April 1st 2011 irrespective of their constraints.

As per Clause 47(4) of the Electricity Act, 2003 and as specified in regulation 25 of JERC Tariff Regulations 2009, *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*. On account of provisions mentioned in the Act and regulation, Commission directs the petitioner, that the petitioner must pay the interest on consumer security deposit for FY 2013-14 (at the Bank Rate i.e. 8.75% per annum applicable as on 29th January 2013) with effect from 1st April 2013 to the consumers on their security deposit irrespective of petitioner's constraints and should explicitly mention the same as the 'Interest on security deposit for FY 2013-14' on the bills of the consumers. **Any non-compliance in this regard shall be viewed seriously by the Commission.**

Table 6.14.1 : Interest on Security Deposit submitted by the petitioner and approved by the Commission for FY 2013-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	2	3	4
1	Opening Security Deposit	28.96	34.31
2	Add: Deposits during the Year	2.63	1.62
3	Less: Deposits refunded	-	(0.02)
4	Closing Security Deposit	31.59	35.92
5	Bank Rate	9.50%	8.75%
6	**Interest on Security Deposit**	**2.88**	**3.14**

In view of the above, Commission considers the Interest on Security Deposit of Rs. 3.14 Crores as reasonable and approves the same for FY 2013-14.

6.15 Return on Equity

Petitioner's submission

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 and FY 2012-13 were considered for the purpose of computation of reasonable return.

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

It is therefore, kindly requested to Hon'ble Commission to approve the Return on Equity of Rs 8.77 Crores for FY 2013-14.

Commission's analysis

ED Chandigarh is an integrated utility in its present form as defined in Regulation 2(9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The ED Chandigarh is not restructured and corporatized. As of now, it is an integrated utility and it is entitled to return on capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide proviso under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement for consideration of either return on capital base or return on equity is the audited Annual Accounts and assets and depreciation registers. ED Chandigarh has not prepared the statement of accounts viz profit and loss account, balance sheet etc. the petitioner has not been maintaining the adequate information.

As discussed in earlier para 5.9, 5.10, 5.11, 5.12, 5.14; the Commission has considered Rs. 45.50 Crores as the gross block at the beginning of FY 2013-14 and accumulated depreciation of Rs. 1.86 Crores. Commission has therefore considered the reasonable return of 1.31 Crores at the rate of 3% on net fixed asset of Rs. 43.64 at the beginning of FY 2013-14.

In view of the above, Commission considers the Return on Equity/NFA of Rs. 1.31 Crores as reasonable and approves the same for FY 2013-14.

6.16 Provisional for Bad and Doubtful debts

Petitioner's submission

The petitioner had projected the amount of Rs. 7.07 Crores for FY 2013-14.

In accordance with Clause 28 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009:

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.

Commission's analysis

Commission observed the submissions made by the petitioner on collection efficiency proposed for FY 2013-14 as 99%. Further the petitioner has not submitted any past audited details of bad & doubtful debts and the reasons & justification criteria for classifying the same as 'bad & doubtful' in the past nor they have mentioned the same for ARR of FY 2013-14. As specified in the regulation no. 28 of JERC Tariff regulations read with the format is explained below.

"28. Bad and Doubtful Debts

*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. (Information to be furnished in format 18)"*

Format -18

Sr. No.	*Particulars*	*Amount (Rs. in Crores)*
1.	*2.*	*3.*
1.	*Amount of receivable bad and doubtful debts (audited)*	
2.	*Provision made for debts in ARR*	

Commission has considered provision for bad & doubtful debt FY 2012-13 at 0.50% of total receivable i.e. Rs 3.58 Crores of receivables for FY 2013-14 and the same is included in the total ARR.

6.17 Non-Tariff Income

Petitioner's submission

For the FY 2013-14, CED has considered similar level of NTI as estimated for FY 2012-13 excluding the non-recurring items.

The petitioner had projected Rs. 12.69 Crores as its Non-Tariff Income for FY 2013-14, which the licensee requests the Hon'ble Commission to approve.

Commission's analysis

Commission observes that the submissions made by the petitioner for review of FY 2012-13 & considered the same for FY 2013-14. The detailed calculations have been presented in the table mentioned below:

Table 6.17.1 : Non-Tariff Income submitted by petitioner and approved by the Commission for FY 2013-14

Rs Crs

S.No.	Particulars	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	Sale Proceeds of dead stock, waste paper etc	-	1.94
2	Receipt from State Electrical Inspectorate	-	-
3	Theft/pilferage of energy	1.10	1.10
4	Wheeling charges under open access	0.36	0.36
5	Interest on staff loans & advance	0.03	0.03
6	Income from trading	-	-
7	Income staff welfare activities	-	-
8	Investment & bank balances	-	-
9	Misc. Receipts/income	6.51	6.51
10	Meter/Service Rent	3.58	3.58
11	Late Payment Surcharge	1.12	1.12
12	Total income	12.69	14.63
13	Add: prior period income		
14	**Total Non Tariff Income**	**12.69**	**14.63**

The Commission considers the non-tariff income of Rs. 14.63 crore as reasonable and approves the same for FY 2013-14.

6.18 Revenue at existing tariff for FY 2013-14

Total Revenue projected by the petitioner and approved by the Hon'ble Commission, the category-wise Revenue from the existing Tariff for FY 2013-14 is given below:

Table 6.18.1 : Details of Revenue at existing tariff projected by petitioner and approved by Commission for FY 13-14

Rs Crs

S.No.	Category/Consumption Slab	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	2	3	4
A	Domestic	247.54	274.61
1	0-150 kWh	13.38	14.84
2	151 kWh-400 kWh	74.82	83.00
3	Above 400 kWh	159.34	176.77
B	Commercial	256.19	234.28
4	0-150 kWh	3.85	3.54
5	151 kWh-400 kWh	10.46	9.65
6	Above 400 kWh	241.88	221.10
C	Large Supply	66.10	72.47
D	Small Power	11.65	10.32
E	Medium Supply	52.73	54.93
F	Agriculture	0.34	0.36
G	Public Lighting	9.27	10.33
H	Bulk Supply	54.56	51.38
I	Others-Temporary Supply	8.51	7.74
J	**Total**	**706.89**	**716.43**

The Commission considers the expected revenue of Rs. 716.43 Crores at existing tariff as reasonable for FY 2013-14.

6.19 Aggregate Revenue requirement and Revenue Surplus/Deficit during FY 2013-14

Petitioner's submission

The estimates of Aggregate Revenue requirement for FY 2013-14 submitted by the petitioner in ARR & tariff petition have been given in the table below:

Table 6.19.1 : Aggregate Revenue Requirement submitted by the petitioner for FY 2013-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)
1	2	3
1	Cost of fuel	-
2	Cost of power purchase for full year	663.67
3	Employees Expenses	59.11
4	R&M expenses	11.42
5	Administration and general expenses	2.54
6	Depreciation	21.95
7	Interest and finance charges	35.33
8	Interest on working capital & Interest on Security Deposit	11.93
9	Return on NFA /Equity	8.77
10	Provision for Bad Debt	7.07
11	Total Revenue Requirement	821.78
12	Less: Non Tariff Income	12.69
13	**Net Revenue Requirement**	**809.09**

The Petitioner has proposed a hike in tariff and estimated the additional revenue of Rs. 344.13 Crores to recover the cumulative revenue gap of Rs. 344.13 Crores for FY 2013-14. The revenue deficit projected by the petitioner in its petition for FY 2013-14 including the impact of additional revenue from proposed tariff is given below:

Table 6.19.2 : Estimation of Deficit submitted by petitioner for FY 13-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)
1	2	3
2	Net Revenue Requirement	809.09
3	Revenue from Retail Sales at Existing Tariff	706.89
4	Net Gap	102.20
5	Gap for the previous year	241.93
6	Total Gap	344.13
7	Additional revenue from proposed tariff	344.13
8	Revenue Gap/(Surplus) if any after proposed tariff	-
9	Budgetary Support from Government	-
10	**Net Final Revenue Gap/(Surplus)**	**-**

Commission's analysis

The Commission has considered and approved the ARR for FY 2013-14 based on the items of expenditure discussed in the preceding sections and the same has been summarized in the table below.

Table 6.19.3 : Aggregate Revenue Requirement submitted by the petitioner & considered for FY 13-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	2	3	4
1	Cost of fuel	-	-
2	Cost of power purchase for full year	663.67	605.34
3	Employees Expenses	59.11	58.28
4	R&M expenses	11.42	10.42
5	Administration and general expenses	2.54	2.52
6	Depreciation	21.95	3.00
7	Interest and finance charges	35.33	6.20
8	Interest on working capital & Interest on Security Deposit	11.93	6.10
9	Return on NFA /Equity	8.77	1.31
10	Provision for Bad Debt	7.07	3.58
11	Total Revenue Requirement	821.78	696.75
12	Less: Non Tariff Income	12.69	14.63
13	**Net Revenue Requirement**	**809.09**	**682.11**

The estimated revenue deficit including the reviewed gap of FY 2011-12 (As approved in TO dated 07th May 2012) & reviewed gap of FY 2012-13 (As dealt in Chapter 5 in current TO) is as given in the table below:

Table 6.19.4 : Approved Revenue gap for FY 2013-14

Rs Crs

Sr. No.	Particulars	FY 2013-14 (Projected)	FY 2013-14 (Approved)
1	2	3	4
2	Net Revenue Requirement	809.09	682.11
3	Revenue from Retail Sales at Existing Tariff	706.89	716.43
4	Net Gap	102.20	(34.32)
5	Gap for the previous year	241.93	32.87
6	Total Gap	344.13	(1.45)
7	Additional revenue from proposed tariff	344.13	-
8	Revenue Gap/(Surplus) if any after proposed tariff	-	(1.45)
9	Budgetary Support from Government	-	-
10	**Net Final Revenue Gap/(Surplus)**	**-**	**(1.45)**

As can be seen from the table mentioned above, there is a cumulative revenue surplus of Rs. 1.45 Crores till FY 2013-14 as estimated by the Commission against the cumulative revised gap of Rs. 344.13 Crores furnished by the petitioner in its petition. The major reason for the surplus for FY 2013-14 is estimation of high sales, non-consideration of any escalation in variable charges of generating stations, reduction of T&D losses and disallowance of extra 2% losses, non-consideration of actual expenditure including Interest Charges, Depreciation and Return on Equity, based on actual valuation of assets. It is expected that in future ARRs and True-ups, when the Petitioner submits the actual figures of revenue for FY 2011-12, FY 2012-13 & FY 2013-14 along with audited accounts, depreciation fixed asset registers, the gap assessed (as of now) in the revenue requirement on account of above shall be increased.

6.20 Carrying Cost

Petitioner Submission

The petitioner has stated that as per Provision 4 of Regulation 8 for 'Review and Truing Up' of JERC Tariff Regulations, 2009, *"While approving such expenses/revenues to be adjusted in the future years as arising out of the Review and / or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. Carrying costs shall be limited to the interest rate approved for working capital borrowings."*

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 6.20.1 : Carrying Cost as submitted by the petitioner

Rs Crs

Sr. No.	Particulars	FY 2011-12 (Actual)	FY 2012-13 (Revised)	FY 2013-14 (Projected)
1	2	3	4	5
1	Opening Revenue Gap	-	154.85	241.93
2	Revenue Gap for the FY	154.85	87.08	-
3	Closing Revenue Gap	154.85	241.93	-
4	Average Revenue Gap	77.43	198.39	120.97
5	Rate of Interest	13.00%	14.75%	14.75%
6	Carrying Cost	10.07	29.26	17.84
7	**Total Carrying Cost**			**57.17**

Commission Analysis

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."*

The Commission is of the view that the petitioner until now has not submitted the audited accounts based on commercial accounting principles for regulated business of electricity as per the regulatory requirement. Further, they haven't prepared Fixed Asset & Depreciation Register and the Commission is of the view that the expenditure as claimed under the various heads (RoE, Depreciation, Interest & Finance Charges and GFA) are on assumption basis.

So, till such time the department prepares and maintains the asset and depreciation registers and get them duly audited, it is not feasible for the Commission to consider carrying costs in accordance of Provision 4 of Regulation 8 for 'Review and Truing Up' of JERC Tariff Regulations, 2009.

7. DIRECTIVES

7.1 Commission's Observation

While examining the information and data contained including the compliance note submitted by the Petitioner in the proposed ARR and Tariff Petition for FY 2013-14, it has been observed that the directives issued in tariff order for FY 2012-13, also mentioned below have not been fully compiled with by the distribution licensee.

Compliance of Directives issued by the Commission in the tariff order for FY 2011-12

1. **Directive -1: Annual Statement of Accounts**

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.

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.

Compliance/Action Taken

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..

Commission's Comments

Accounts of the licensee need to be prepared on commercial account principles for regulated business of electricity as per regulatory requirement by 30th September, each year. The Commission in its previous order has also directed the petitioner to comply with the directives and file the true up accordingly. The Commission directs the petitioner to file the true up for FY 2011-12 by October 31, 2013, failing which the Commission would be constraint to take action according to the JERC Regulations and the Electricity Act, 2003.

2. Directive-2: Preparation of Asset and Depreciation Register

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.

Petitioner is directed to submit quarterly progress report and the final completion date.

Compliance/Action Taken

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.

Commission's Comments

The Commission has noted the action taken and directs to file a monthly progress report in this regard.

3. Directive-3: Management Information System

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 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.

Petitioner is directed to submit quarterly progress report and the final completion date.

Compliance/Action Taken

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, R-APRDP project has already been initiated for a credible & accurate and verifiable data base and management information system (MIS).

Commission's Comments

Action taken is noted. Petitioner is directed to submit quarterly progress report and the final completion date.

4. Directive-4: Metering of consumer installations / replacement of Non-Functional or defective Meters

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.

Procurement process be expedited and action plan to install these meters be given by 30.09.12.

Compliance/Action Taken

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.

Commission's Comments

Action taken is noted. Procurement process be expedited and complete the work of installation of such meters by 30.09.13, through owned staff/outsourced staff/EPC contractor, without fail.

5. Directive-5: Energy Audit

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.

The investment required to reduce the losses be included in the investment plan for augmentation of T&D system to be submitted to the Commission. Effective technical and administrative measures shall be taken to reduce the commercial losses. The action plan for energy audit and loss reduction measures shall be furnished to the Commission by 30th September, 2012.

Compliance/Action Taken

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.

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 program) has 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.

Commission's Comments

Action taken is noted. Procurement process be expedited and to submit quarterly progress report and the final completion date.

6. Directives-6: Interest on Security Deposit

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.

The petitioner is directed to pay interest on consumer security deposit at the applicable bank rate.

Compliance/Action Taken

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.

Commission's Comments

The Commission in its previous order has directed the Petitioner to pay the interest on security deposit to the consumers in accordance with the Electricity Act 2003. The Commission feels that enough time has been given to the Petitioner for compliance of the same and reconciliation of the security deposit. The petitioner is directed to pay interest on consumer security deposit at the applicable bank rate by September 30, 2013 failing which appropriate action would be taken for non-compliance of the Commission's Directives.

7. Directive-7: Demand Side Management and Energy Conservation

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.

Petitioner is directed to inform the time bound action plan for installation of TOD meters.

Compliance/Action Taken

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.

Commission's Comments

Action taken is noted. Petitioner is directed to inform the time bound action plan for installation of TOD meters.

8. Directive -8: Manpower Study

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.

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.

Compliance/Action Taken

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.

Commission's Comments

Compliance be reported by 30-9-2013 and outcome of the study be incorporated in the ARR of FY 2014-15 to be submitted before 30.11.2013.

<u>Compliance of Directives issued by the Commission in the tariff order for FY 2012-13</u>

1. **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.

Compliance/Action Taken

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.

Commission's Comments

Action taken is noted. Petitioner is directed to inform the time bound action plan for the same by 30.09.13

2. **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.

Compliance/Action Taken

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.

Commission's Comments

Action taken is noted. Petitioner is directed to inform the time bound action plan for the same by 30.09.13

3. 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 matters) as amended from time to time.

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.

The short-term power purchase be rationalized especially under UI mechanism; the overdrawls from UI below 49.7 Hz will not be allowed. As last year (FY 2011-12), 18 MUs have been recorded as overdrawls below 49.5 Hz, purchased at 873 paise/KWh.

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. The summary of total Sale/Purchase from short term sources including Net gain/Net loss under purchase of UI and from other sources including power exchange, bilateral etc. The results of gain/loss of such sale/purchase from other sources be explicitly mentioned.

In order to optimize the cost of power purchase, if unavoidable, the rotational power cuts could be undertaken by the utility, keeping equity among all consumers of the utility irrespective of their status.

Compliance/Action Taken

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.

Commission's Comments

Action taken is noted.

4. 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.

Compliance/Action Taken

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.

Commission's Comments

Action taken is noted.

5. 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.

Compliance/Action Taken

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 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.

Commission's Comments

Action taken is noted.

6. 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.

Compliance/Action Taken

In this regard, it is submitted that all the villages under Chandigarh Administration stands already electrified.

Commission's Comments

Action taken is noted.

7. Directive 7: Change of Category:

Commission has observed that consumer 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.

Compliance/Action Taken

The consumer category of 'Government recognized institutions', 'Government & public sports 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.

Commission's Comments

The Commission has specifically directed the petitioner to submit the analysis and impact of the conversion into Bulk tariff or Non-domestic tariff which has not been submitted by the petitioner. However, the Commission considering the non profit nature of the following establishments has considered the same into Domestic category.

(a) Government recognized education institutions

(b) Government and public sports institution

(c) *Religious Institutions*

(d) *Dispensary/ Hospital/Public Library etc*

(e) *Orphanage /Cheshire homes etc*

(f) *Electric Crematorium*

This has been reflected in the Tariff Schedule at the appropriate category.

8. Directive 8: Capital expenditure:

The Petitioner is directed to submit the detailed statement of capital expenditure incurred and capitalization for every quarter, within 15 days in the subsequent quarter.

Compliance/Action Taken

Capital Expenditure for the FY 2012-13 - Q1: **Rs 115.54 Crores**, Q2: **Rs 819.59 Crores**.

Commission's Comments

Action taken is noted. A typographical error has been observed in the above action taken, it would be in Rs Lacs.

9. Directive 9:Enforcement Cell:

The Petitioner is directed to submit the status of the functioning of enforcement cell and quarterly progress report detailing number of cases, amount involved, sub-judice cases, reduction in losses as a consequence.

Compliance/Action Taken

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. Total 487 cases were involved in the first two quarters.

Commission's Comments

Action taken is noted.

10. Directive 10:Voltage wise Categorisation:

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.

Compliance/Action Taken

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.

Commission's Comments

Action taken is noted.

<u>New Directive</u>

1. The Petitioner has proposed a new Category for JJ Cluster / Unauthorized colonies. The Commission directs the petitioner to submit the number of consumers, load, consumption and status of metering for such consumers before the same is considered for the Tariff categorization. The same be submitted alongwith the next ARR & tariff filing before the Commission.

8. TARIFF PRINCIPLES AND DESIGN

8.1 Preamble

The Commission in determining the revenue requirement and retail supply tariff for the financial year 2013-14 has been guided by the provisions of the Electricity Act, 2003, the Tariff Policy, 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. Section 61 of the Act lays down the broad principles, which shall guide determination of retail tariff.

Keeping view of the above, the Commission has designed the tariff in such a way that cross subsidy between different categories of consumers remains within + / - 20% of average cost of supply and that even for BPL category consumers, tariff rates are close to 50% of the average cost of supply.

8.2 Tariff Proposal

Petitioner's submission

The category wise existing and proposed tariff submitted by the Petitioner are as under:

Table 8.2.1: Existing and Proposed Tariff for FY 2013-14 proposed by the Petitioner (in Rs.)

S.No.	Category/Consumption Slab	FY 2013-14			
		Existing Tariff		Proposed Tariff	
		Fixed Charges	Variable Charges	Fixed Charges	Variable Charges
		Rs.per kVA/KW/ HP per month	Rs/KWh	Rs. per kVA/KW/ HP per month	Rs/KWh
A	**Domestic**				
1	0-150 kWh	0	2.30	25	3.50
2	151 kWh - 400 kWh	0	4.20	25	5.20
3	Above 400 kWh	0	4.40	25	6.00
B	**Commercial**				
1	0-150 kWh	6	4.30	110	5.00
2	151 kWh - 400 kWh	70	4.50	110	6.25
3	Above 400 kWh	70	4.70	110	7.00
C	**Large Supply**	70	4.70	150	6.70
D	**Small Power**	6	4.40	70	6.30
E	**Medium Supply**	70	4.50	125	6.50
F	**Agriculture**	0	2.30	20	3.50
G	**Public Lighting**				
1	Public lighting system	70	4.30	100	6.70
2	Advertisement /Neon sign boards	70	6.00	100	9.00
H	**Bulk Supply**	70	4.50	100	6.80
I	**Others-Temporary Supply**	0	6.70	0	9.80
J	**SPDD- JJ Clusters**	0	0	0	3.50

Commission's analysis

The Petitioner has proposed 48.68% increase in average tariff on the existing tariff for FY 2013-14. Commission has determined the retail tariff for FY 2013-14, keeping in view the guiding principles as stated in Section 61 of the Act and also considered the suggestions/objections of the stakeholders in this regard. Keeping in mind the approved Aggregate Revenue Requirement for FY 2013-14 and reviewed gap of FY 2012-13, Commission is of the view that there is a surplus of Rs 1.57 Crores, so there is no need to revise the tariff.

The revised tariff schedule specified in Section 9 of this order is summarized in table 8.2.2 below:

Table 8.2.2: Commission's Approved Tariff for FY 2013-14

S.No.	Category/Consumption Slab	FY 2013-14	
		Fixed Charges	Variable Charges
		Rs. per kVA/KW/ HP per month	Rs/KWh
A	**Domestic**		
1	0-150 kWh	0.00	2.30
2	151 kWh - 400 kWh	0.00	4.20
3	Above 400 kWh	0.00	4.40
B	**Commercial**		
1	0-150 kWh	6.00	4.30
2	151 kWh - 400 kWh	70.00	4.50
3	Above 400 kWh	70.00	4.70
C	**Large Supply**	70.00	4.70
D	**Small Power**	6.00	4.40
E	**Medium Supply**	70.00	4.50
F	**Agriculture**	0.00	2.30
G	**Public Lighting**		
1	Public lighting system	70.00	4.30
2	Advertisement /Neon sign boards	70.00	6.00
H	**Bulk Supply**	70.00	4.50
I	**Others-Temporary Supply**	0.00	6.70

9. Determination of open access charges

Petitioner Submission:

CED in its data gaps reply dated 06th March 2013 stated that:

"The JERC regulations have not specified the mechanism for determination of wheeling charges nor have the allocation percentages wise between wheeling and supply. As such, it is not in the fitness of things to propose the open access (wheeling charges) for which the methodology has not yet been approved by the commission. Further, the CED is in the process of restructuring of the Electricty Department after which the assets of transmission and distribution system shall be bifurcated and accordingly the open access charges shall be proposed/got approved from the Hon'ble Commission".

Commission Analysis:

The Commission with an objective to generate debate and seek suggestions/comments of the stakeholders on this issue, had also highlighted the steps required & sample calculation of open charges as per the open access regulations to be notified by the Commission shortly to enable open access in the state of Goa and the UTs and had also floated a staff paper titled 'STAFF PAPER ON OPERATIONALISATION OF OPEN ACCESS (OA) IN THE STATE OF GOA AND THE UTs' in September 2012. The complete draft consultation paper is available on the Commission's website **www.jercuts.gov.in**

The petitioner has not submitted any calculation of open access charges in their tariff petition for FY 2013-14. The Commission has therefore in order to facilitate the open access has approved the Open Access related charges for FY 2013-14.

It is also seen from the Petitioner's submission that the Transmission and Distribution business has not been segregated and the CED continues to function as an integrated utility. The Commission in line with the petitioner's submission and the fact that the expenses of the utility are consolidated has considered "NIL" transmission charges for the open access consumers in the State.

<u>Allocation Matrix</u>

The Commission feels that there has to be proper bifurcation of all expenses pertaining to the Petitioner between functions of wheeling business (wire business) and retail supply business. As the petitioner has not proposed any such bifurcation based on facts the Commission feels prudent to consider the allocation matrix for bifurcation of wheeling and retail ARR as proposed in the 'STAFF

PAPER ON OPERATIONALISATION OF OPEN ACCESS (OA) IN THE STATE OF GOA AND THE UTs' in September 2012. The allocation between wheeling and retail supply business for FY 2012-13 and FY 2013-14 as per the approved ARR in this order is provided in the table below:

Table 9.1: Allocation Matrix for Wheeling and Retail Supply Business for FY 2012-13 & FY 2013-14

Wheeling and Retail Supply ARR (Rs. Crores) - CED									
S.No.	Particulars	Allocation (%)		Allocation FY 2012-13			Allocation FY 2013-14		
		Wheeling	*Supply*	*Wheeling*	*Supply*	*Total*	*Wheeling*	*Supply*	*Total*
1	Cost of Fuel	0%	100%	-	-	-	-	-	-
2	Power Purchase Expenses (incl transmission charges)	0%	100%	-	616.87	616.87	-	605.34	605.34
3	Employee cost	70%	30%	37.45	16.05	53.50	40.80	17.48	58.28
4	Repair & Maintenance expenses	90%	10%	8.61	0.96	9.56	9.38	1.04	10.42
5	Administration & General expenses	50%	50%	1.16	1.16	2.31	1.26	1.26	2.52
6	Depreciation	90%	10%	1.68	0.19	1.86	2.70	0.30	3.00
7	Interest & Finance Charges	90%	10%	4.11	0.46	4.56	5.58	0.62	6.20
8	Interest on working capital	22%	78%	0.63	2.25	2.88	0.65	2.31	2.96
9	Interest on Security Deposit	0%	100%	-	3.26	3.26	-	3.14	3.14
10	Return on Net Fixed Assets /Equity	90%	10%	0.62	0.07	0.69	1.18	0.13	1.31
11	Provision for Bad & Doubtful Debt	0%	100%	-	3.28	3.28	-	3.58	3.58
12	Advance against Depreciation	90%	10%	-	-	-	-	-	-
13	**Total Revenue Requirement**			**54.25**	**644.53**	**698.78**	**61.54**	**635.21**	**696.75**
14	Less: Non Tariff Income	0%	100%	-	14.63	14.63	-	14.63	14.63
15	Less: Revenue from Sale through UI	0%	100%	-	14.75	14.75	-	-	-
16	Less: Revenue from Sale of Power (Exchanges)	0%	100%	-	344.96	21.56	-	-	-
17	**Net Revenue Requirement (13-14-15-16)**			**54.25**	**270.19**	**647.84**	**61.54**	**620.58**	**682.11**
18	**Total Energy to be wheeled by the distribution licensee (energy required at discom's periphery)**								**1,809.50**
19	**Wheeling Charges (Rs./KWh) to be paid by long term open access users**						**0.34**		
20	ST RATE								
	TSC-Annual Distribution Charges of discom for the immediately preceding financial year (Rs. Crores)						**54.25**		
	Av CAP (in MW)						**1,242.33**		
	ST RATE = 0.25*[TSC/Av CAP]/365 (Rs. per MW per day)						**299.1**		

The Commission opines that in the absence of the details of bifurcation of assets and expenses the open access should not be restricted due to lack of information. The Commission in this regard would like to mention that the apportionment of wheeling charges have to account for losses. Therefore, in the absence of the voltage wise details the Commission has considered the bifurcation of wheeling cost based on the sales and losses at each voltage level. The losses and the demographics of ED-Chandigarh are similar to that of Delhi. Therefore, in the absence of voltage level wise losses the Commission has benchmarked the losses as determined by DERC in its Tariff Order dated July 2012 – Table No 160. Average losses of the 3 Discom's of Delhi has been accounted for while calculating the losses at HT and EHT Level as the losses & season of Chandigarh are more or less similar to Delhi. Accordingly, the Commission has considered the losses at HT and EHT at 3.95%. The Commission at

15% in this order has approved the loss for FY 2013-14. Accordingly, the balancing loss has been considered at the LT level.

Therefore, to arrive at the network usage the input energy at each level has been arrived and shown in the table below:

***Table 8.22:** Determination of input energy for network usage percentage*

Particulars	UoM	Amount
Total Input	MU	1,809.50
Input for HT and EHT Sales	MU	373.99
Losses for HT and EHT	%	3.95%
Losses	MU	14.77
Sales at 11 kV and above	MU	359.21
Input for LT	MU	1,435.52
Losses at LT level	%	18%
Losses	MU	256.65
Sales at 11 kV and above	Mu	1,178.86
Balance	MU	0.00

Accordingly, the wheeling cost has been considered in the ratio of 21: 79 and the wheeling charge so arrived has been shown in the table below:

***Table 8.23:** Wheeling Charges for FY 2013-14*

Particulars	UoM	Formulae	FY 2013-14
Wheeling Cost	Rs Crores	A	61.54
Wheeling Cost at EHT and HT (80%)	Rs Crores	B=A*80%	12.72
Wheeling Cost at LT (20%)	Rs Crores	C=A*20%	48.82
Energy Input at Discom Periphery	MU	D	1,809.50
Wheeling Charge at EHT and HT level	Rs per Unit	E=B/D*10	0.07
EHT and HT losses	%	F	3.95%
EHT and HT losses	MU	G	71.48
Sales at EHT and HT level	MU	H	359.21
Energy Input at LT	MU	I=D-G-H	1,378.81
Wheeling Charge at LT level	Rs per Unit	J=C/I*10	0.35
Sales at LT level	MU	K	1,178.86
LT Losses	MU	L=I-K	199.95
Total Losses	MU	M=G+L	271.43
	%		15.00%

Cross Subsidy Surcharge

The Cross subsidy surcharge is based on the following formula given in the Tariff Policy as below:

S = T-[C (1+L/100) +D]

Where,
S is the surcharge
T is the Tariff payable by the relevant category of consumers;
C is the Weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power
D is the Wheeling charges
L is the System losses for the applicable voltage level, expressed as percentage.

The Computation of Cross Subsidy is given below:

Table 8.24: Cross Subsidy Charges for FY 2013-14

Cross Subsidy Surcharge	UoM	Industry
T	Rs Per kWh	4.98
C	Rs Per kWh	4.48
D	Rs Per kWh	0.07
L	%	3.95%
Surcharge	Rs Per kWh	0.43

Additional Surcharge

In order to promote competition through open access the Commission approved “Nil” Additional Surcharge. This would be revisited at the time of next tariff order based on Open Access implementation.

10. Rationalization and Reform of Tariff Schedule and Terms & Conditions of Supply

The Commission in pursuit of the rationalization and reform of the tariff schedule and terms & conditions of supply had floated a draft consultation paper titled 'Draft Consultation Paper - Seeks to provide a policy framework to address uniformity in consumer classification based on uses of electricity, voltage-wise contract load/demand limits and terms and condition of LT and HT supply to various consumer categories' in December 2012.

The Joint Electricity Regulatory Commission (JERC) for the State of Goa and UTs notified its "Joint Electricity Regulatory Commission (Electricity Supply Code) Regulations, 2010'' which was applicable to all distribution licensees and its consumers. Presently, all the seven licensees have different supply voltage for different contract demand / load, different consumer categories and different terms & conditions. The supply voltage for different contract demand/load has not been specified in the JERC (Electricity Supply Code) Regulation, 2010. Until a common uniform supply voltage for different contract demand / load, consumer categories, Terms & Conditions for LT supply and HT supply are framed; there would always be dissimilarities in the above amongst all the seven utilities under JERC.

The objective of the draft paper was to bring about uniformity mainly in the following areas for the seven licensees under the jurisdiction of JERC.

1. Uniform categorization of consumers based on uses;
2. Uniform supply voltage for different contract demand/load;
3. Uniform terms & conditions for LT supply;
4. Uniform terms & conditions for HT supply

Further, there is dissimilarity in the terms and conditions for both LT and HT voltage level between the licensees on various parameters as listed below:

1. Power Factor;
2. Power Factor Incentive;
3. Power Factor Surcharge;
4. Disconnection;
5. Billing;
6. Excess Demand; and
7. Over drawl

The draft paper proposes to bring about uniformity in the above mentioned parameters through a common terms and conditions of supply for all the seven licensees.

The Commission had floated the draft paper for comments/suggestions/objections from the stakeholders for further consideration and implementation in the forthcoming tariff orders. However, the Commission did not receive adequate comments/suggestions from all the licensees and other stakeholders. There were no objections/suggestions from some of the licensees under the jurisdiction of JERC. In view of the lack of awareness and for greater participation from the public at large, the Commission has included a gist of the proposed tariff schedule and terms & conditions of supply in this tariff order which is reproduced below here. **The Commission wants the licensees and other stakeholders to be more participative and give their suggestions/comments/objections so that the proposed common tariff schedule and terms & conditions of supply can be made applicable in the future years with necessary changes.** From the below mentioned schedule, **the Commission has already introduced the proviso of advance payment rebate, prompt payment rebate and power factor surcharge/rebate in this year's tariff schedule for the benefit of the stakeholders.** The Commission is inviting comments/suggestions from the stakeholders on other features of the draft tariff schedule which are yet to be implemented.

The complete draft consultation paper is available on the Commission's website www.jercuts.gov.in.

Proposed Uniform Tariff Schedule and Terms & Conditions of Supply

PART - A: LOW TENSION (LT) SUPPLY

System of supply: Low Tension – Alternating Current, 50 cycles per second
Single Phase supply at 230 Volts
Three Phase supply at 400 Volts
The tariffs are applicable for supply of electricity to LT consumers with a contracted load/demand upto 75 kW (100 HP) for Domestic, non-domestic, Public lighting, Industrial, Agricultural and Public water works categories.
Single Phase supply - contracted load upto 5.0 kW
Three Phase supply - contracted load above 5.0 kW

CATEGORY OF SERVICE AND TARIFF RATES

1.0 DOMESTIC SERVICE

Applicability

This tariff shall be applicable for supply of electricity for a contracted load/demand upto 75 KW for domestic purposes such as lights, fans, radios, televisions, heaters, air-conditioners, washing machines, air-coolers, geysers, refrigerators, ovens, mixers and other domestic appliances including motor-pumps for lifting water for domestic purposes in residential houses, bungalows, multi-storied flats, farm houses, ashrams, mutts, housing colonies etc. This shall also be applicable to the common facilities in the multi-storied, purely residential apartments, buildings having contracted load/demand upto 75 kW.

1.1 DOMESTIC SERVICE-I (DS-I)

This tariff shall be applicable to all huts and dwelling houses of families below the poverty line (BPL) and houses, including pucca houses, built under Government schemes, including rehabilitation for BPL families, having contracted load of 100 Watts only. Consumption of consumers under this category shall be limited to 30 kwh per month.

Note: In case it is detected that load of consumers under this category exceeds 100 watt or monthly consumption exceeds 30 kwh for three consecutive months, it shall be considered under unauthorised use of electricity and shall be dealt as per JERC Electricity Supply Code Regulations, 2010 and the BPL Tariff shall immediately become inoperative and shall further be billed under DS-II category.

1.2 DOMESTIC SERVICE-II (DS-II)

This is applicable for domestic premises for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted load/demand above 5 kW upto 75 KW.

Note (i) If a portion of the domestic premises limited to only one room is used for running small household business having DS-II connection, such connection shall be billed under DS-II category provided that the total monthly consumption of the consumer does not exceed 150 KWH.

(ii) If either more than one room or only one room having monthly consumption exceeding 150 KWH for consecutive three months are detected in the domestic premises being used for mixed purposes having DS-II connection, it shall be considered under unauthorised use of electricity and shall be dealt as per JERC Electricity Supply Code Regulations, 2010 and such connection shall further be billed under NDS-I category until a separate connection of appropriate tariff is taken for that portion used for non-domestic purpose.

TARIFF RATES

1.0 DOMESTIC SERVICE

1.1 DOMESTIC SERVICE-I (DS-I)

Sl.	Category of consumers	Fixed charge (Rs/connection/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered	x	
	unmetered		X

1.2 DOMESTIC SERVICE-II (DS-II)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	Single / Three Phases		Upto 100	
			101-300	
			301-500	
			Above 500	

OPTIONAL

1.2.1 DOMESTIC SERVICE-II/D (DS-II/D)

All those consumers under DS-II category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

1.2.1 DOMESTIC SERVICE-II/D (DS-II/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

2.0 NON-DOMESTIC SERVICE

Applicability

This shall be applicable for supply of electrical energy for non-domestic consumers having contracted load/demand upto 75 kW, using electrical energy for light, fan and power loads for non-domestic purposes like shops, offices, government and semi–government offices, show rooms, laundries, photo-studios, bakery shops, parlours, bars, coffee houses, advertisement hoardings, neon sign-boards, hospitals, nursing homes, clinics, dispensaries, diagnostic centres, X-ray plants, private schools, colleges, libraries, coaching institutes and research institutes, restaurants, hotels, clubs, gymnasium, sport institutions, stadiums, guest houses, boarding / lodging houses, marriage houses, public halls, auditorium, exhibitions, theatres, circus, cinemas, fuel/oil stations, service stations, printing presses, museums, banks, race-course, burial /crematorium grounds, bus-stations, railway stations, telephone exchanges, All India Radio / T.V. installations, shops having welding set, small lathe, electric drill etc, IT establishments, common facilities in multi-storied commercial office / buildings, commercial trusts, societies, shopping malls, multiplexes, commercial establishments and other installations not covered under any other tariff schedule.

This shall also be applicable to government educational institutions, their hostels and libraries, government hospitals, government research institutions, government sport institutions and non–profitable government aided educational institutions, their hostels and libraries, government run youth hostels, harijan hostels, rehabilitation centres, anganwadies, balwadies etc, non-profitable recognized

charitable institutions, orphanage homes and old-age homes run by religious and charitable organisations recognised by government, etc.
Religious places such as temples, mosques, gurudwaras, churches etc, are also covered under this tariff.

2.1 NON-DOMESTIC SERVICE-I (NDS-I)

This shall be applicable for supply of electrical energy for non-domestic services such as shops, offices, government and semi–government offices, show rooms, laundries, photo-studios, bakery shops, parlours, bars, coffee houses, advertisement hoardings, neon sign-boards, hospitals, nursing homes, clinics, dispensaries, diagnostic centres, X-ray plants, private schools, colleges, libraries, coaching institutes and research institutes, restaurants, hotels, clubs, gymnasium, sport institutions, stadiums, guest houses, boarding / lodging houses, marriage houses, public halls, auditorium, exhibitions, theatres, circus, cinemas, fuel/oil stations, service stations, printing presses, museums, banks, race-course, burial /crematorium grounds, bus-stations, railway stations, telephone exchanges, All India Radio / T.V. installations, shops having welding set, small lathe, electric drill etc, IT establishments, common facilities in multi-storied commercial office / buildings, commercial trusts, societies, shopping malls, multiplexes, commercial establishments and other installations not covered under any other tariff schedule for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted /demand above 5 KW upto 75 KW.
This shall also be applicable to government educational institutions, their laboratories, hostels and libraries, government hospitals, government research institutions, government sport institutions and government aided educational institutions, their laboratories, hostels and libraries, government run youth hostels, harijan hostels, rehabilitation centres, anganwadies, balwadies etc.

2.2 NON-DOMESTIC SERVICE-II (NDS-II)

This shall be applicable for supply of electrical energy for non-domestic services such as orphanage homes and old-age homes run by religious and charitable organisations recognised by the government for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted load/demand above 5 KW upto 75 KW
This shall be applicable for supply of electrical energy for non-domestic (Religious) service such as places of worship like temples, mosques, gurudwaras, churches.

2.3 NON-DOMESTIC SERVICE-III (NDS-III)

This shall be applicable for supply of electrical energy for advertisement hoardings and neon sign boards for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted load/demand above 5 KW upto 75 KW

TARIFF RATES

2.0 NON-DOMESTIC SERVICE

2.1 NON-DOMESTIC SERVICE-I (NDS-I)

Sl.	Category of consumers	Fixed charge	Energy charge

		(Rs/KW/ month or part thereof)	Consumption/ month (Units)	Rate (Ps/unit)
	Single/Three Phases		Upto 100	
			Above 100	

OPTIONAL

2.1.1 NON-DOMESTIC SERVICE-I/D (NDS-I/D)

All those consumers under NDS-I category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

2.1.1 NON-DOMESTIC SERVICE-I/D (NDS-I/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

2.2 NON-DOMESTIC SERVICE-II (NDS-II)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	Single/ Three Phases		For all units	

OPTIONAL

2.2.1 NON-DOMESTIC SERVICE-II/D (NDS-II/D)

All those consumers under NDS-II category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

2.2.1 NON-DOMESTIC SERVICE-II/D (NDS-II/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)

	All Three Phase		For all units	

2.3 NON-DOMESTIC SERVICE-III (NDS-III)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	Single/ Three Phases		For all units	

OPTIONAL

2.3.1 NON-DOMESTIC SERVICE-III/D (NDS-III/D)

All those consumers under NDS-III category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

2.3.1 NON-DOMESTIC SERVICE-III/D (NDS-III/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

3.0 IRRIGATION AND AGRICULTURAL SERVICE (IAS)

Applicability

This shall be applicable for supply of electrical energy for contracted load/demand upto 100 HP for bonafide use for irrigation pumping and agricultural purposes including processing of Agricultural Produce, confined to chaff - cutter, thrasher, cane crusher and rice Huller including lighting loads when operated by the agriculturist in the field or farm. This is also applicable to nurseries growing flowers/ plants/ saplings/ fruits, hatcheries, poultries (with more than 1000 birds) and fisheries (fish ponds), piggery, aquaculture, sericulture, cattle breeding farms, mushroom growing farms, and those dairy units where only extraction of milk and its processing such as chilling, pasteurisation, etc is done.

3.1 IRRIGATION AND AGRICULTURAL SERVICE-I (IAS-I)

This shall be applicable for supply of electrical energy for contracted load/demand upto 25 HP for bonafide use for irrigation pumping and agricultural purposes including processing of Agricultural Produce

3.2 IRRIGATION AND AGRICULTURAL SERVICE-II (IAS-II)

This shall be applicable for supply of electrical energy for contracted load/demand above 25 HP upto 100 HP for bonafide use for irrigation pumping and agricultural purposes including processing of Agricultural Produce

3.3 IRRIGATION AND AGRICULTURAL SERVICE-III (IAS-III)

This shall be applicable for supply of electrical energy for contracted load/demand upto 100 HP for allied activities such as nurseries growing flowers/ plants/ saplings/ fruits, hatcheries, poultries (with more than 1000 birds) and fisheries (fish ponds), piggery, aquaculture, sericulture, cattle breeding farms, mushroom growing farms, and those dairy units where only extraction of milk and its processing such as chilling, pasteurisation, etc is done.

Tariff Rates

3.0 IRRIGATION AND AGRICULTURAL SERVICE (IAS)

3.1 IRRIGATION AND AGRICULTURAL SERVICE-I (IAS-I)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered		
	Unmetered		X

3.2 IRRIGATION AND AGRICULTURAL SERVICE-II (IAS-II)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)

3.3 IRRIGATION AND AGRICULTURAL SERVICE-III (IAS-III)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered		

4.0 LOW TENSION INDUSTRIAL SERVICE (LTIS)

Applicability

This shall be applicable for supply of electricity to low tension industrial consumers with a contracted load/demand upto 100 HP for industrial processing or agro-industries purposes, cold storage, arc welding sets, workshops, flour mills, wet grinding, oil mills, rice mills, dal mills, atta chakki, Huller, expellers, saw mills, milk dairies (where milk is processed other than chilling, pasteurisation etc to produce other milk products), ice cream manufacturing units, power-looms, garment manufacturing units, tyre retreading units, bakery manufacturing units, etc including lighting loads.

4.1 LOW TENSION INDUSTRIAL SERVICE-I (LTIS-I)

This shall be applicable for supply of electricity to low tension industrial consumers with a contracted load/demand upto 25 HP

4.2 LOW TENSION INDUSTRIAL SERVICE-II (LTIS-II)

This shall be applicable for supply of electricity to low tension industrial consumers with a contracted load/demand above 25 HP upto 100 HP

Tariff Rates

4.0 LOW TENSION INDUSTRIAL SERVICE (LTIS)

4.1 LOW TENSION INDUSTRIAL SERVICE-I (LTIS-I)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge Rate (Ps/unit)

OPTIONAL

4.1.1 LOW TENSION INDUSTRIAL SERVICE-I/D (LTIS-I/D)

All those consumers under LTIS-I category with 3 phase supply and with contract demand upto 25 HP opting for demand based tariff shall be required to pay at the rates indicated below:

4.1.1 LOW TENSION INDUSTRIAL SERVICE-I/D (LTIS-I/D)

Sl.	Category of consumers	Demand charge (Rs/HP/ month or part thereof)	Energy charge	
			Consumption/ months(Units)	Rate (Ps/unit)
	All Three Phase upto 25 HP			

4.2 LOW TENSION INDUSTRIAL SERVICE-II (LTIS-II)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge
			Rate (Ps/unit)

OPTIONAL

4.2.1 LOW TENSION INDUSTRIAL SERVICE-II/D (LTIS-II/D)

All those consumers under LTIS-II category with 3 phase supply and with contract demand above 25 HP upto upto 100 HP opting for demand based tariff shall be required to pay at the rates indicated below:

4.2.1 LOW TENSION INDUSTRIAL SERVICE-II/D (LTIS-II/D)

Sl.	Category of consumers	Demand charge (Rs/HP/ month or part thereof)	Energy charge	
			Consumption/ months(Units)	Rate (Ps/unit)
	All Three Phase			

5.0 PUBLIC WATER WORKS & PUBLIC LIGHTING

Applicability

This shall be applicable to public water works, sewerage treatment plant and sewerage pumping stations including lighting loads functioning under state government and state government undertakings and local bodies for contracted load/demand upto 100 HP.

This shall also be applicable for supply of electricity for contracted load/demand upto 75 KW to street light system including signal system belonging to state / central government / local bodies. Also applicable to traffic lights, mast lights / blinkers etc.

5.1 PUBLIC WATER WORKS (PWW)

This shall be applicable to public water works, sewerage treatment plant and sewerage pumping stations including lighting loads functioning under state government and state government undertakings and local bodies for contracted load/demand upto 100 HP.

5.2 PUBLIC LIGHTING (PL)

This shall be applicable for supply of electricity for contracted load/demand upto 75 KW to street light system including signal system belonging to state / central government / local bodies. Also applicable to traffic lights, mast lights / blinkers etc.

Tariff Rates

5.0 PUBLIC WATER WORKS (PWW)

5.1 PUBLIC WATER WORKS-I (PWW-I)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge
			Rate (Ps/unit)

OPTIONAL

5.1.1 PUBLIC WATER WORKS/D (PWW/D)

All those consumers under PWW category with 3 phase supply and with contract demand upto 100 HP opting for demand based tariff shall be required to pay at the rates indicated below:

5.1.1 PUBLIC WATER WORKS/D (PWW/D)

Sl.	Category of consumers	Demand charge (Rs/HP/ month or part thereof)	Energy charge	
			Consumption/ months(Units)	Rate (Ps/unit)
	All Three Phase			

5.2 PUBLIC LIGHTING (PL)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered		
	Unmetered		X

6.0 BULK SUPPLY SERVICES (BS)

Applicability

This tariff shall be applicable to supply of electrical energy for contracted load/demand above 30 KW upto 75 KW at three phase low tension at single point where onward distribution lines / service lines are owned and maintained by the consumers for domestic purpose or non-domestic purpose as specified in the respective tariff category.

6.1 BULK SUPPLY SERVICES-I (BS-I)

This tariff shall be applicable to supply of electrical energy for domestic services for contracted load/demand above 30 KW upto 75 KW at three phase low tension at single point where onward distribution lines / service lines are owned and maintained by the consumers as specified in the domestic service category above.

6.2 BULK SUPPLY SERVICES-II (BS-II)

This tariff shall be applicable to supply of electrical energy for non-domestic services for contracted load/demand above 30 KW upto 75 KW at three phase low tension at single point where onward distribution lines / service lines are owned and maintained by the consumers as specified in the non-domestic services category above.

Tariff Rates

6.1 BULK SUPPLY SERVICES-I (BS-I)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge (Paisa/kwh)

OPTIONAL

6.1.1 BULK SUPPLY SERVICES-I/D (BS-I/D)

All those consumers under BS-I category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

6.1.1 BULK SUPPLY SERVICES-I/D (BS-I/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption (Units)	Rate (Ps/unit)
	All Three Phase			

6.2 BULK SUPPLY SERVICES-II (BS-II)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part	Energy charge (Paisa/kwh)

		thereof)	

OPTIONAL

6.2.1 BULK SUPPLY SERVICES-II/D (BS-II/D)

All those consumers under BS-II category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

6.2.1 BULK SUPPLY SERVICES-II (BS-II/D)

Sl.	**Category of consumers**	**Demand charge (Rs/KW/ month or part thereof)**	**Energy charge**	
			Consumption/ MONTHS(Units)	**Rate (Ps/unit)**
	All Three Phase			

TERMS AND CONDITIONS OF LOW TENSION (LT) TARIFF

1. Unless otherwise agreed to, these tariffs are applicable for power supply at one point only.

2. Unless otherwise specifically stated to the contrary, the figures of energy charges relates to paise per unit (kwh) for energy consumed during the month.

3. These tariffs are exclusive of statutory levies like electricity duty/cess or any other taxes, duties/cess etc, imposed by the State Government / Central Government or any other competent authority and shall be charged extra.

4. In case payment is made through cheque and the cheque is dishonoured, an amount of Rs.200/- shall be levied as cheque return charges. The licensee may initiate action u/s 138 of the Negotiable Instrument Act, 1981 in addition to disconnection of the service.

5. Fixed/Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection. Fixed/Demand charges, wherever applicable, shall be double as and when bi-monthly billing is done. Similarly, slabs of energy consumption shall also be doubled in case of bi-monthly billing.

6. The electricity bill shall be rounded off in whole rupees. Amount less than 50 paisa shall be ignored and amount of 50 paisa and above shall be considered as one rupee.

7. Advance Payment Rebate: If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.

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

9. Delayed payment surcharge: In case a consumer does not pay energy bills in full by the due date specified in the bill, a delayed payment surcharge of one and half (1.5) percent per month or part thereof on the outstanding arrears shall be levied from the due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003.

10. Shunt Capacitor Installation

a) Every LT consumer including irrigation pump set consumers whose connected load includes induction motor (s) of capacity 3 HP and above and other low power factor consuming appliances shall arrange to install low tension shunt capacitors of appropriate capacity at his cost across terminals of his motor (s). The consumer shall ensure that the capacitors installed by him are properly matched with the actual rating of the motor so as to ensure power factor of 90% (0.9 lagging).

b) All LT consumers having welding transformers will be required to install suitable shunt capacitor(s) of adequate capacity so as to ensure power factor of not less than 90% (0.9 lagging).

c) The capacitors shall be of standard manufacture and meet the Bureau of Indian Standards specification.

d) Consumers not complying to above shall be liable to pay a power factor surcharge at the following rates:

(i) For the LT consumers whose meter is capable of recording average monthly power factor and 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 @ 0.5% on billed demand and energy charges for each fall of 0.01 in power factor upto 0.7(lagging). If such consumers maintains power factor more than 95% (0.95 lagging), a power factor incentive @ 0.25% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging)

(ii) For the LT consumers whose meter is not capable of recording average monthly power factor and such LT Consumers not complying to conditions a to c above shall be liable to pay a power factor surcharge of 10% (ten percent) of the billed fixed/demand and energy charges till the capacitors in healthy condition are installed.

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

f) No new supply to LT installations having low power factor consuming equipment such as induction motor of 3 HP and above or welding transformers etc., will be released unless shunt capacitors are installed to the satisfaction of the Board.

11. 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.

12. Billing Demand: Any LT consumer who has opted for demand based tariff, the billing of such consumer shall be on the maximum demand recorded during the month or contracted demand, whichever is higher. Such billing demand shall be rounded off to next higher digit for the purpose of billing.

13. Excess Demand: If in any month, the recorded maximum demand of the consumer exceeds 105% of its contracted demand, the normal tariff shall be applicable upto the 105% of the contract demand and that portion of demand which is in excess of 105% of the contracted demand shall be billed at double the normal rate. If the actual recorded demand of a consumer exceeds 105% of the contracted demand consecutively for three months, the licensee may issue a notice and inform the consumer to get additional contract demand sanctioned or to limit their drawl as per their contract. Otherwise the licensee shall take action as per provisions of the Act/Rules/Regulations.

Illustration: If contract demand is 60 kw whereas maximum demand recorded during the month is 70 kw, then demand for 63 kw (105% of 60 kw) shall be billed at normal rate and demand for 7 kw (70 kva-63 kw) shall be billed at twice the normal rate.

14. Defective / Damaged / Burnt Meter: In case of meter being defective / damaged / burnt the Licensee or the consumer as the case may be shall replace the same within the period specified in "Standards of Performance" Regulations issued by the Commission. Till defective meter is replaced the consumption shall be assessed and billed on an average consumption of last six meter reading cycles or average monthly consumption of corresponding six meter reading cycles of the preceding year whichever is higher from the date of meter being out of order. Such consumption shall be treated as actual consumption for all practical purposes until the meter is replaced/ rectified.

In case a functional check-meter is available then the readings of the check meter shall be used for billing purposes when main meter becomes defective/damaged/burnt.

In case the meter becomes defective within three meter reading cycles after its installation and prior consumption is not available, then billing shall be done provisionally on the basis of following load factor subject to adjustment on the average consumption of three meter reading cycles of the replaced meter:

Sl	Category of consumers	Load Factor	Average Unit
1.	Domestic	0.15	100 units/kW
2.	Non-domestic	0.20	150 units/kW
3.	Public Water Works	0.20	100 units/HP for water works 125 unit/kW for street light
4.	Irrigation & Agicultural	0.15	80 units/HP
5.	LT Industrial	0.25	135 units/HP
6.	HT Industrial (at P.F.=0.0.90 lag)	0.40	260 units/kVA

15. Contracted/Connected load/Demand exceeding LT load limit: In case of existing LT consumers whose contracted/connected load or demand exceeds the upper limit of LT supply, such consumers may either shift to HT supply or optionally continue to remain as LT consumers subject to payment of 10% surcharge on fixed and energy charges. The licensee shall not release any new connection or enhance load of existing consumers whose contracted load/demand exceeds LT limits.

16. Usage of electricity for other purpose than authorized: If either more than one room or only one room having monthly consumption exceeding 150 KWH for consecutive three months are detected in the domestic premises being used for mixed purposes having DS-II connection or any other premises which is used for a purpose other than for which it was authorized and the tariff applicable for which is higher, it shall be considered under unauthorised use of electricity and shall be dealt as per JERC Electricity Supply Code Regulations, 2010 and such connection shall further be billed on appropriate higher tariff category until a separate connection of appropriate tariff is taken for that portion.

17. FPPCA: The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula notified by the Commission. The value of K-factor shall be applicable to the different consumer categories as per the values approved in this tariff order. Such charges shall be recovered / refunded in accordance with terms & conditions specified in the FPPCA formula.

18. Temporary Supply (LT)

(i) Temporary Supply is for connection temporary in nature for a maximum period of two year. The applicability shall be as given in the respective tariff category. Temporary supply cannot be claimed by a prospective consumer as a matter of right but will normally be arranged by the licensee when a requisition is made giving due notice subject to technical feasibility and in accordance with electricity supply code issued by the Commission.

(ii) The tariff shall be chargeable as applicable to the corresponding appropriate tariff category at the following rates subject to minimum Rs ....:

Sl	Period of Supply	Tariff Rate
1.	Upto 12 months	150% of normal rate of appropriate tariff category
2.	More than 12 months and upto 18 months	175% of normal rate of appropriate tariff category
3.	More than 18 months and upto 24 months	200% of normal rate of appropriate tariff category

Fixed/Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection.

(iii) Terms of Supply of Temporary Supply shall be as below:

a) Temporary supply may be given for a period not exceeding 3 months in the first instance, the duration of which, may be extended on quarter to quarter basis subject to maximum total duration of two year.

b) In addition to the tariff charges, the consumer shall have to deposit the following charges before commencement of the temporary supply:

(i) Estimated cost of erection of temporary service line and dismantling.

(ii) Cost of irretrievable materials which cannot be taken back to service.

(iii) Meter rent for the full period of temporary connection as per appropriate tariff schedule and other miscellaneous charges.

(iv) Rental on the cost of materials of the licensee as per estimate at the rate of Rs. 15/- per month on every Rs. 100/- or part thereof.

(v) Ten per cent on the total cost of the estimate for the temporary service connection to cover as security for loss of materials and contingencies. In case such loss is not noticed, the amount will be refunded.

c) The applicants for temporary supply shall be required to make a deposit in advance of the cost as detailed above including fixed/demand charges and the energy consumption charges estimated for full period on the basis of contracted load/demand. This will however, be adjusted against the final bill that will be rendered on disconnection of supply.

d) If the consumer intends to extend the temporary supply beyond the period originally applied for, he will have to deposit in advance all applicable charges as detailed above including the estimated electricity consumption charges, for the period to be extended and final bill as well, for the previous period, if any.

19. Seasonal Supply (LT)

(i) Seasonal supply shall be given to any consumer on written request to the licensee subject to the following conditions.

Sl	Period of Supply	Tariff Rate
1.	Upto 3 consecutive months in a year	Appropriate tariff plus 40 percent
2.	More than 3 consecutive months and upto 6 consecutive months in a year	Appropriate tariff plus 30 percent
3.	More than 6 consecutive months and upto 9 consecutive months in a year	Appropriate tariff plus 20 percent
4.	More than 9 consecutive months but less than one year	Appropriate tariff plus 10 percent.

(ii) The meter rent and other charges as provided in the appropriate tariff are applicable to seasonal loads and would be charged extra for the entire period of supply.

(iii) The supply would be disconnected after the end of the period unless the consumer wants the supply to be continued. Any reconnection charges have to be borne by the consumer.

(iv) Consumer proposing to avail seasonal supply shall sign an agreement with the licensee to avail power supply for a minimum period of 2 years in the case of LT category of supply.
(v)The consumers must avail supply in terms of whole calendar month continuously.
(vi) The consumer is required to apply for seasonal supply and pay initial cost and security deposit as an applicant for normal electricity supply.
(vii) The consumer shall ensure payment of monthly energy bills within 7 days of its receipt. The supply will be disconnected if payment is not made on due date.
20. Schedule of Tariff and Other charges approved in this Tariff Order shall remain in force until it is amended by the Commission.

PART - B: HIGH TENSION (HT) SUPPLY

System of supply: High Tension – Alternating Current, 50 cycles per second, 3 phase at 11 KV / 22 KV / 33 KV
The tariffs shall be applicable for supply of electricity for use in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA depending upon the supply voltage for different contract demand as specified below:

Sl	Supply Voltage	Contract Demand	
		Minimum	maximum
1	11 kV or 22 kV	80 kVA	1500kVA
2	33 kV	1501 kVA	5000 kVA

CATEGORY OF SERVICE AND TARIFF RATES

8.0 HIGH TENSION SERVICE-HTS

Applicability

The tariffs shall be applicable for supply of electricity for use in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

Note:

(i) A surcharge @ 10% shall be levied on fixed/demand charge and energy charge if supply is availed at LT voltage by the existing consumers against specified 11 kV.

(ii) A surcharge @ 5% shall be levied on fixed/demand charge and energy charge if supply is availed at 11 kV or 22 kV by the existing consumers against specified 33 kV.

(iii) An incentive @ 3% shall be given on demand charge and energy charge if supply voltage is at 33 kV against specified 11 kV.

(iv) An incentive @ 3% shall be given on demand charge and energy charge if supply voltage is at 66 kV EHT voltage against specified 33 kV HT voltage.

8.1 HIGH TENSION/DS (HT/DS)

The tariffs shall be applicable for supply of electricity for domestic use defined under 1.0 above in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.2 HIGH TENSION/NDS (HT/NDS)

8.2.1HIGH TENSION/NDS-I (HT/NDS-I)

The tariffs shall be applicable for supply of electricity for non-domestic use defined under 2.0 above including shopping malls, multiplexes and other commercial installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.2.2 HIGH TENSION/NDS-II (HT/NDS-II)

The tariffs shall be applicable for supply of electricity for non-domestic (religious and charitable) use defined under 2.0 above with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.3 HIGH TENSION/IAS (HT/IAS)

The tariffs shall be applicable for supply of electricity for irrigation and agricultural use defined under 3.0 above in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.4 HIGH TENSION/INDUSTRIAL (HTIS-I)

The tariffs shall be applicable for supply of electricity for industrial use defined under 4.0 above other than power intensive covered under HTS-IV tariff in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.5 HIGH TENSION/POWER INCENTIVE (HTIS-II)

The tariffs shall be applicable for supply of electricity for power intensive, metal alloy, steel melting, ferro-alloy, ferro-metallurgical use in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.6 HIGH TENSION/PWW (HT/PWW)

The tariffs shall be applicable for supply of electricity for public water works use defined under 5.0 above in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

Tariff Rates

8.0 HIGH TENSION SERVICE-HTS

8.1 HIGH TENSION/DS (HT/DS)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge
			Rate (Ps/unit)

8.2.1 HIGH TENSION/NDS (HT/NDS-I)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge
			Rate (Ps/unit)

8.2.2 HIGH TENSION/NDS (HT/NDS-II)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge
			Rate (Ps/unit)

8.3 HIGH TENSION/IAS (HT/IAS)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.4 HIGH TENSION/INDUSRIAL (HTIS-I)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.5 HIGH TENSION/POWER INCENTIVE (HTIS-II)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.6 HIGH TENSION/PWW (HT/PWW)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

PART - C: EXTRA HIGH TENSION (EHT) SUPPLY

System of supply: Extra High Tension – Alternating Current, 50 cycles per second, 3 phase at 66 KV / 110 KV / 132 KV / 220 KV

The tariffs shall be applicable for supply of electricity for use in installations with contract demand more than 5000 KVA depending upon the supply voltage for different contract demand as specified below:

Sl	Supply Voltage	Contract Demand

		minimum	Maximum
1	66 kV	5001 kVA	25000 kVA
2	110 kV or 132 kV or 220 kV	Above 25000 kVA	

CATEGORY OF SERVICE AND TARIFF RATES

9.0 EXTRA HIGH TENSION

Applicability

The tariffs shall be applicable for supply of electricity for use in installations with a minimum contract demand of 5001 KVA on extra high tension voltage at 66 KV / 110 KV / 132 KV / 220 KV as per the specified voltage wise contract demand.

Note:

(i) A surcharge @ 5% shall be levied on fixed/demand charge and energy charge if supply is availed at 33 kV HT voltage by existing consumers against specified 66 kV EHT voltage.

(ii) A surcharge @ 5% shall be levied on fixed/demand charge and energy charge if supply is availed at 66 kV EHT voltage by existing consumers against specified 110 KV / 132 KV / 220 KV EHT voltage.

(iii) An incentive @ 3% shall be given on demand charge and energy charge if supply voltage is at 110 kV or 132 kV or 220 kV against specified 66 kV.

Tariff Rates

9.0 EXTRA HIGH TENSION SERVICES (EHTS)

Sl.	**Category of consumers**	**Fixed charge (Rs/KVA/ month or part thereof)**	**Energy charge Rate (Ps/unit)**

<u>TERMS AND CONDITIONS OF HT and EHT TARIFF</u>

1. Unless otherwise agreed to, these tariffs are applicable for power supply at one point only.

2. Unless otherwise specifically stated to the contrary, the figures of energy charges relates to paisa per unit for energy consumed during the month.

3. These tariffs are exclusive of statutory levies like electricity duty/cess or any other taxes, duties/cess etc., imposed by the State Government / Central Government or any other competent authority and shall be charged extra.
4. In case, payment is made through cheque and the cheque is dishonoured, an amount of Rs.200/- shall be levied as cheque return charges. The licensee may initiate action u/s 138 of the Negotiable Instrument Act, 1981 in addition to disconnection of the service.
5. The supply voltage for different contract demand as specified below:

Sl	Supply Voltage	Contract Demand	
		minimum	maximum
1	11 kV or 22 kV	80 kVA	1500kVA
2	33 kV	1501 kVA	5000 kVA
3	66 kV	5001 kVA	25000 kVA
4	110 kV or 132 kV or 220 kV	Above 25000 kVA	

6. Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection. Demand charges, wherever applicable, shall be double as and when bi-monthly billing is done. Similarly, slabs of energy consumption shall also be doubled in case of bi-monthly billing.
7. The electricity bill shall be rounded off in whole rupees. Amount less than 50 paisa shall be ignored and amount of 50 paisa and above shall be considered as one rupee.
8. Advance Payment Rebate: If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.
9. Prompt Payment Rebate: If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.
10. Delayed payment surcharge: In case a consumer does not pay energy bills in full by the due date specified in the bill, a delayed payment surcharge of one and half (1.5) percent per month or part thereof on the outstanding arrears shall be levied from the due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003.
11. Power Factor Surcharge / Incentive
(a)The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor upto 0.7(lagging)

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

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

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

12. 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.

13. Billing Demand: The billing shall be on the maximum demand recorded during the month or 75% of contracted demand, whichever is higher. Such billing demand shall be rounded off to next higher digit for the purpose of billing.

14. Excess Demand: If in any month, the recorded maximum demand of the consumer exceeds 105% of its contracted demand, the normal tariff shall be applicable upto the 105% of the contract demand and that portion of demand which is in excess of 105% of the contracted demand shall be billed at double the normal rate. If the actual recorded demand of a consumer exceeds 105% of the contracted demand consecutively for three months, the licensee may issue a notice and inform the consumer to get additional contract demand sanctioned or to limit their drawl as per their contract. Otherwise the licensee shall take action as per provisions of the Act/Rules/Regulations.

Illustration: If contract demand is 100 kva whereas maximum demand recorded during the month is 115 kva, then demand for 105 kva (105% of 100 kva) shall be billed at normal rate and demand for 15 kva (120 kva-105 kva) shall be billed at twice the normal rate.

15. Defective / Damaged / Burnt Meter: In case of meter being defective / damaged / burnt, the licensee or the consumer as the case may be shall replace the same within the period specified in "Standards of Performance" Regulations issued by the Commission. Till defective meter is replaced the consumption shall be assessed and billed on an average consumption of last six meter reading cycles or average monthly consumption of corresponding six meter reading cycles of the preceding year whichever is higher from the date of meter being out of order. Such consumption shall be treated as actual consumption for all practical purposes until the meter is replaced/ rectified.

In case a functional check-meter is available then the readings of the check meter shall be used for billing purposes when main meter becomes defective/damaged/burnt.

In case the meter becomes defective immediately after its installation and prior consumption is available, then billing shall be done provisionally on the basis of following load factor subject to adjustment on the average consumption of three meter reading cycles of the replaced meter.

16. FPPCA: The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula notified by the Commission. The value of K-factor shall be applicable to the different consumer categories as per the values approved in this tariff order. Such charges shall be recovered / refunded in accordance with terms & conditions specified in the FPPCA formula.

17. Temporary Supply (HT & EHT)

(i) Temporary Supply is for connection temporary in nature for a maximum period of two year. The applicability shall be as given in the respective tariff category. Temporary supply cannot be claimed by a prospective consumer as a matter of right but will normally be arranged by the licensee when a requisition is made giving due notice subject to technical feasibility and in accordance with electricity supply code issued by the Commission.

(ii) The tariff shall be chargeable as applicable to the corresponding appropriate tariff category at the following rates subject to minimum Rs ....:

Sl	Period of Supply	Tariff Rate
1.	Upto 12 months	150% of normal rate of appropriate tariff category
2.	More than 12 months and upto 18 months	175% of normal rate of appropriate tariff category
3.	More than 18 months and upto 24 months	200% of normal rate of appropriate tariff category

Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection.

(iii) Terms of Supply of Temporary Supply shall be as below:

a) Temporary supply may be given for a period not exceeding 3 months in the first instance, the duration of which may be extended on quarter to quarter basis subject to maximum total duration of two year.

b) In addition to the tariff charges, the consumer shall have to deposit the following charges before commencement of the temporary supply:

(i) Estimated cost of erection of temporary service line and dismantling.

(ii) Cost of irretrievable materials which cannot be taken back to service.

(iii) Meter rent for the full period of temporary connection as per appropriate tariff schedule and other miscellaneous charges.

(iv) Rental on the cost of materials of the licensee as per estimate at the rate of Rs. 15/- per month on every Rs. 100/- or part thereof.

(v) Ten per cent on the total cost of the estimate for the temporary service connection to cover as security for loss of materials and contingencies. In case such loss is not noticed, the amount will be refunded.

c) The applicants for temporary supply shall be required to make a deposit in advance of the cost as detailed above including demand charges and the energy consumption charges estimated for full period on the basis of contracted demand. This will however, be adjusted against the final bill that will be rendered on disconnection of supply.

d) If the consumer intends to extend the temporary supply beyond the period originally applied for, he will have to deposit in advance all applicable charges as detailed above including the estimated electricity consumption charges, for the period to be extended and final bill as well, for the previous period, if any.

18. Seasonal Supply (HT & EHT)

(i) Seasonal supply shall be given to any consumer on written request to the Board subject to the following conditions.

Sl	Period of Supply	Tariff Rate
1.	Upto 3 consecutive months in a year	Appropriate tariff plus 40 percent
2.	More than 3 consecutive months and upto 6 consecutive months in a year	Appropriate tariff plus 30 percent
3.	More than 6 consecutive months and upto 9 consecutive months in a year	Appropriate tariff plus 20 percent
4.	More than 9 consecutive months but less than one year	Appropriate tariff plus 10 percent.

(ii) The meter rent and other charges as provided in the appropriate tariff are applicable to seasonal loads and would be charged extra for the entire period of supply.

(iii) The supply would be disconnected after the end of the period unless the consumer wants the supply to be continued. Any reconnection charges have to be borne by the consumer.

(iv) Consumer proposing to avail seasonal supply shall sign an agreement with the licensee to avail power supply for a minimum period of 3 years in the case of HT category of supply.

(v) The consumers must avail supply in terms of whole calendar month continuously.

(vi) The consumer is required to apply for seasonal supply and pay initial cost and security deposit as an applicant for normal electricity supply.

(vii) The consumer shall ensure payment of monthly energy bills within 7 days of its receipt. The supply will be disconnected if payment is not made on due date.

19. Time of Day tariff (ToD)

(i) Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.

(ii)The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

Time of use	Demand Charges	Energy Charges
Normal period (6:00 a.m. to 6:00 p.m)	Normal Rate	Normal rate of energy charges
Evening peak load period (6:00 p.m to 10.00 p.m)	Normal Rate	120% of normal rate of energy charges
Off-peak load period (10:00 p.m to 6:00 a.m)	Normal Rate	90% of normal rate of energy charges

(iii) Applicability and Terms and Conditions of TOD tariff:

(a) TOD tariff shall be optional unless otherwise specifically stated to the contrary in the tariff order.

(b) The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from other sources through wheeling of power.

(c) The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff.

(d) In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.

20. Schedule of Tariff and Other charges approved in this Tariff Order shall be as approved in the tariff order.

PART - D: MISCELLANEOUS AND GENERAL CHARGES (FOR ALL CATEGORIES OF CONSUMERS)

1 METER RENT:

i) BPL
ii) LT Single Phase except BPL
iii) LT Three Phase Upto 100 Amps
iv) LT meter with CT
v) HT meter with CTPT combined unit
vi) EHT meter with CTPT combined unit

2 APPLICATION FEE FOR NEW CONNECTION / REDUCTION OF CONTRACTED LOAD OR DEMAND / ENHANCEMENT OF CONTRACTED LOAD OR DEMAND/REQUEST FOR PERMANENT DISCONNECTION:

(i) BPL
(ii) LT Single phase except BPL
(iii) LT Three phase
(iv) HTS
(v) EHTS

3 TESTING / INSPECTION OF CONSUMER'S INSTALLATION:

(i) Initial Test / Inspection Free of cost
(ii) Subsequent test and inspection Rs. 100.00 for single phase necessitated by fault in installation or by not complying with terms and conditions of supply connection
a) for three phase LT connection
b) for HT connection.

4 METER TESTING FEE:

(i) LT Single Phase meter
(ii) LT Three Phase meter
(iii) LT Three Phase meter with CT
(iv) LT Tri-vector meter
(v) HT Tri-vector meter
(vi) EHT Tri-vector meter
(vii) LT CT set
(viii) HT metering equipment
(ix) EHT metering equipment

Note: If the meter is tested at third party testing laboratory at the request of the consumer then the fees charged by the testing laboratory will be payable by the consumer.

5 REMOVING / RE-FIXING / CHANGING OF METER / METER BOARD AT CONSUMER'S REQUEST:

(i) BPL
(ii) LT Single Phase meter
(iii) LT Three Phase meter
(iv) LT Three Phase meter with CT
(v) LT Tri-vector meter with CT
(vi) HT Tri-vector meter with metering equipment

(vii) EHT Tri-vector meter with metering equipment

Note: Cost of material, as required, will be borne by the consumer

6 RECONNECTION CHARGE:

(i) BPL
(ii) LT Single Phase supply
(iii) LT Three Phase supply
(iv) HT supply
(v) EHT supply

7 SUPERVISION, LABOUR AND ESTABLISHMENT CHARGE FOR SERVICE CONNECTION:

(i) BPL
(ii) LT Single Phase
(iii) LT Three Phase
(iv) HT As per approved estimate
(v) EHT As per approved estimate

11. CONCLUSION OF COMMISSION'S ORDER

Having considered the Petition no. 100/2013 of Electricity Department of UT Chandigarh for approval of Aggregate Revenue Requirement (ARR) and determination of retail tariffs for supply of energy and data gaps submitted by the utility, Commission approves the Aggregate Revenue Requirement (ARR) and the revised tariff schedule for ED Chandigarh.

1. The break-up of the Aggregate Revenue Requirement approved for ED Chandigarh for the year 2013-14 is given below.

Sr. No.	Particulars	FY 2013-14 (Approved)
		(Rs. Crs)
1	Cost of fuel	-
2	Cost of power purchase	605.34
3	Employee cost	58.28
4	Repair & Maintenance expenses	10.42
5	Administration and General expenses	2.52
6	Depreciation	3.00
7	Interest and finance charges	6.20
8	Interest on working capital & Interest on Security Deposit	6.10
9	Return on NFA /Equity	1.31
10	Provision for Bad Debt	3.58
12	**Total Revenue Requirement**	**696.75**
13	Less: Non-Tariff Income	14.63
14	Less: Revenue from Sale through UI	-
15	Less: Revenue from Sale of Power-Exchanges	-
16	**Net Revenue Requirement (12-13-14-15)**	**682.11**
17	Revenue from Retail Sale at Existing Tariff for FY 2013-14	716.43
18	**Net Gap /(Suplus)(16-17)**	**(34.32)**
19	Gap for the previous year	32.87
20	**Total gap (18+19)**	**(1.45)**

2. The approved retail tariff (as given below) shall be in accordance with the tariff schedule specified in this order to meet the ARR of FY 2013-14 including gap of FY 2012-13.

S.No.	Category/Consumption Slab	FY 2013-14	
		Fixed Charges	Variable Charges
		Rs. per kVA/KW/ HP per month	Rs/KWh
A	**Domestic**		
1	0-150 kWh	0.00	2.30
2	151 kWh - 400 kWh	0.00	4.20
3	Above 400 kWh	0.00	4.40
B	**Commercial**		
1	0-150 kWh	6.00	4.30
2	151 kWh - 400 kWh	70.00	4.50
3	Above 400 kWh	70.00	4.70
C	**Large Supply**	70.00	4.70
D	**Small Power**	6.00	4.40
E	**Medium Supply**	70.00	4.50
F	**Agriculture**	0.00	2.30
G	**Public Lighting**		
1	Public lighting system	70.00	4.30
2	Advertisement /Neon sign boards	70.00	6.00
H	**Bulk Supply**	70.00	4.50
I	**Others-Temporary Supply**	0.00	6.70

3. The value of K factor for the different consumer categories for use in the FPPCA formula is as below.

S. No.	Category/Consumption Slab	K factor for FPPCA formula for FY 2013-14
A	**Domestic**	
1	0-150 kWh	0.49
2	151 kWh-400 kWh	0.90
3	Above 400 kWh	0.94
B	**Commercial**	
4	0-150 kWh	1.19
5	151 kWh-400 kWh	1.38
6	Above 400 kWh	1.09
C	**Large Supply**	1.09
D	**Small Power**	0.96
E	**Medium Supply**	1.07
F	**Agriculture**	N/A
G	**Public Lighting**	0.97
H	**Bulk Supply**	1.03
I	**Others-Temporary Supply**	N/A

Note: The FPPCA formula is not applicable for the consumer categories including BPL, agriculture and temporary supply. Therefore, the K factor against these categories is shown as not applicable (N/A).

4. <u>All existing provisions which are not modified by this order, shall continue to be in force. The licensee shall publish the revised tariff structure and the salient features of tariff within one week in three daily newspapers in Hindi, Punjabi and one in English, having wide circulation in their respective areas of supply. The distribution licensee shall also publish a booklet in Hindi, Punjabi and English containing all details of tariff and its applicability for the benefit of consumers. It should be made available for sale to public at a nominal price.</u>

5. The licensee will compute fuel and power procurement cost variations on quarterly basis and adjustment shall be made in consumer bills starting next month following the end of the quarter based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula notified by the Commission. For the purpose of calculation using FPPCA formula notified by the Commission, **the approved per unit cost of power purchase (RApproved) for use in the FPPCA formula (paisa per unit) is 292 paisa per unit for FY 2013-14.** The approved per unit cost of power purchase for FY 2013-14 to be considered in the FPPCA formula excluding transmission charges of PGCIL, SLDC charges , RLDC charges and charges for reactive energy (paise per unit).

6. Copy of this order may be sent to petitioner, objectors, CEA and Administration of UT of Chandigarh. It shall be placed on the website of the Commission.

Sd/-	**Sd/-**
(S.K. Chaturvedi)	**(Dr. V.K.Garg)**
Member	**Chairman**

Place: Gurgaon
Date: 15th April 2013

Certified Copy
(R. K. Malik)
Secretary

12. TARIFF SCHEDULE

GENERAL CONDITIONS FOR LT & HT SUPPLY

The above mentioned LT/HT Tariffs are subjected to the following conditions.

General Terms and Conditions

1) The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.

2) Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.

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

4) Fixed charges, wherever applicable, will be charged on pro-rata basis from the date of release of connection. Fixed charges, wherever applicable, will be double as and when bi-monthly billing is carried out, Similarly slabs of energy consumption will also be considered accordingly in case of bi-monthly billing.

5) The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 75% of contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal rate. The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulation. If such over-drawl is more than 20% of the contract demand then the connections shall be disconnected immediately.

   Explanation: Assuming the contract demand as 100 KVA, maximum demand at 120 KVA and total energy consumption as 12000 kWh, then the consumption corresponding to the contract demand will be 10000 kWh (12000*100/120) and consumption corresponding to the excess demand will be 2000 kWh. This excess demand of 20 KVA and excess consumption of 2000 kWh will be billed at twice the respective normal rate. Such connections drawing more than 120 kVA, shall be disconnected immediately.

6) Power Factor Charges for HT and EHT

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

(a)The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor upto 0.7(lagging)

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

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

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

7) 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 demand/fixed and 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 demand/fixed and energy charges of that month for every 1% fall in power factor from90%
3.	Below 85% and upto 80%	1.5 % of billed demand/fixed and energy charges of that month for energy 1% fall in P.F from 85%
4.	Below 80% and upto 75%	2% of billed demand/fixed and energy charges of the month for energy 1% fall in P.F from 80%
5.	Below 75%	3% of billed demand/fixed and 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.

8) **Delayed payment surcharge** shall be applicable to all categories of consumers**.** Delayed payment surcharge of 2% per month or part thereof shall be levied on all arrears of bills. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paisa shall be ignored and amount of 50 paisa or more shall be rounded off to next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only upto the month of permanent disconnection.

9) **Advance Payment Rebate:** If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.

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

11) The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula separately notified by the Commission under the Regulation.

Such charges shall be recovered / refunded in accordance with the terms and conditions specified in the FPPCA formula.

12) The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order for FY 2013-14.

13) Unauthorized use of Electricity

Cases to be treated as Unauthorized Use of Electricity

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

(i) Use of electricity by any artificial means; or

(ii) Unauthorized use of electricity by means without the permission of the concerned person or authority or licensee; or

(iii) Use of Electricity in the premises where supply is disconnected by the licensee.

(iv) Disconnection of neutral

(v) Tampering with meter or equipments associated with metering provided by the licensee and not reported to the licensee

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

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

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

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

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

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

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

14) **Time of Day (TOD) tariff**

(i) Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.

(ii)The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

Time of use	Demand Charges	Energy Charges
Normal period (6:00 a.m. to 6:00 p.m)	Normal Rate	Normal rate of energy charges
Evening peak load period (6:00 p.m to 10.00 p.m)	Normal Rate	120% of normal rate of energy charges

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

(iii) Applicability and Terms and Conditions of TOD tariff:

(a) TOD tariff shall be **optional** unless otherwise specifically stated to the contrary in the tariff order.
(b) The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from other sources through wheeling of power.
(c) The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff.
(d) In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.

15) **Schedule of Miscellaneous and General Charges shall be as approved in this tariff order, as below.**

Miscellaneous and General Charges

Sr. No	Description	Approved
A	**Application processing charges for new connection/ enhancement of load/ reduction of load/**	
i	Domestic supply	Rs 25/-
ii	Non-Domestic Supply	Rs 100/-
iii	SP, MS and street lighting supply.	Rs 250/-
iv	LS and bulk supply	Rs 500/-
v	AP supply	Rs 25/-
vi	Temporary metered supply	Two times the normal rates of category of permanent supply
B	**Charges for Re-fixing/ Changing of meter /Meter Board in the same premise on consumer request when no additional material is required. (When the cause leading to subsequent change/replacement of meter is either manufacturing defect or Department's fault then, it shall be free of cost**	

Sr. No.	Description	Approved
	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/-

Sr. No.	Description	Approved
ii	Non-Domestic Supply	Rs 500/-
iii	SP, MS and street lighting supply.	Rs 500/-
iv	LS and bulk supply	Rs 1000/-
v	AP supply	Rs 250/-
vi	Temporary metered supply	Rs 1500/-
F	**Testing/ Inspection of Consumer's installation**	
a	Initial Test/ Inspection	Free of Cost.
b	For subsequent test of a new installation or an extension to an existing installation if the installation is found to be defective or the wiring contractor or his representative fails to be present	
i	Single Phase	Rs 150/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
ii	Three Phase	Rs 200/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
iii	MS/BS loads upto 100 kW	Rs 500/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
iv	LS/BS (loads above 100 kW)	Rs 1000/- (Payable in advance for each subsequent visit for the purpose of testing the installation.)
G	**Meter Reading Cards/ Passbook (New/ Replacement)**	
i	Provision of meter reading cards including PVC jacket	Rs 5/- per card
ii	Replacement of meter card found to be missing on consumer's premises	

Sr. No	Description	Approved
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
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 500/- per month
v	33 kV Metering System	Rs 1000/- per month
vi	66 kV Metering System	Rs 2000/- per month
I	**Replacement of broken glass**	
a	Replacement of broken glass of meter cupboard (when the cause of the breakage is considered to be an act or fault of the consumer).	Rs 60/-
b	Replacement of meter glass where the same has been tampered with or broken by the consumer	
i	Single phase meter	Rs 250/-
ii	Three phase meter	Rs 450/-
J	**Supply of duplicate copies of electricity bills**	
i	Domestic consumers	Rs 5/-
ii	Non-Domestic consumers	Rs 10/-
iii	Temporary consumers	Rs 10/-
iv	L.T. Industrial (upto 20 kW) & AP consumer	Rs 10/-

Sr. No.	Description	Approved
v	L.T. Industrial (above 20 kW) & Street lighting consumer	Rs 15/-
vi	H.T. Industrial & bulk supply consumer	Rs 20/-
K	**Review of electricity bills**	
a	(If the accuracy of licensee's bill is challenged by the consumer and a review of the bills is demanded)	
i	Single Phase Supply	Rs 10/-
ii	Three Phase Supply	
	load upto 20 kW	Rs 250/-
	load above 20 kW upto 60 kW	Rs 450/-
	load above 60 kW upto 100 kW	Rs 750/-
iii	Large Supply (above 100 kW)	Rs 1000/-
	NOTE: If the challenged bill is found to be incorrect ,the credit of the fee will be given to the consumer, otherwise these will be forfeited.	
L	**Testing and calibration including sealing of energy meter owned /supplied by the consumer**	
i	Single Phase	Rs 100/-
ii	Polyphase whole current meter	Rs 500/-
iii	Polyphase meters with CTs	Rs 1200/-
iv	HT and EHT metering equipment	Rs 3500/-
M	**Checking of the capacitors at the request of the consumer**	
a	Consumer receiving supply at	
i	230/440 V	Rs 250/- per visit
ii	Above 400 V and up to 11 KV	Rs 500/- per visit
N	**Rates for Security Deposit for new/extension in load only.**	
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	**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/-

Sr. No	Description	Approved
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/-
P	Special Meter reading charges in case of change in occupancy/ vacation of premises for domestic consumers	Rs. 50/-

SCHEDULE FOR SERVICE CONNECTION CHARGES AND SERVICE RENTALS

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

A. SERVICE CONNECTION CHARGES FOR DOMESTIC SUPPLY

Sr No	Particulars	Category	Rs
1	**Single Phase Fixed Per kW Charges**		
a	**Up to 1 kW**	**Domestic**	**250**
		NRS	**250**
b	**Above 1 kW and up to 3 kW**	**Domestic**	**300**
		NRS	**300**
c	**Above 3 kW and 5 kW**	**Domestic**	**500**
		NRS	**750**
2	**Three Phase Fixed Per kW Charges**		
a	**Above 5 kW**	**Domestic**	**75**
		NRS	**1000**

Variable Charges

No variable charges are leviable upto 75 meters. Beyond 75 meters for all loads variable charges at Rs 125 per meter length of service line shall recoverable for loads in excess of 5 kW.

a) Domestic and Non Residential consumers falling under the following categories have the option either to pay in lump sum the service connection charge as mentioned under the preceding clause or to pay monthly service rentals at 1.6 paisa per rupee of the estimated cost of the service line excluding the cost of 30.48 meters.

i) Members of Schedule Castes.

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

b) All such prospective and existing consumer who will pay or have paid service connection charges in full shall be exempted from the payment of monthly service rentals.

c) The service rentals to the consumers existing prior to 1-11-2002, if applicable already shall continue

B. SERVICE CONNECTION CHARGES FOR INDUSTRIAL AND BULK SUPPLY

For new Connections:

Sr. No	Load	Service Connection Charge
1	Up to 60 kW	Rs 750/kW

Service connection charges under Para i) shall be applicable for loads upto 60KW where the length of new and augmented or both line(s) to be provided is upto 100 meters which will include 11kV line (whether overhead or cable LT line and service cable. Where this limit exceeds 100 meters, applicant shall be required to pay actual cost of RS 125 Per meter of 11 kV line, LT line and service cable in excess of 100 meters as additional service connection charges (nonrefundable).However, no component of distribution substation transformer to be created would be charged wherever applicable.

Extension of Load

a) Where the consumer is either paying service rentals or had paid the service connection charges on kW basis for the original load.

i) Extension in load bringing To be charged at Rs 750 per the total load upto 60 KW KW for extension part only. However charges for service line in excess of 100 meters shall be charged at Rs 125 per meter for length of service line (new or augmented or both) feeding such consumer. Rentals on original load, if applicable, already shall continue.

b) Where the consumers had paid the service connection charge in full.

ii) No charges for extension shall be recoverable where the cost of service/common part of service line had been paid by the applicant at the time of release of original connection provided: No augmentation of service/common portion of service lines had been carried out ever since the release of connection and also the additional load can be released from the existing line without augmentation and the cost deposited by the consumer at the time of release of original connection is not less than 'per kW charges' payable on the basis of total connected load (including extension in load) For calculating per kW charges, the rate as applicable at the time of release of original connection shall apply for the existing load and prevailing rates for the extension in load. Difference, if any, between the actual cost paid and the recoverable amount 'per KW charges' shall be payable by such consumers at the time of extension in load. This shall also apply to the cases fed through independent feeder laid at the cost of the consumer. The cost of line/bay (33/66/132/220kV) paid by the consumer at the time of clubbing/conversion paid by the consumer at the time of clubbing of supply to higher voltage shall be appropriated towards service connection charges at the time of subsequent release of extension in load, if applicable. However, for calculating total 'per kW charges' service connection charges already recovered in respect of clubbing cases, applicable rates to different connections as existing prior to clubbing are to be taken into account.

Cases involving augmentation of service/Common portion of service line or if the augmentation had taken place subsequent to release of connection shall be default with as per provisions of sub para (a)

c) While accessing the connected load for working out service connection charges, both general and industrial loads shall be taken into account.

d) The per kW, service charges for extension in load shall be as contained in Para 2 above and those shall be, in addition to the service rentals on the original load, if applicable thereon.

e) An increase in the connected load even without increase in the contract demand shall call for payment of service connection charges an per kW basis as applicable to the category in which total connected load after extension falls and shall be recoverable for extension part only. Consumers seeking extension in contract demand within the sanctioned connected load shall not be required to pay service connection charges on KW basis.

f) Consumers seeking contract demand higher than 60% of the connected load, shall be charged one time charge termed as 'Contract Demand Charges' as under :

Sr. No	Particulars	Rs/kVA
1	**For Contract Demand above 60% and up to 80% of connected load**	**200**
2	**For Contract Demand above 80% and up to 100% of connected load**	**300**
3	**Large Supply Consumers getting at 33 kV and above are exempted from the payment of one time contract**	

	demand charges

g) In case of LT connections, Service rentals to the consumer existing prior to 1-11- 2002, if applicable already shall continue.

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

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

a) If the extension in load applied by the consumer is in excess of the capacity of line already erected or more than 100 % of the original load, consumer shall pay the service connection charges as applicable to the new applicants.

b) If during the period of 5 Years from the date of connection some load has already been released from the line, whose entire cost has been paid by the consumer, who seeks extension in load within five years upto the extent of the capacity of the line or 100% of the original load within 5 years upto the extent of the capacity of the line or 100 % of the original load, whichever is lesser, release of additional load shall be regulated as under:

Load released on voltage above 11 kV and loads 1MW and above on 11kV:
Extension in load to the original consumer shall be allowed(within the contract demand for which line was originally erected for him) at the cost of the board, even if augmentation/erection of new lines is required.

Load less than 1MW released on 11 kV
In this case care should to taken for a period of 5 years that a margin of 100 % of the load of the original consumer is available in the capacity of the line. if other consumer(s) wants connection(s) to be released by utilizing the available margin, new consumer(s) singly or jointly, as the case may be shall pay towards

the cost of augmentation of line so that sufficient margin in capacity is available to cater to the additional requirement of the original consumer.

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

D. SERVICE CONNECTION CHARGES FOR AGRICULTURE POWER

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

The detail tariff schedule is as under:

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 recognized education institutions, viz schools, colleges, universities, ITI 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 the dwelling is used for the mixed load purposes the connection shall be billed for the purpose for which the tariffs is higher.

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

iii. Private education institutions not recognized by the Chandigarh Administration 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	Energy charge
	Rs. per KW per Month	Rs./KWh
0-150 kWh	0.00	2.30
151-400 kWh	0.00	4.20
Above 400 KWh	0.00	4.40

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 such 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	Energy charge
	Rs. per KW per Month	Rs./KWh
0-150 kWh	6.00	4.30
151-400 kWh	70.00	4.50
Above 400 KWh	70.00	4.70

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 stepdown 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	Consumption Slab	Fixed charge	Energy charge
		Rs. per KW per Month	Rs./KWh
Large Power Supply	All units	70.00	4.70

POINT OF SUPPLY

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

CONTRACT DEMAND

Contract demand is the load **k W, k V A** 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, 400 volts,or at 11 kV for load above 60 KW.

TARIFF

Consumption range	Consumption Slab	Fixed charge	Energy charge
		Rs. per KW per Month	Rs./KWh
Medium Power Supply	All units	70.00	4.50

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	Consumption Slab	Fixed charge	Energy charge
		Rs. per KW per Month	Rs./KWh
Small Industrial Supply	All units	6.00	4.40

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	Consumption Slab	Fixed charge	Energy charge
		Rs. per KW per Month	Rs./KWh
Agricultural Pumping Supply	All units	0.00	2.30

NOTE

a) Pumping sets shall be ISI marked. The responsibility for ensuring installation of ISI marked pumping sets as well as shunt capacitors shall be that of JE concerned, who shall verify the same at the time of verification of test reports before release of connection.

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

c) An agriculture consumer, if he so desires, may shift the location within his premises of his connection, with the approval of the competent authority, after payment of appropriate charges.

POINT OF SUPPLY

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

7. PUBLIC LIGHTING (PL)

APPLICABILITY

This tariff schedule shall apply for use of Public Lighting system including signaling system, road and park lighting managed by municipal corporation, panchayats, institutions(at the discretion of the supplier)etc.

The tariff schedule shall also apply for use of electricity by street lights managed/outsourced to an external agency and advertisement boards, sign boards, bill boards, signages etc., (apart from the advertisement boards installed on commercial establishment & charged under commercial tariff).

CHARACTER OF SERVICE

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

TARIFF

Consumption range	Consumption Slab	Fixed charge	Energy charge
		Rs. per KW per Month	Rs./KWh
Public Lightning system - Public lighting system managed by Municipal Corporation, Panchayat and Street lights maintained/outsourced to an external agency	All units	70	4.3
Advertisement /Neon sign boards - Advertisement boards, bill boards, sign boards (apart from advertisement boards installed on the commercial establishments & charged under commercial tariff)		70	6

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	Consumption Slab	Fixed charge	Energy charge
		Rs. per KW per Month	Rs./KWh
Bulk Supply	All units	70.00	4.50

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.

CHARACTEROFSERVICE

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

TARIFF

Consumption range	Consumption Slab	Fixed charge	Energy charge
		Rs. per KW per Month	Rs./KWh
Temporary Supply	All units	0.00	6.70

Service character of Supply for load above 5000 kW

Supply to any category of consumers above 5000kW shall be given at voltage level of 66 KV and above only.