# TARIFF ORDER

## Determination of
## Aggregate Revenue Requirement & Retail Tariff
## for
## FY 2014-15,
## Review for FY 2013-14
## &
## Truing Up of FY 2011-12 and 2012-13
## For
## Electricity Department, Union Territory of Chandigarh (Petition no – 126/2014)


**JOINT ELECTRICITY REGULATORY COMMISSION**

**For the State of Goa and Union Territories**

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**11th April 2014**

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# 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 |
| MW | : | Mega Watt |

| Abbreviation | | Full Form |
|---|---|---|
| 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[1]
S.K. Chaturvedi (Chairperson)

**Petition No. 126/2014**

In the matter of

Aggregate Revenue Requirement (ARR) and Retail Tariff for the Financial Year 2014-15, Annual Performance Review (APR) of FY 2013-14 and Provisional True-Up for FY 2011-12 & FY 2012-13 for the Electricity Department, Union Territory of Chandigarh

And in the matter of

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

## ORDER

**Date: 11th April 2014**

# 1. INTRODUCTION

### 1.1 JERC Formation

[1] *As per section 93 of the Electricity Act, 2003; No act or proceedings of the Appropriate Commission shall be questioned or shall be invalidated merely on the ground of existence of any vacancy or defect in the constitution of the Appropriate Commission. Therefore due to vacancy of the position of Hon'ble Member in the Joint Electricity Regulatory Commission for the state of Goa and the UTs, the Hon'ble Chairperson constitutes Coram.*

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 transmission, distribution and retail supply of electricity in Chandigarh (UT). The Chandigarh Electricity Department (CED) has been allowed to function as an integrated distribution licensee of Union Territory of Chandigarh.

## 1.3 Filing of Petition

Electricity Department of Chandigarh UT, vide memo no. SEE/OP/C1-2013-14/5121 dated 17th October 2013, had requested for clarification that whether the ARR petition has to be filed for FY 2014-15 or MYT Petition has to be filed for FY 2014-15 to FY 2016-17. The Commission, vide its letter no. 12/34/2013-JERC/1364 dated 22nd October 2013, clarified that since the MYT Regulations have not yet been notified, the department may file ARR petition for FY 2014-15 as per prevailing regulations.

The department, vide its memo no. SEE/OP/C1-2013/14/5739 Dated 29th November 2013 along with accompanying affidavit, had requested the Commission to grant extension for 45 days i.e. till 15th January 2014 on the grounds that technical bids for the tender " Appointment of Consultants for preparation of ARR and Tariff Petitions for FY 2014-15, Review of FY 2013-14 and True-up fpr FY 2011-12 and FY 2012-13 had already been opened and was under process of approval, thereby requiring some time for the finalization of tender. The Commission, keeping in view of the directions of Hon'ble APTEL, granted extension up to 31st December 2013 vide its letter no. 12/34/2013-JERC/1569-70 dated 05th December 2013.

However, the department, vide its memo no. SEE/OP/C1-2013/6327 Dated 31st December 2013 along with accompanying affidavit, had again requested the Commission to grant extension for till 31st January 2014 on the grounds that the consultants were appointed 13th December 2013 and had commenced work on preparation of ARR and Tariff Petition and keeping in view the fact that the compete tariff proposal needs to be discussed with and approved by the higher authorities of Chandigarh Administration, the department prayed for some more time for finalization of the petition. The Commission granted extension up to 15th January 2014 vide its letter no. 12/34/2013-JERC/1697 dated 06th January 2014.

The department subsequently filed its petition for determination of Aggregate Revenue Requirement (ARR) & Retail Tariff for distribution and retail sale of electricity for FY 2014-15, Review of FY 2013-14 & Truing up of FY 2011-12 and FY 2012-13 on 20th January 2014 according to 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 vide its Memo No. SEE/OP/C1-2014/161 Dated 20th January 2014 along with request for extension of time vide its memo no. SEE/OP/C1-2014/166 Dated 20th January 2014. CED has submitted that its ARR and Tariff petition for FY 2014-15 is prepared on the basis of the principles outlined in the JERC Tariff Regulations 2009. The Electricity Department of Chandigarh UT had prayed to permit the petitioner to recover the unrecovered gap for FY 2013-14 and the likely gap for FY 2014-15 along with the carrying cost of the regulatory asset (comprising of gap for provisional true-up for FY 2011-12 and FY 2012-13) through the tariffs being proposed to be made applicable to the consumers for FY 2014-15 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

After initial scrutiny/analysis, the petition was admitted on 21st January 2014 and notice was published in Hindustan Times and Dainik Bhaskar on 25th January 2014 inviting suggestions and comments from stakeholders on the petition filed by CED. Preliminary data gaps were identified and intimated vide letter no. 12/34/2013-JERC/1783-84 Dated 31st January 2014 and the petitioner was directed to respond to same before 10th February 2014. The technical validation session of the petition, for verification of information submitted along with the petition and subsequent replies/additional information submitted by the petitioner, was done by JERC on 18th and 19th February 2014. The petitioner was directed to file additional clarifications/ information as discussed during the course of session. A copy of the Admission Order dated 21nd January 2014 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 Interactions with the Petitioner*

| S.No. | Date of Receipt | Action By | Subject |
|---|---|---|---|
| 1. | 20/01/2014 | CED | Submission of Petition |
| 2. | 21/01/2014 | JERC | Admission of the petition |
| 3. | 31/01/2014 | JERC | Deficiency note on ARR and Tariff Petition for FY 2014-15 |
| 4. | 12/02/2014 | CED | Reply to Deficiency note on ARR and Tariff Petition for FY 2014-15 |
| 5. | 18/02/2014<br>19/02/2014 | JERC | Technical Validation Session and request for additional clarifications |
| 6. | 03/03/2014 | CED | Submission of Replies to issues post the Technical Validation Session |

## 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. | 23/01/2014 | English | The Tribune |
| 2. | 23/01/2014 | English | Hindustan Times |
| 3. | 23/01/2014 | English | Indian Express |
| 4. | 24/01/2014 | Hindi | Chandigarh Bhaskar |
| 5. | 23/01/2014 | Hindi | Amar Ujala |
| 6. | 23/01/2014 | Punjabi | Ajeet Chandigarh |

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 17th February 2014. The copies of paper cutting of public notice are attached as **Annexure 2** to this order.

**Commission received 9 written objections / suggestions on the petition, by the last date for filing objections/suggestion i.e. 17th February 2014. However, the Commission accepted the objections, both written and oral submissions on the day of public hearing also. 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 21st March 2014 at the Central AC hall of Institute of Engineers, Sector 19 A, Chandigarh from 09:30 AM for all consumers.

*Table 1.7.1 : Details of public notice published by Commission*

| Sr. No. | Date | Language | Name of Newspaper |
|---|---|---|---|
| 1. | 25/01/2014 | Hindi | Dainik Bhaskar |
| 2. | 25/01/2014 | English | Hindustan Times |

| Sr. No. | Date | Language | Name of Newspaper |
|---|---|---|---|
| 3. | 20/03/2014 | English | Hindustan Times (Repeat public notice) |
| 4. | 20/03/2014 | Hindi | Punjab Kesari (Repeat public notice) |

Copies of public notice published by the Commission for intimation of public hearing are attached as **Annexure 3** to this order.

During the public hearing, each objector was provided with 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 but presented before the Commission orally.

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.

### 1.8 Adherence to Model Code of Conduct

The Commission had noted that in view of the General Elections 2014, the Model Code of Conduct has been imposed since March 5' 2014. In this context, the Principal Secretary, Secretariat of the Election Commission of India, vide its letter no. 437/6/Misc./2014-CC&BE/322 dated February 17' 2014, clarified to the CERC/FOR that the model code of conduct is applicable to the Electricity Regulatory Commissions also as had been done during the last Lok Sabha Elections and that in case any relaxation is required under model code of conduct, CERC/SERC may refer the matter to the Commission.

The FOR (Forum of Regulators) communicated the above mentioned clarification as received from the Election Commission to all SERCs vide its letter no. 15/2(39)/2013-FOR/CE dated February 24' 2014.

Accordingly, JERC, vide its D.O. No. 21/46/2014-Jerc/1876 dated March 7' 2014 to the Election Commission communicated the following:

**Quote:**

*………………"While Public Hearings have already been held in respect of tariff petitions filed by GOA and three UTs, the Public Hearings are scheduled from second week of March '14 in respect of tariff petitions filed by Electricity Department of Puducherry (clubbed with the petition filed by State Generating Station PPCL), Dadra & Nagar Haveli and Chandigarh. Subsequently, the Commission*

*also is to issue the Tariff Orders for the generator and all the licensees situated in Goa and six Union Territories on or before 31st March 2014.*

*…………. As the election schedule has already been announced and Model Code of Conduct has been imposed, I earnestly request the Election Commission for grant of permission to JERC to discharge the statutory functions of holding the Public Hearings and issue of Tariff Orders as mentioned earlier and also as envisages in the Act."*

**Unquote**

Subsequently, the Election Commission of India vide its letter no. 437/GOA-HP/2014/800 dated March 18' 2014, communicated its consent as follows:

**Quote:**

"*I am directed to refer your DO. No. 21/46/2014-Jerc/1876 Dated 07th March 2014, on the subject cited and to state that the Commission has 'No Objection' for holding meetings and for fixing the revised tariff and for taking a final decision thereon. However, before implementing the same, prior concurrence of the Election Commission of India shall be taken."*

**Unquote**

In view of above, the Commission conducted the public hearing on 21st March 2014. The Principal Secretary, Secretariat of the Election Commission of India, vide its letter no. 437/6/1//2014/-CC&BE/235 Dated 29th March 2014 further clarified to the CERC as follows:

**Quote:**

"The Commission has no objection to the continuance of the process required for the decision on the power tariff. However, tariff award shall be made only on the completion of poll in the relevant State, i.e. after the poll date/dates in that State'

**Unquote**

The FOR (Forum of Regulators) communicated the above mentioned clarifications as received from Election Commission to all SERCs vide its letter no. 15/2(39)/2013 – FOR/CERC/36750 dated April 4' 2014.

The poll date in Chandigarh, which was on **10th April, 2014**, is over. Hence, in view of the consent and instructions received from the Election Commission of India as above, the Commission has finalized the tariff order and issued the current Tariff Order.

# 2. APPROACH OF THE ORDER FOR DETERMINATION OF ARR & TARIFF FOR FY 2014-15, REVIEW FOR FY 2013-14 & TRUING UP FOR FY 2011-12 and FY 2012-13.

## 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 13th January 2011. After deliberations, the Commission on 16th July 2011 issued the Tariff Order and the new electricity tariff was made effective from 01st April 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 30th December 2011. After deliberations, the Commission on 07th May 2012 issued the Tariff Order and the new electricity tariff was made effective from 01st May 2012. Subsequently, Electricity Department of Union Territory of Chandigarh had filed its third petition for Determination of Aggregate Revenue Requirement and Tariff for FY 2013-14 to the Commission on 15th February 2013. After deliberations, the Commission on 15th April 2013 issued the Tariff Order and the new electricity tariff was made effective from 01st April 2013.

**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 2014-15, Review of FY 2013-14 & Provisional Truing Up for FY 2011-12 and FY 2012-13 on 20th January 2014 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 2014-15 based on the principles outlined in the JERC Tariff Regulations 2009. After initial scrutiny, the petition was admitted on 21st January 2014 subject to clarifications & information gaps to be submitted by the Petitioner. The Commission has taken the petition bearing no. 126/2014 on record on 21st January 2014.**

The Commission has considered the revised submissions made by the petitioner during the technical validation session (except for the R&M expenses for FY 2013-14, for which the Commission has relied on the detailed break-up provided in the formats by the petitioner).

## 2.2 Summary of Tariff Petition for Annual Revenue Requirement

*Table 2.2.1: Truing up for FY 2011-12 and FY 2012-13, Review for FY 2013-14 and Aggregate Revenue Requirement for FY 2014-15 (Rs Crores)*

| Sr. No. | Particulars | 2011-12 | | | 2012-13 | | |
|---|---|---|---|---|---|---|---|
| | | Original Submission in ARR Petition | Revised Submission TVS | Final Submission considered by the Commission | Original Submission in ARR Petition | Revised Submission TVS | Final Submission considered by the Commission |
| 1 | Cost of fuel | | | | | | |
| 2 | Cost of power purchase for full year | 623.65 | 623.65 | 623.65 | 621.71 | 621.71 | 621.71 |
| 3 | Employee costs | 47.46 | 47.46 | 47.46 | 44.61 | 44.61 | 44.61 |
| 4 | R&M expenses | 8.85 | 8.85 | 8.85 | 9.30 | 9.30 | 9.30 |
| 5 | Administration and general expenses | 1.97 | 1.97 | 1.97 | 2.69 | 2.69 | 2.69 |
| 6 | Depreciation | 19.63 | 19.63 | 19.63 | 20.92 | 20.92 | 20.92 |
| 7 | Interest and finance charges | 42.96 | 42.96 | 42.96 | 36.47 | 36.47 | 36.47 |
| 8 | Interest on working capital & Interest on Security Deposit | | | | 13.12 | 13.66 | 13.66 |
| 9 | Return on NFA /Equity | 8.70 | 8.70 | 8.70 | 8.88 | 8.88 | 8.88 |
| 10 | Provision for Bad Debt | 5.29 | 5.29 | 5.29 | 6.09 | 6.29 | 6.29 |
| 11 | Advance Against Depreciation | | | - | | | - |
| **12** | **Total Revenue Requirement** | **758.51** | **758.51** | **758.51** | **763.79** | **764.53** | **764.53** |
| 13 | Less: Non Tariff Income | 15.41 | 15.41 | 15.41 | 16.98 | 16.98 | 16.98 |
| 14 | Less: Revenue from Sale through UI | 58.89 | 58.89 | 58.89 | 24.68 | 24.68 | 24.68 |
| 15 | Less: Revenue from Sale of Power-Exchanges | | | | 19.02 | 19.02 | 19.02 |
| **16** | **Net Revenue Requirement (12-13-14-15)** | **684.21** | **684.21** | **684.21** | **703.11** | **703.85** | **703.85** |
| 17 | Revenue from Retail Sales at Existing Tariff | 534.71 | 534.71 | 534.71 | 609.23 | 609.23 | 609.23 |
| 18 | FPPPCA billed during the year | | | | 19.82 | 19.82 | 19.82 |
| **19** | **Net Gap (16-17-18)** | **149.50** | **149.50** | **149.50** | **74.26** | **74.79** | **74.79** |
| 20 | Gap for the previous year | | | | 149.50 | 149.50 | 149.50 |
| 21 | Carrying Cost | | | | | | |
| **22** | **Total gap (19+20+21)** | **149.50** | **149.50** | **149.50** | **223.55** | **224.29** | **224.29** |
| 23 | Additional revenue from proposed tariff | | | | | | |
| **24** | **Revenue Gap/ (Surplus), if any, after proposed tariffs (22-23)** | **149.50** | **149.50** | **149.50** | **223.55** | **224.29** | **224.29** |
| 25 | Budgetary Support from Government | | | | | | |
| **26** | **Net Final Revenue Gap/ (Surplus) (24-25)** | **149.50** | **149.50** | **149.50** | **223.55** | **224.29** | **224.29** |

| Sr. No. | Particulars | 2013-14 | | | FY 2014-15 | | |
|---|---|---|---|---|---|---|---|
| | | Original Submission in ARR Petition | Revised Submission TVS | Final Submission considered by the Commission | Original Submission in ARR Petition | Revised Submission TVS | Final Submission considered by the Commission |
| 1 | Cost of fuel | 0.00 | 0.00 | | | | |
| 2 | Cost of power purchase for full year | 602.33 | 602.33 | 602.33 | 612.00 | 612.00 | 612.00 |
| 3 | Employee costs | 53.53 | 54.11 | 54.11 | 58.46 | 63.75 | 63.75 |
| 4 | R&M expenses | 9.98 | 9.98 | 8.55[2] | 10.72 | 10.72 | 10.72 |
| 5 | Administration and general expenses | 2.36 | 2.36 | 2.36 | 2.53 | 2.53 | 2.53 |
| 6 | Depreciation | 21.9 | 21.90 | 21.90 | 23.28 | 23.28 | 23.28 |
| 7 | Interest and finance charges | 34.52 | 34.52 | 34.52 | 33.89 | 33.89 | 33.89 |
| 8 | Interest on working capital & Interest on Security Deposit | 13.34 | 13.32 | 13.30 | 13.53 | 13.65 | 13.65 |
| 9 | Return on NFA /Equity | 8.6 | 8.60 | 8.60 | 9.09 | 9.09 | 9.09 |
| 10 | Provision for Bad Debt | 6.86 | 6.86 | 6.86 | 6.47 | 6.47 | 6.47 |
| 11 | Advance Against Depreciation | | | | | | |
| **12** | **Total Revenue Requirement** | **753.42** | **753.97** | **752.52** | **769.97** | **775.37** | **775.36** |
| 13 | Less: Non Tariff Income | 15.50 | 15.50 | 15.50 | 15.50 | 15.50 | 15.50 |
| 14 | Less: Revenue from Sale through UI | 9.53 | 9.53 | 9.53 | | | |
| 15 | Less: Revenue from Sale of Power-Exchanges | | | | | | |
| **16** | **Net Revenue Requirement (12-13-14-15)** | **728.39** | **728.94** | **727.49** | **754.47** | **759.87** | **759.86** |
| 17 | Revenue from Retail Sales at Existing Tariff | 625.55 | 625.55 | 625.55 | 647.49 | 647.49 | 647.49 |
| 18 | FPPPCA billed during the year | 60.00 | 60.38 | 60.38 | | | |
| **19** | **Net Gap (16-17-18)** | **42.84** | **43.01** | **41.55** | **106.98** | **112.38** | **112.37** |
| 20 | Gap for the previous year | 223.55 | 224.29 | 224.29 | 42.84 | 43.01 | 41.55 |
| 21 | Carrying Cost | | | | 6.19 | 6.19 | 6.19 |
| **22** | **Total gap (19+20+21)** | **266.39** | **267.30** | **265.84** | **156.01** | **161.58** | **160.12** |
| 23 | Additional revenue from proposed tariff | | | | 156.97 | 156.97 | 156.97 |
| **24** | **Revenue Gap/ (Surplus), if any, after proposed tariffs (22-23)** | **266.39** | **267.30** | **265.84** | **-0.96** | **4.61** | **3.15** |
| 25 | Budgetary Support from Government | | | | | | |
| **26** | **Net Final Revenue Gap/ (Surplus) (24-25)** | **266.39** | **267.30** | **265.84** | **-0.96** | **4.61** | **3.15** |

[2] *As per the details submitted by the petitioner in the accompanying formats*

**Prayer:**

CED requested the Commission to:

- Condone the delay in filing the Petition by CED and Admit this Petition;
- Examine the proposal submitted by the Petitioner for a favorable dispensation as detailed in the enclosed proposal;
- Consider the submissions and allow the Provisional True-Up for FY 2011-12 and FY 2012-13, revised estimate for FY 2013-14 and approve Aggregate Revenue Requirement and Tariff for CED for FY 2014-15;
- Approve Revenue Gap of Rs.149.50 Cr for FY 2011-12 and Rs. 74.26 Cr for FY 2012-13 and create Regulatory Asset for the same;
- Pass suitable orders for implementation of the tariff proposals for the FY 2014-15 for making it applicable from April 1, 2014 onwards.
- Approve the terms and conditions of Tariff Schedule and various other matters as proposed in this petition and the proposed changes therein.
- Approve the Miscellaneous and General Charges as proposed in this petition and the proposed changes therein.
- 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 orders as the Hon’ble Commission may deem fit and proper, 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 & FY 2012-13

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 07th May 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 has also requested for provisional true up for FY 2012-13 based on the Tariff Order for FY 2013-14 issued on 15th April 2013 by the Hon'ble Commission wherein it had undertaken review of FY 2012-13 as per the actual information submitted by CED for 08 months. Further, the petitioner stated that the annual accounts for FY 2011-12 and FY 2012-13 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 and FY 2012-13 in this Petition. The annual /proforma accounts for the period FY 2011-12 and FY 2012-13 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 and FY 2012-13 that was determined earlier by the Commission. The truing up for FY 2011-12 and 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 detailed analysis & treatment of each component is provided in Chapter 4 (Provisional Truing up for FY 2011-12 and FY 2012-13) of this Order.**

## 2.4 Approach for Review of ARR for FY 2013-14

The Petitioner in its petition has requested for a revision of the ARR for FY 2013-14 which was determined earlier by the Commission in its ARR order dated May 07' 2012. The review of ARR for FY 2013-14 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 2013-14 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 2013-14) of this Order.**

## 2.5 Approach for Determination of ARR & Retail Tariff for FY 2014-15

The Petitioner has submitted the ARR & tariff petition for FY 2014-15 along with review petition for FY 2013-14 and provisional truing up for FY 2011-12 and FY 2012-13.

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 repeated directions in the tariff orders dated 16th July 2011, 07th May 2012 and 15th April 2013 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, currently 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 FY 2012-13 and submitted the same in the Petition. Further, CAG has audited the proforma accounts for FY 2011-12 and FY 2012-13. However, in absence of audited accounts prepared on commercial principles, the Commission has considered the figures approved in order dated 15$^{th}$ April 2013 for FY 2012-13 and pre-actuals for FY 2013-14 form the basis for projection of income and expenditure for FY 2014-15.**

**The detailed analysis and treatment of each component is provided in Chapter 6 (Determination of Aggregate Revenue Requirement for FY 2014-15) 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 2014-15, 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 21st March 2014 at the Central AC hall of Institute of Engineers, Sector 19 A, Chandigarh from 09.30 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 2014-15 of the CED. 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 CED

### 3.3.1 Change in category for certain consumers / Professionals Operating from Home

**Stakeholders Objections/Comments:**

The main point raised by the Air Marshal Randhir Singh (Retd) in brief are as under:

*Converting professionals from the Commercial to the Domestic category is a loss incurring proposal and other consumers will be burdened due to thus. This proposal should be dropped*.

The main point raised by the Indian Citizen Forum in brief, is as follows:

***Quote:***

*It was intimated that the consumers who were using the Commercial Activities at residential place having the electric connections under the D/S supply were charged/ converted under DMC electric tariff. After some review, the electricity department converted it into under the D/S tariff, which has a great loss to the department itself. But it would have been put under the NRS Tariff instead to charge the penalties from the consumers who were using the same connection and load, as it is, for last many years. Is is not the corrupt practice by the department as well as injustice with the consumers at present? Moreover, the department was quite reluctant to review the decision already given by the Hon'ble Consumer Grievances Cell in favor of public in so many cases.*

**Unquote**

The main point raised by the Chandigarh Defense Colony Welfare Association in brief are as under:

*The rationale for proposing to switch professionals like doctors, engineers, chartered accountants, lawyers and consultants who operate from their houses from the commercial to domestic categories as the these professionals can easily afford to pay their electricity bills.*

**Petitioner's submission:**

**Quote**

The provisions for professionals like doctors, engineers, CAs etc had been made in the tariff petition for FY 2014-15 keeping in view the objections raised by few such professional during the public hearing on ARR of FY 2012-13 and petition filed by Medico Legal Action Group & another, in Hon'ble Punjab & Haryana High Court on similar grounds.

**Unquote**

**Commission's views:**

The Commission has noted the concerns of the stakeholders and submission of the petitioner, The Commission would like to highlight that there is no change in existing tariff schedule which has been detailed in subsequent chapters.

### 3.3.2 Fixed Charges

**Stakeholders Objections/Comments:**

The main point raised by the Air Marshal Randhir Singh (Retd) in brief are as under:

*As at present there are no fixed charges, the status quo should be maintained.*

The main point raised by the Chandigarh Defense Colony Welfare Association in brief are as under:

*There is no clarity for rationale why the fixed charges which were in place 8 years ago and have been done away with around 2 years ago are again proposed to be introduced. Further, in case same is required to be reintroduced, it should be levied uniformly across category @ Rs 5 per kW irrespective of consumption and. slab or category should be charged without any exception.*

The main point raised by the Chandigarh Defense Colony Welfare Association, National Consumer Awareness Group in brief are as under:

*Fixed charges should be allowed at existing level, and these charges should be reimbursed to the consumers in shape of electricity units if the consumption is carried out is more than fixed charges by the consumer. Fixed or minimum charges should be levied and charged in such a manner that each installed connection should use at least minimum electricity to meet out the infrastructure expenses done by the CED and not for making profits.*

The main point raised by the Pendu Sangharsh Committee, Chandigarh Residents Social Welfare Federation, Representatives of Chandigarh Residents in brief are as under:

*No justification of provided by petitioner.*

**Petitioner's submission:**

**Quote**

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.

Further, it is intimated that as per section 45 of Electricity Act 2003, the charges for electricity supplied by a distribution licensee may include a fixed charge in addition to the charge for the actual electricity supplied.

**Unquote**

**Commission's views:**

The Commission has noted the concerns of the stakeholders and submission of the petitioner, The Commission would like to highlight that there is no change in existing tariff structure which has been detailed in subsequent chapters.

### 3.3.3 T&D Losses

**Stakeholders Objections/Comments:**

The main point raised by the Chandigarh Defense Colony Welfare Association, Chandigarh Business Council, and Federation of Sector Welfare Associations, Joint forum for Industries Association of Chandigarh & Chamber of Chandigarh Industries and PHD Chamber of Commerce and Industry in brief are as under:
*Chandigarh ED has not been able to bring down the losses below the percentage laid down by the JERC and it is unfair to burden the consumer for ED's inefficiency.*

The main point raised by the Sh. Ajay Jagga in brief are as under:
*Chandigarh ED has not complied with the direction of the Petitioner wherein was required to inform in the time bound action plan for the same by 30/09/2013.*

**Petitioner's submission:**

**Quote**
It is pertinent to mention that since UT Chandigarh has not been provided any Inter State Transmission Point within the periphery of UT Chandigarh as such additional approx 3% notional interstate losses are being borne by CED.
Around 98% of the consumers in UT Chandigarh are at LT level which has an adverse effect on the loss reduction. However, CED is making all efforts for reducing its T&D losses by undertaking various measures i.e. HVDS, replacement of electromechanical meter to electronic meters, replacement of bare LT conductors with LT ABC in theft prone areas, procurement of star rated transformers and accordingly proposes to achieve a loss of 15.50% for FY 2013-14 and 15.00% for FY 2014-15.

It is pertinent to mention that UT of Chandigarh has not been provided any interstate transmission point within the boundaries of Chandigarh and the metering is being done at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB). M/S PGCIL in its letter dated 22.06.2013 have calculated the inter-state losses of 3.15% at 220 kV Nalagarh-Manimajra line for FY 2011-12. By subtracting an average of additional 3% of the energy towards losses which are attributable towards inter-state loss due to non-availability of interstate transmission point within the boundaries of Chandigarh, CED is meeting with the T&D loss targets given by Hon'ble JERC.

It is worth to mention here that Hon'ble commission vide its suo moto petition no. 76/2012 is holding regular hearing on Loss Reduction Programme and CED has been providing all details of actual losses incurred by CED to the Hon'ble Commission against the same. The latest hearing for the same was held on 27.12.2013.

CED is very much serious about the directive issued by the Hon'ble commission and keen to reduce these T&D loss further. Further, after the implantation of R-APDRP schemes, theses loss shall further be reduced

Moreover, the present electricity tariff in UT Chandigarh is very competitive in comparison to its neighboring states and hence, the option of subsidy is not practical. The recent tariff reduction given in Delhi or any other neighboring state is through subsidy. The Govt who is giving subsidy, is required to pay the subsidy amount to the concerned licensees.

**Unquote**

**Commission's views:**

The Commission has noted the submission of the petitioner and dealt with this issue in detail in the subsequent chapters**.**

### 3.3.4 Single Point Supply

**Stakeholders Objections/Comments:**

The main point raised by the Air Marshal Randhir Singh (Retd), National Consumer Awareness Group in brief are as under:

*No SPD should be there as it purports to extend triple benefits to a particular group of consumers. Potentially the SPS will result in loss of revenue which in turn will be passed on to other consumers*.

The main point raised by the Chandigarh Defense Colony Welfare Association in brief are as under:

*This proposal gives them a triple benefit. Firstly, their tariff is the lowest amongst the three slabs. Secondly, there will be no fixed charges for them. Thirdly, there will be no FPPCA for them. The huge losses which will be incurred is to be borne by the consumer. The rationale for such a proposal is not clear.*

**Petitioner's submission:**

**Quote**

It is a proposal before Hon'ble commission that in order to give intended benefits to marginalized category of consumers, to prevent theft of electricity and to keep the tariff very simple and straight forward for better understanding, SPS category be introduced.

**Unquote**

**Commission's views:**

The Commission has noted the submission made by the petitioner and has dealt with this issue in detail in the subsequent chapters.

### 3.3.5 Proposed Revision of Power Tariff

**Stakeholders Objections/Comments:**

The main point raised by the Pendu Sangharsh Samiti, Chandigarh Residents Social Welfare Federation, Representatives of Chandigarh Residents in brief are as under:

*Any increase at this juncture would have a cascading effect on the residents who are already reeling under skyrocketing prices. Also, while the states like Delhi, Maharashtra and Haryana are reducing the electricity tariff, the UT electricity department is arbitrarily and unilaterally proposing a steep hike.*

The main point raised by the Joint forum for Industries Association of Chandigarh & Chamber of Chandigarh Industries and PHD Chamber of Commerce and Industry in brief are as under:

*While the fuel inflation is being neutralized through the collection of FPPCA charge, the remaining increase should be general inflation and increased costs towards day to day working of the department which has been 5.05%. Thus, the increase of 24% during a year in this back drop figure of WPI, is unwarranted is totally inflated by the UTED, to cover up there in efficiencies.*

**Petitioner's submission:**

**Quote**

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 2014-15 and proposed the tariff hike accordingly.

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. CED has not proposed tariff hike on the basis that it had started the commercial accounting. On the other hand, for the revenue Gap of Rs 149.50 Cr and Rs 74.26 Cr pertaining for FY 2011-12 & FY 2012-13 respectively, the Hon'ble JERC has been requested to treat the same as Regulatory Asset which may be considered for tariff hike in subsequent ensuing years after the compliance of JERC directives regarding preparation of accounts on commercial accounting principles and Fixed asset register. The tender for appointment of consultant for preparation of accounts on commercial accounting principle and fixed asset registers has already been called and is under process. However, it is pertinent to mention here that as per existing rules being followed in Chandigarh Administration, the proforma account of FY 2012-13 has been duly audited by Comptroller & Auditor General of India (CAG).

Further, the present electricity tariff in UT Chandigarh is very competitive in comparison to its neighboring states. The recent tariff reduction given in Delhi, in two slabs of domestic category i.e. 0-200 units & 201-400 units, is through subsidy. The Delhi Govt is required to pay the subsidy amount to the concerned licensees (BSES, NDPL)..

**Unquote**

**Commission's views:**

The Commission has dealt this issue in detail in the subsequent chapters.

### 3.3.6 Electricity Meter Rentals

**Stakeholders Objections/Comments:**

The main point raised by the Air Marshal Randhir Singh (Retd), Sh. Ajay Jagga in brief are as under:

*Once the cost of meter is recovered, the department should stop recovering the meter rentals*.

The main point raised by the Sh. Kashmiri Lal in brief are as under:

*Since the electricity department installs the electric meters on payment (paid by consumers), the extra charges on account of meter rental and service equipment charges are no way justified. As the total amount recovered by CED on account of meter rentals since the date of installation runs into tens of thousand rupees approx, justification of levying these charges needs to be explained*.

The main point raised by the Chandigarh Business Council in brief are as under:

*While the meter rentals have increased over the years, the meter is not repaired for any fault and is only replaced at the cost of the consumer.*

**Petitioner's submission:**
**Quote**
In this regard, it is intimated that as per clause 7.3 of JERC Electricity Supply Code Regulation 2010, an option is available with the consumer at the time of seeking a new connection, to indicate whether he want to purchase the meter by himself OR he want meter cost is borne by the department.
In case of first option, where the meter is purchased by the consumer, neither meter rent nor any security for the price of meter, is required to be charged from the consumer.
**Unquote**

**Commission's views:**
The Commission has noted and agrees with the submission of petitioner.

### 3.3.7 FPPCA

**Stakeholders Objections/Comments:**

The main point raised by the Air Marshal Randhir Singh (Retd) in brief are as under:

- *No clarity of computation.*
- *Alternative mean to increase revenue.*
- *Lack of transparency.*

The main point raised by the Chandigarh Industrial Area Tenant Association, Pendu Sangharsh Committee, Chandigarh Residents Social Welfare Federation, Representatives of Chandigarh Residents in brief are as under:
*As Chandigarh Administration has no generation capacity of electricity of its own and consequently no consumption of fuel has been done, there is no rationale for charging difference of fuel cost purchase used in generation of electricity.*

The main point raised by the Chandigarh Business Council in brief are as under:
*The levy of FPPCA @ Rs 23% is very high as compared to neighboring tricity whereas same is in range of 3% to 4 % only. The excess recovery should be refunded at the earliest.*

The main point raised by the Sh. Ajay Jagga in brief are as under:
*The levy of FPPCA @ Rs 20% is very high and it is beyond understanding as to why the CED is not finalizing the agreement in advance or something like long term purchase agreement whereby no escalation is provided or may be accounted for but there will be no charges on account of FPPCA every time, in an arbitrary manner.*

The main point raised by the Joint forum for Industries Association of Chandigarh & Chamber of Chandigarh Industries and PHD Chamber of Commerce and Industry in brief are as under:
*While the FPPCA been taken as Rs 60 Crores for the whole of FY 13-14 as RE, on prorate recovery basis, it should be 71.38*12/7= Rs 122.36 Crores.*

**Petitioner's submission:**
**Quote**
CED submits that though till Oct'13, actual FPPCA recovered is Rs. 71.38 Cr. however, during the latter half of the year, considering the variations in the power purchase prices, it is expecting the negative FPPCA to be billed which has also been discussed in the section 4.139 of the petition. Thus, based on the negative FPPCA to be billed during the latter half of the year, the Petitioner projects Rs. 60 Cr. as the net FPPCA for FY 2013-14.

Hence, it is submitted that projecting the FPPCA for FY 2013-14 on a pro-rata basis (Rs. 122.36 Cr.) will not be a true representative of the realistic FPPCA which is calculated on quarterly basis on actual basis and thus should not be considered while approving the ARR for FY 2013-14.

CED is charging FPPCA as per Hon'ble Commission order dated 27.6.2012 passed in the Petition No. 79 /2012 (Suo-moto). To make the FPPCA calculation transparent, the required information is uploaded on the website of the department www.chdengineering.gov.in and the complete FFPCA calculation sheet is also send to Hon'ble commission on quarterly basis for its information.
**Unquote**

**Commission's views:**
The Commission has noted the submission made by the petitioner. The Commission would like to emphasize that in view of the quarterly submissions made by the petitioner to the Commission, it is apparent that while positive FPPCA are recovered from consumers, benefit of negative FPPCA is passed on to the consumers. Therefore, the submission made by the petitioner is accepted as any surplus/deficit on account of recoveries/refunds in FPPCA will be trued-up as per actuals.

### 3.3.8 ACD

**Stakeholders Objections/Comments:**

The main point raised by the Air Marshal Randhir Singh (Retd) in brief are as under:

*The concept has been introduced prematurely in view of the fact that prepaid meters are being planned to be installed in the time bound manner, which will make the concept of ACD redundant.*

The main point raised by the Sh. Kashmiri Lal in brief are as under:

*The Commission had directed the CED to pay interest to consumers on the ACD on the bank rates from the date of implementation of EA 2003 or the date of payment of ACT whichever is later. Status of same may kindly be clarified.*

The main point raised by the Chandigarh Industrial Area Tenant Association in brief are as under:

*No recovery from interest should be there in the tariff.*

The main point raised by the Chandigarh Business Council in brief are as under:

*The rate of payment of interest for ACD should be @ 16%, which a businessperson is paying from limits by the bank as businessman/industrialist do business on bank limits and pay bills from accounts.*

The main point raised by the Pendu Sangharsh Committee, Chandigarh Residents Social Welfare Federation, Representatives of Chandigarh Residents, National Consumer Awareness Group in brief are as under:

*The Advanced Consumption Deposit Scheme for consumers using 50 W and below has been divided in two categories; first, those whose electricity connections were released after 22 May 1979 and, second, those whose electricity connection were released before 22 May 1979. The latest electricity bills issued have indicated the additional amount to be recovered as ACD from those consumers who fall in the second category, while the responsibility to produce the receipts for the amounts deposited as Advance (as security) in the case of latter category as been left with the respective consumers. The reasons given by the Electricity Department is that the details are not readily available. This is a strange logic to penalize the consumer for the inefficient handling of records by the Electricity Department. It may be noted that the post 22$^{nd}$ May 1979 more operation electricity divisions were created and logically all records of the affected consumers should have been transferred to the present division maintaining the respective records. Such consumers are being denied the benefit of refund of their deposit along with interest for the year 2011-12 and 2012-13.*

The main point raised by the Joint forum for Industries Association of Chandigarh & Chamber of Chandigarh Industries and PHD Chamber of Commerce and Industry in brief are as under:

*The department has decreased the interest payable on ACD from 9.5% of last year to 8.5% this year. This is anti consumers and Is monopolistic. The Advance deposit raised by the department should not be allowed to be used in current account. The money so raised should be invested in a manner that it earns more than 8.5%, so that, instead of claiming 5.33 Crs expense, there should be net income, which should be deducted from ARR 14-15. As against the provision of 2.8 Cr during FY13-14, the department has already booked an expense of 5.26, (Almost 100% deviation). It is totally misleading and should not be provided for in the ARR.*

**Petitioner's submission:**
**Quote:**

First of all, there is no connection between 50 kW limit to ACD Scheme.

*In the Public Notice dated 10.10.2013, it was mentioned/ clarified that "all the consumers whose electricity connection was released prior to 22nd May 1979 or those consumers who has not been paid any interest or those consumers who has any grievance in this regard, are requested to personally submit/produce the original receipt of the consumption deposit paid at their concerned sub-division office for further verification. Being the very old record, the same is not readily available with the department. In case the above is not done, department will not be able to pay interest on security deposit to such consumers till further verification*".

Hence, such consumers were never denied the benefit of adjustment of interest on security deposit. CED is already working on the verification of relevant documents and thus very soon, it shall be in position to pay the interest on consumer security to such left out consumers. However, through above cited public notice, CED had made a sincere & honest effort to get the consumers well informed regarding Interest on security deposit & Charging of Additional Security Deposit and sought cooperation from them. However, it is pertinent to mention here that in order to adhere to various modes of payment of ACD/ security deposit like Bank Guarantee etc & interest on ACD related issues as per recent JERC order dated 11.2.2014, CED has started preparation of software/ data bank to maintain the accounts of ACD/ security deposit separately.

Further, CED submits that the interest rate as applied for computation of interest on consumer security deposit as per the provision of JERC Electricity Supply Code Regulation 2010 is the Bank rate as on 1st April, 2013 and the calculations are done as per the JERC Terms and Condition for Tariff Regulation, 2009. It is further submitted that the estimate for FY 2013-14 is based on the actual of FY2012-13, which were not available during last year's projections. CED has considered the actual average addition during FY 2012-13 and FY 2011-12 for projecting the consumer security deposit for FY 2013-14 and FY 2014-15 respectively.

**Unquote**

**Commission's views:**

The Commission has noted the submission of the petitioner. The Commission has already directed the petitioner in the order dated 20th November 2013 and 11th February 2014 the following:

"*The petitioner/consumers are entitled for the interest on consumer security deposit/ACD charges from date of commencement of Electricity Act 2003 or date of payment of security deposit by the consumers whichever is later. The Commission, therefore, directs the respondent to pay interest at the Bank rate on the amount of security deposit/ ACD charges from the* *commencement of Electricity Act 2003 or the date of payment of security deposit/ ACD charges by the consumers whichever is later."*

The Commission, in view of submissions made by various stakeholders, now directs the petitioner to make necessary modifications in the billing software so that following information is accessible to all the consumers via web/internet:

1. Amount and Date of Receipt of Consumer Security Deposit from consumer (starting from date and amount of receipt of 1st deposit).
2. Interest due and Interest actually paid as on 31st March 2014 and as on date.
3. Additional ACD payable in subsequent bill, if any, along with detailed computations.

The petitioner is directed to submit the status report of compliance of this direction within 6 months of issuance of this order.

### 3.3.9 Model Code of Conduct

**Stakeholders Objections/Comments:**

The main point raised by the Sh. Ajay Jagga in brief are as under:

*In view of the fact that the notification regarding the general elections has been issued and the Model Code of conduct is in force. Therefore, it is submitted that the fair play would be if the Hon'ble Commission adjourns the date of hearing to any date after the competition of election process or till the model code of conduct is in force. However, if the commission has already obtained permission from the election commission the same may please be announced to continue the hearing in the interest of justice.*

**Petitioner's submission:**

**Quote:**

*In this connection, it is submitted that the Hon'ble Chairman Sh.S.K.Chaturvedi, JERC has clarified in the public hearing that the Election Commission of India has issued NOC to conduct the public hearing.*

*This office is in receipt of email from the Hon'ble Commission and the NOC issued by the Election Commission of India vide No.437/GOA-HP/2014/801-802 Dated 18th March, 2014 is reproduced below:-*

*ELECTION COMMISSION OF INDIA*
*Nirvachan Sadan, Ashoka Road, New Delhi-110001*

*No.437/GOA-HP/2014/801-802 Dated 18th March, 2014*

*"To*

*Shri Sudhir K.Chaturvedi,*

*Chairma, Joint Electricity Regulatory Commission*

*For the State of Goa & Union Territory*

*2nd Floor, HSIDC Office Complex,*

*'Vanijya Nikunj', Udyog Vihar, Phase-V,*

*Gurgaon-122016 (Haryana)*

*Sub: General Election to Lok Sabha, 2014 – Applications of Model Code of Conduct – Clarification- regarding.*

*"I am directed to refer to your DO No.21/46/2014-JERC/1876 Dated the 7th March, 2014 on the subject cited and to state that the Commission has 'no Objection' for holding meetings for fixing the revised tariff and for taking a final decision thereon. However, before implementing the same, prior occurrence of the Election Commission of India shall be taken."*

*Kindly acknowledge the receipt of this letter.*

*Yours faithfully,*

*Sd/-*

*(A.K.Bhatnagar)*

**Unquote**

**Commission's views:**

The Commission had already obtained separate permission from the Election Commission which has been detailed in the clause 1.1 of this tariff order.

### 3.3.10 Kundi Connections

**Stakeholders Objections/Comments:**

The main point raised by the Sh. Kashmiri Lal in brief are as under:

*In the Tribune dated 06.02.2014, it was reported that every year the UT administration is running into losses more than Rs 7 Crores because the department has failed to stop the Kundi Connections. Position/action taken in this context may kindly be provided.*

The main point raised by the Chandigarh Defense Colony Welfare Association, Chandigarh Business Council in brief are as under:

*Chandigarh ED has done nothing to punish the power thieves and simply passes on the resultant loss to the consumers in the form of enhancement of tariff.*

The main point raised by the Chandigarh Industrial Area Tenant Association, Pendu Sangharsh Committee, Chandigarh Residents Social Welfare Federation, Representatives of Chandigarh Residents, Mr Sat Pal Kansal in brief are as under:

*No preventive actions have been taken by the electricity department to stop kundi connections.*

**Petitioner's submission:**

**Quote**

CED has 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 connections have 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 Further, CED has detected 101 nos. of cases related theft of energy in FY 2012-13 and charged approx Rs 1 Cr as compensation under section 152 of EA 2003. With the help of police, regular kundi connection removal operations is being carried out.

**Unquote**

**Commission's views:**

The Commission has noted the submission of the petitioner. The Commission has created a separate sub category on the request of the petitioner for the JJ Clusters/ Unaauthorised colonies/ Slum dwellers wherein the petitioner has submitted that creation of this sub category will go in long way in curbing the meance of kundi connections and theft of electricity.

### 3.3.11 Interstate Losses

**Stakeholders Objections/Comments:**

The main point raised by the Chandigarh Defense Colony Welfare Association in brief are as under:

*The inter-state losses' at the periphery have been shown more than 3% by the Electricity Department of Chandigarh. The metering is being done at Dhulkot and Nalagarh with consequent losses resulting at the periphery. The electricity delivery point should be af the periphery and the metering should be done at this point to prevent extra payment on account of Inter-state losses.*

The main point raised by the Joint forum for Industries Association of Chandigarh & Chamber of Chandigarh Industries and PHD Chamber of Commerce and Industry in brief are as under:

*The interstate loss of 2% (though unaccepted) has arbitrarily been increased to 3% this year. The department has only 4 lines to receive power. The loss in these lines can actually be calculated, thus changing these figures to the tune of 2% earlier and 3% now, in ARR are arbitrary and are unjustified.*

**Petitioner's submission:**

**Quote**

It is reiterated that UT of Chandigarh has not been provided any interstate transmission point within the boundaries of Chandigarh and the metering is being done at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB). M/S PGCIL in its letter dated 22.06.2013 have calculated the inter-state losses of 3.15% at 220 kV Nalagarh-Manimajra line for FY 2011-12. By deducting an average of additional 3% of the energy towards losses which are attributable towards inter-state loss due to non-availability of interstate transmission point within the boundaries of Chandigarh, CED is meeting with the T&D loss targets given by Hon'ble JERC

It is further submitted that CED has made representation to the CEA on the issue related to interconnection and metering point on which CEA has agreed to the submission made by the ED of Chandigarh. During 30th Standing Committee meeting of CEA held on dated 02.01.2013, in principle approval for establishment of 2x160 MVA, 220/66 KV Sub Station alongwith 220 KV D/C line from Barwala (Panchkula) was accorded. It was also decided during meeting that the scheme may be fine tuned after discussion with Chandigarh, HVPNL & CTU. Further, it was decided that M/S Powergrid site office would carry out walk over survey from 400/220 KV Barwala (Panchkula) Sub Station to UT Chandigarh bounding from both proposed locations namely Hallomajra and Raipur Kalan. CED vide memo no. 6170 daed 18.12.2013 requested M/S PGCIL to carry out walk over survey as per MoM issued by CEA vide letter no. 7/1/2013- SP&PA dated 5.12.2013 and also conveyed that the land for 220 KV Sub Station is available at 2 No. sites namely Hallomajra and Raipur Kalan.

Further, it is gathered that M/S PGCIL local site office has carried out walk over survey for both sites and it is learnt that report along with BOQ has been sent by local office to Regional HQ of POWERGRID".

**Unquote**

**Commission's views:**

The Commission has noted the submission of the petitioner and has dealt with this issue in detail in the subsequent chapters.

### 3.3.12 Maintenance Losses

**Stakeholders Objections/Comments:**

The main point raised by the Chandigarh Defense Colony Welfare Association in brief are as under:

*These losses occur due to non-repair of transformers and irregular all changes. Similarly, the underground Cable Joints are neither checked nor properly de until the cables burn out. No checks for damaged / cracked insulators are done to reduce maintenance losses. All this results in loss of revenue and consequent burden on the consumers.*

**Petitioner's submission:**

**Quote**

Routine and preventive maintenance of the distribution network is a regular exercise which CED does. The Repairs and Maintenance Expenses as proposed in the ARR petition go towards the day-to-day upkeep of the network of the licensee and form an integral part of the utilities efforts towards reliable and quality power supply and also in the reduction of losses in the system to meet up with the Standard of performance Regulations provided by Hon'ble Commission.

**Unqoute**

**Commission's views:**

The Commission has noted and agrees with the submission of the petitioner.

### 3.3.13 Power Cost and Power Purchase Revenue from the Sale of Power from Bilateral, UI and Exchange

**Stakeholders Objections/Comments:**

The main point raised by the Joint forum for Industries Association of Chandigarh & Chamber of Chandigarh Industries and PHD Chamber of Commerce and Industry in brief are as under:

*The UTED should restrict itself to the power purchase from units like APCPL, NTPCAURIA, NTPC Dadri II, NHPC Dulhasti, NHPC Tanakpur, NHPC Uri etc. The power is even cheaper on spot buying or the short term buying basis. A special officer should be appointed to exclusively optimize the purchase. The consumers should not be put to higher tariff for inefficiencies at the purchase of power level.*

*The UTED should give systematic plan to reduce the average purchase cost on year by year on basis. The department purchased 150 MU on short term and sold unutilized 62 MU at a lower rate, giving huge loss to the department. They should not be permitted to pass on such losses to the consumers..*

**Petitioner's submission:**

**Quote:**

In this regard, it is submitted that the power purchase rate in respect of the Central generating stations are being determined by the CERC from time to time as per the guidelines issued for which the PPAs has already been approved by the Commission. The power from APCPL 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 APCPL, the fixed charges are to be borne by the UT of Chandigarh and it will further burden the per unit power purchase cost. CED further submits that it receives large quantum of cheapest power from BBMB and when it is required to surrender power due to low demand, the costlier power is being surrendered first. Also, under Demand Side Management and Energy Conservation, CED has already proposed the action plan for implementation of Time of Day tariff. DNIT for the same shall be prepared after receiving the approved regulation on DSM from the Hon'ble Commission.

It is further submitted that CED is putting every effort to remain within the scheduled power however, since the department is having a shortage of power during the summer season and surplus during the winter season and if long term power purchase agreements are made, this may lead to financial loss to CED in this ABT regime in view of the market rates which may vary during the summer and winter season. Therefore, buying short term power through competitive bidding is most appropriate to meet the increased load demand during the summers.

Further, being one of the directives issued by Hon'ble JERC, the scope of work of previous DNIT for appointment of consultant for load forecasting has been amended in view of the draft JERC regulations of Multi Year Distribution Tariff (MYT) Regulation 2013 and Demand Side Management Regulation 2013 and case is under process of calling the tender..

**Unquote**

**Commission's views:**

The Commission has noted the submissions made by the petitioner. The Commission would like to highlight that the petitioner has net shortage of power and thus directs the petitioner to do prudence check while purchasing power.

### 3.3.14 A&G Expenses and R&M Expenses

**Stakeholders Objections/Comments:**

The main point raised by the Joint forum for Industries Association of Chandigarh & Chamber of Chandigarh Industries and PHD Chamber of Commerce and Industry in brief are as under:

*There is a strong need to introduce modern management techniques, office automation computerization and e working. A road map for systematic reduction in employs cost by virtue of above, should be put in place. The total business word is achieving reduction towards per unit employ cost despite the increase in per man-hour wage. There is actual reduction in power sale by the department. The January WPI is 5.05%. Incorporating this size of reduction in this account* *in the light of the suggestions made above is not a big task. Thus there is gross error in the projections. When there is an actual decrease in this cost during the last year, why the trend cannot be maintained this year.*

**Petitioner's submission:**
**Quote**
The main reason for increase in A&M expenses is due to increase in office expenses and the regulatory expenses. It is further submitted that the projections have been done as per the JERC Terms and Condition for Determination of Tariff Regulations, 2009.
CED submits that the R&M expenses are required to undertake various repair and maintenance activities as a step towards improvement of systems, reduction in breakdowns, reduction in response time and increasing preventing maintenance and the expenses as projected have been determined as per the JERC Terms and Condition for Determination of Tariff Regulations, 2009.

**Commission's views:**
The Commission has dealt with these issues in detail in subsequent chapters.

### 3.3.15 Non Availability of Audited Accounts and Energy Audit and Fixed Assets Register

**Stakeholders Objections/Comments:**

The main point raised by the Chandigarh Defense Colony Welfare Association, Chandigarh Industrial Area Tenant Association, National Consumer Awareness Group, Federation of Sector Welfare Associations, Sh. Ajay Jagga, Joint forum for Industries Association of Chandigarh & Chamber of Chandigarh Industries and PHD Chamber of Commerce and Industry in brief are as under:
*The Energy Audit Statement, Accounts on Commercial Principles, Load Research, and Load Forecasting study not provided by petitioner.*

The main point raised by the Sh. Ajay Jagga in brief are as under:
*The Fixed Assets Register not provided by petitioner, so no depreciation should be allowed.*

The main point raised by the Joint forum for Industries Association of Chandigarh & Chamber of Chandigarh Industries and PHD Chamber of Commerce and Industry in brief are as under:
*The department is not maintaining any register of assets nor is presenting any audited report. In the absence of such information, there can only be stray and unreliable estimates for Capitalization of assets, depredation, interest and finance charge and Return on investment and cannot form the part of ARR.*

**Petitioner's submission:**

**Quote:**

In this regard, it is submitted that In this regard, it is intimated that the 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. However, it is pertinent to mention here that as per existing rules being followed in Chandigarh Administration, the proforma account of every financial year is being duly audited by Comptroller & Auditor General of India (CAG). With regard to the compliance to the JERC directive regarding preparation of accounts on commercial accounting principles and Fixed asset register, the tender for appointment of consultant for preparation of accounts on commercial accounting principle and fixed asset registers has already been called and is under process. CED has requested Hon'ble JERC to treat the revenue Gap of Rs 149.50 Cr and Rs 74.26 Cr pertaining for FY 2011-12 & FY 2012-13 respectively, as Regulatory Asset which may be considered for tariff hike in subsequent ensuing years after the compliance of JERC directives regarding preparation of accounts on commercial accounting principles and Fixed asset register.

**Commission's views:**

The Commission has noted that while petitioner has initiated efforts in this context, there has been serious delays on account of the petitioner. The Commission has dealt with these issues in detail in the subsequent chapters.

### 3.3.16 Discount for advance payment and prepaid meters

**Stakeholders Objections/Comments:**

The main point raised by the Chandigarh Industrial Area Tenant Association in brief are as under:

*2% discount should be there for the consumers who are willing to pay the charges for their consumption of electricity in advance as it goes directly in the favor of electricity department and reduces the working capital requirement of the electricity department.*

*Tariff for prepaid meters should also be called for in this petition as and when this petition is presented before the commission for approval.*

The main point raised by the Pendu Sangharsh Committee, Chandigarh Residents Social Welfare Federation, Representatives of Chandigarh Residents in brief are as under:

*As there is no own vendor in Chandigarh who has designed and manufactured prepaid meters nor has Electricity Department given any vendor's name and who can supply pre-paid meters, it is difficult for the consumer to exercise any option in the absence of the above essential information. This contradiction would lead the public suffering tremendously.*

**Petitioner's submission:**

**Quote**

In this regard, it is intimated that the Hon'ble commission vide its order dated 11.2.2014 has directed CED to approve list of manufactures of prepaid meters and frame a software and policy for prepaid meter within 6 months from 20.11.2013 (Date of order under review)".

After getting the approval from the competent authority, CED has initiated the process of appointing consultant for the implementation of pre-paid meters. Hence, after finalization/ implementation of process, consumers can avail the option of pre-paid connection, otherwise the post-paid billing shall continue.

Further, as per the provisions of JERC Supply Code regulation 2010, Pre-paid connection (less than 50 kW) can be given to the consumer if he/she opts for the same.

**Unquote**

**Commission's views:**

The Commission has noted that the petitioner has initiated efforts in compliance to the directions of the Commission as per order dated 20th November 2013 and 11th February 2014. The Commission directs the petitioner to expedite the process and appraise the Commission of its status within 4 months of issuance of this order.

### 3.3.17 Bad Debts

**Stakeholders Objections/Comments:**

The main point raised by the Chandigarh Industrial Area Tenant Association in brief are as under:

*A detailed list of actual "Bad debts" should be announced and comparison of Provision of bad debts and actual bad debts may also be shown in the books of accounts..*

The main point raised by the Joint forum for Industries Association of Chandigarh & Chamber of Chandigarh Industries and PHD Chamber of Commerce and Industry in brief are as under:

*There should not be any bad debts as the petitioner does not sell anything on credit.*

**Petitioner's submission:**

**Quote**

CED in this regard submits that the calculation of Bad debts amounting to 1% of the revenue from sale of power is in accordance with Regulation 28 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. It is further submitted that the provisioning of Bad debts is a standard business practice and the same is allowed to be recovered from the consumers through ARR as legitimate expense by most of the Regulatory Commission's across the country.

**Unquote**

**Commission's views:**

The Commission has dealt with the provision of bad debts in subsequent chapters of this tariff order.

### 3.3.18 Recovery of Arrears

**Stakeholders Objections/Comments:**

The main point raised by the Chandigarh Business Council in brief are as under:

*The status of recovery of arrears in tune of Rs 11 Crores.*

The main point raised by the Pendu Sangarsh Commitee in brief are as under:

*There are large amount of payments, which is lying outstanding in the name of various consumers. Such defaulters also include as government departments and private organizations. The Electricity department is not paying any attention and taking no step to recover this outstanding amount from the defaulters. This amount, if recovered, would go a long way to give a big relief to the innocent consumers who are being penalized and over-burdened consistently with serial power tariff hike. Therefore, all out efforts should be mobilized to recover the outstanding arrears so that innocent consumers may be saved from this arbitrary proposed hike.*

**Petitioner's submission:**

**Quote**

The Chandigarh Electricity Department (CED) has made sincere efforts in reducing the defaulting amount from both Govt. and Pvt. Organizations'. Notices under section 56 of the Electricity Act 2003 is already printed on the backside of the electricity bill issued to the consumers for the payment of the billed amount by the due date and disconnection when the billed amount is not made by the due date. However, as per provision of JERC regulation, ACD is being accepted in three installments, if required.

Further, as per clause 28 of JERC Terms and conditions for determination of Tariff Regulations 2009, a provision of bad debts upto 1% of receivables in the revenue requirement of the CED is allowed and thus, proposed tariff hike does not consider/ include arrears etc.

**Unquote**

**Commission's views:**

The Commission agrees with petitioner that while the revenue received is considered on accrual basis and not on actual basis while determining the tariff and thus the under recovery/arrears does not impact the tariff determination process. However, accumulation of arrears adversely affect the financial health of the utility and provision of bad debts upto 1% should not be considered as substitute for non-recovery of arrears. The Commission directs the petitioner to make all efforts for collection of arrears and submit a status report every 4 months for compliance of this direction along with the amount of outstanding arrears along with its age.

**3.3.19 Regarding Subsidies to the Rural Communities.**

**Stakeholders Objections/Comments:**

The main point raised by the Pendu Sangarsh Commitee in brief are as under:

*Almost in every state, the power utilities have given benefits in the form of subsidies to the down trodden and weaker sections of the society. But in Chandigarh, the Electricity Department has made no such provisions. Subsidies should be extended to the SCs/STs, OECs, the natives of all the 23 villages of U. T. Chandigarh, including peasants of the villages of U. T. Chandigarh.*

**Petitioner's submission:**

**Quote:**

In this regard, it is again intimated that the present electricity tariff in UT Chandigarh is very competitive in comparison to its neighboring states and hence, the option of subsidy is not practical. The recent tariff reduction given in Delhi, in two slabs of domestic category i.e. 0-200 units & 201-400 units, is through subsidy. The Delhi Govt is required to pay the subsidy amount to the concerned licensees (BSES, NDPL).

CED is adhering to the regulations framed by JERC. CED has no power to raise or lower the tariff as the power to raise/ lower the tariff vest with JERC as per section 62 of EA 2003.

**Unquote**

**Commission's views:**

The Commission is of view that the while decision of roll back subsidies lies with the government, the cross-subsidies are governed by the Electricity Act 2003 and National Tariff Policy. The Commission agrees with the submission of petitioner that the tariff of CED is already very competitive and thus there is no requirement of review of change of level of cross-subsidies in present scenario.

### 3.3.20 Requirement of Additional Manpower

**Stakeholders Objections/Comments:**

The main point raised by the U.T. Power Men Union, Chandigarh in brief are as under:

*There are numerous issues prevailing in the current system prevailing in the system owing to non – recruitment of manpower in lieu of the vacancies owing to retirement of existing employees some of which are briefed as follows:*

1. *While the no. of connections have almost doubled since 1987, the no. of employees have been virtually reduced to 2/3 of no. of employees in 1987, thereby, resulting in difficulties in compliance of the Standard of Performance Regulations.*
2. *With computerization and advancement in technology, there is need for recruitment of trained and specialized staff.*
3. *Non-Recovery / delayed recovery of the dues due to non availability of adequate manpower.*
4. *Pilferage / theft of electricity in absence of adequate manpower to properly monitor these activities.*

*In view of above sufficient funds be provided in the ARR for the year 2014-15 so that department may take necessary steps to fill up the vacant posts of different categories.*

**Petitioner’s submission:**
No submission received from the petitioner.

**Commission’s views:**

The Commission has already directed the petitioner in previous orders to submit the study of manpower requirement. The petitioner has submitted the manpower requirement which has been admitted as separate petition no. 129/2014. Pending the disposal of this petition by separate order, the Commission has provisionally acknowledged the demand of the petitioner to hire 42 LDCs in the FY 2014-15.

### 3.3.21 Other Objections

**Stakeholders Objections/Comments:**

The main point raised by the Joint forum for Industries Association of Chandigarh & Chamber of Chandigarh Industries and PHD Chamber of Commerce and Industry in brief are as under:

**Quote**

1. *Transparency: There should be transparency in the working of the department both in terms activities and the finance and All such information should be in public domain on quarterly basis.*

2. *No reasoning/justification, for the demand of two part tariff has been made by UTED. There is no rationale in demanding the fixed charges, as the total distribution network created by the department has either been depreciated or has been paid from the money charged as line service connection recovered from the consumer at the stage and time of release of power connection to them.*

3. *There is no rationale in allowing no bonus for improving the power factor from 0.90 to 0.95 and a bonus of 0.5% per 0.01 point above 0.95. Against a fine of 1% per 0.01 decrease towards lower power factor. These fines cannot be looked upon as medium for revenue generation but should act deterrent to energy loss or encouragement to its saving. Let the department also go green and allow 1% per 0.01 increase of power factor from 0.9 onwards, as an incentive to consumers, who are investing to ensure a power factor higher than 0.9 and helping the department in making better voltage regulation and reduced line losses in their network.*

4. *Since industry is considered as priority category by the GOI so separate Industrial Consumer category for it. The tariff for this should be lower than the NRS category. If the commission is allowing cross-subsidized tariff for other priority categories, then industry too has the legitimacy of its demand. This is more in concern, as the industry of Chandigarh is facing the global completion from the neighboring states as well.*

5. *A consumer friendly process and a single window policy should be put in place and the industrial connections should be released in time bound manner.*

6. *Electricity Lok Adalat should be constituted to address out of court settlements for the disputes of consumers.*

7. *All the maintenance staff should be provided official mobile phones and vehicles, so as to ensure timely restoration of electricity.*

8. *A 20% surcharge for LT consumers is very high. It should be reduced to 12% in line with the permitted surcharge to other neighboring power distribution companies in the neighboring states of Punjab and Haryana.*

9. *Introduction of complete IT in the department should be ordered within a time bound frame.*

10. *There is very low publicity given to this process of public hearing. Even the Associations, putting forth, their objections regularly are not been informed individually and directly.*

11. *Late payment charge should now be reduced as equivalent to interest, as the department has already collected ACD from consumers.*

12. *With the onset of new technologies, and to ensure efficient use of the available distribution network of the department, the governance of the consumer connection should be shifted to Contract demand from Connected Load.*

    a. *Most of the Honorable State Electricity Regulatory Commissions have already passed such orders and the utility companies and have adopted them and have created win-win situation for the both the consumers and the utility companies.*

    b. *While ensuring efficient use of the network, the department is able to release more connection through the existing lines.*

    c. *The consumers get the flexibility of changing their connected load, without allowing any change in their contract demand.*

    d. *The consumers get a relief from terming "added connected load" as theft/ which in fact is not, if the demand of the consumer does not change.*

    e. *The consumer gets a relief of an avoidable entry of UTED staff in their premises for load checking.*

    f. *There is no revenue loss to the department on this account.*

    g. *The department is able to save huge cost of inspection of consumer premises.*

**Unquote**

**Petitioner's submission:**
**Quote**

1. Finance & Energy Audit: In this regard, it is submitted that Energy Audit of Chandigarh Electricity Department to assess actual technical and commercial losses shall be covered under Part-A (IT implementation) of R-APDRP project. The allotment of work of IT implementation is under process.

2. It is under the purview of the Hon'ble Commission.

3. The petitioner submitted that the money charge at the time of releasing power connection to the consumers is the one time charge which includes meter installation charges. However, the fixed charges as recovered from the consumers are 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. Further, it is intimated that as per section 45 of Electricity Act 2003, the charges for electricity supplied by a distribution licensee may include a fixed charge in addition to the charge for the actual electricity supplied

4. In this regard, CED submits that although 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 looked at if it is more than 0.95.

5. In this regard, it is submitted that there is already categories for industrial consumers based on their connected load i.e. Small, Medium and Large industries. The Tariff being charged to the industrial consumers is almost in the same line as being allowed to the same category consumers by the neighbouring Commissions.

6. In this regard, it is submitted that the electricity connections are being released as per JERC Electricity Supply Code Regulation 2010. However, after the implementation of R-APDRP project, the all the related process to release of connection shall be expedited.

7. CED submits that step by step options are already available to the electricity consumers of UT Chandigarh for out of court settlement of their disputes –

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

    b. Consumer Grievance Redressal Forum (CGRF) notified & established as per JERC Regulation.

    c. Ombudsman notified & appointed as per JERC regulations.

8. 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. Moreover, the contact details of CGRF is also been printed on electricity bill. 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.

9. The petitioner submitted that the all the maintenance staff have either been provided with official SIMs or have been provided related allowances.

10. In this regard, it is intimated that 20% surcharge for LT consumers is very genuine. However, the final approved order shall be binding on the CED in this regard.

11. In this regard, CED submits that it is in the process of implementing R-APDRP project which will help to reduce T&D losses and accelerate improvement of distribution system.

12. CED submits that the Public Notice was published in the various leading local newspapers (The Tribune, Hindustan Times, Indian Express (English), Dainik Bhaskar, Amar Ujala (Hindi) and Dainik Ajit (Punjabi) on dated 23.1.14/24.1.14 for giving objections/suggestions regarding ARR & Tariff Petition for FY 2014-15 filed by CED. Besides above, the ARR and tariff petition has been uploaded on the website of CED and JERC. Thus, adequate publicity has been made.

13. In this regard, it is submitted that late payment surcharge is levied onto the consumers as per the Clause 35(2) of the JERC Terms and Conditions of Tariff Regulations, 2009 which states that for any delay in payment of bill by a consumer beyond the period specified by the Commission, a late payment surcharge shall be levied as laid down by the Commission from time to time in the General Conditions of Tariff / Supply Code.
14. In this regard, CED submits that it is in the process of implementing R-APDRP project which will help to reduce T&D losses and accelerate improvement of distribution system.
15. With the onset of new technologies, and to ensure efficient use of the available distribution network of the department, the governance of consumer connection will be considered for shifting from connected load to contract demand.
16. In this regard, CED submits that it is in the process of implementing R-APDRP project which will help reduce T&D losses and accelerate improvement of distribution system.

**Unquote**

**Commission's views:**

The Commission has noted the submission of the petitioner and wherever relevant, dealt the same in detail in subsequent chapters.

# 4. PROVISIONAL TRUING UP FOR FY 2011-12 and FY 2012-13

## 4.1 Petitioner Submission

The petitioner has submitted that in the Tariff Order for FY 2013-14 issued on 15th April 2013, the Commission had not undertaken provisional true up of FY 2011-12 due to non-availability of the audited accounts based on the commercial accounting principles for FY 2011-12. Further, the Commission had undertaken the review of ARR of FY 2012-13 based on the actual information of first 9 months and projection for the rest.

The petitioner submitted that that it had floated the Tender (OP-4/19/2013-14) for appointment of consultant for preparation of Annual Statement of Accounts on commercial accounting principles. The petitioner requested the Commission to consider the actual details as submitted in the Petition based on the Performa Accounts for FY 2011-12 and FY 2012-13 audited by Comptroller & Auditor General of India (CAG). The petitioner also requested to approve the provisional true up for FY 2011-12 and FY 2012-13 until the Annual Accounts for FY 2011-12 and FY 2012-13 based on the commercial accounting principles are available. The petitioner has submitted the Performa Accounts for FY 2011-12 and FY 2012-13 along with Audit Certificate along with the petition for the purpose of True-up.

## 4.2 Commission Analysis

Commission in its last tariff orders dated 16th July 2011, 07th May 2012 and 15th April 2013 had directed the petitioner to prepare annual statement of accounts on commercial account principles for regulated business of electricity. Since, ED-Chandigarh is currently 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. The Commission has raised serious concerns on non-preparation/ non-availability of accounts and asked the utility to provide detailed justification for this non-compliance and reasons why current submission of petitioner for provisional true-up of FY 2011-12 and FY 2012-13 should be considered by the Commission despite this non-compliance.

The petitioner has responded to the concerns raised by the Commission stating the following:
**Quote:**

*" In this regard, it is submitted that initially the DNIT for "**Appointment of consultant for (i) Preparation, construction and compilation of accounts for FY 2010-11, 2011-12, 2012-13 2013-14 and FY 2014-15 on commercial accounts principles for regulated business of electricity as per the regulatory requirement (ii) Preparation, construction and compilation of Assets and Depreciation Register from FY 2005-06 to FY 2014-15 (iii) preparation of ARR and Tariff Petition***

***for the FY 2014-15, review petition for FY 2013-14 and True-up Petition for FY 2011-12 and FY 2012-13 along with its submission, presentation and defence before the Regulatory Commission & Statutory Authorities like AG/CAG etc as per the scope of work"*** *was prepared on 25th May 2013, immediately after the approved tariff order for FY 2013-14 and sent to CE UT for approval on 27th May 2013. CE Ut in his various MEMOs dated 24th June 2013, 09th July 2013 and 23rd July 2013 asked this office to refer DNIT through the Consultancy Evaluation Committee. Keeping in view the draft MYT Regulations uploaded by the Hon'ble JERC, which was scheduled to be got effective from 01st April 2014, it was decided to separate the scope of above mentioned DNIT into 2 parts viz. (A) "****Appointment of consultant for (i) Preparation, construction and compilation of accounts for FY 2010-11, 2011-12, 2012-13, 2013-14 and FY 2014-15 on commercial accounts principles for regulated business of electricity as per the regulatory requirement (ii) Preparation, construction and compilation of Assets and Depreciation Register from FY 2005-06 to FY 2014-15***

*B)* ***Preparation of ARR and Tariff Petition for the FY 2014-15, review petition for FY 2013-14 and True-up Petition for FY 2011-12 and FY 2012-13 along with its submission, presentation and defense before the Regulatory Commission & Statutory Authorities like AG/CAG etc as per the scope of work.***

*So that the work of filing of MYT/ARR petition do not suffer as the same has to be filed by 30th November every year.*

*After separation, modifications suggested by the Standing Committee and the approval by CE Ut on 16th August 2013, the DNIT for "Appointment of Consultant for preparation f accounts on commercial principles and preparation of fixed asset register was floated on the e-tender portal of Chandigarh Administration on 23rd August 2013 with opening date of tender as 17th September 2013. The date of bidding was again extended to 11th October 2013 due to non-participation of bidders and due to this tender was cancelled on 11th October 2013.*

*Further on the basis of inputs provided by the various firms like M/s Deloitte, M/s Feedback Infra and M/s S.K. Bhasin and Associates, the DNIT was again amended and sent to higher office for the approval on 04th November 2013. After the final approval of the competent authority on 31st December 2013, the tender was refloated on 17th January 2014 with the date of opening on 05th February 2014. Again on the request of interested firms like M/s Deloitte, M/s Feedback Infra the last bidding date has been extended to 10th February 2014 in order to ensure wider and healthy competition. The last date has further been extended to 17th February 2014 keeping in view of requests of other firms. CED is putting its sincere efforts for the preparation of accounts on commercial principles and the asset and depreciation register and shall submit the same to the Hon'ble Commission immediately after the approval of such accounts by the competent authority.*

*In the tariff petition for FY 2014-15 filed by CED, the Hon'ble JERC has been requested to treat the revenue gap of Rs 149.50 Cr and Rs 74.26 Crores pertaining to FY 2011-12 and FY 2012-13 respectively, as the regulatory asset which may be considered for the tariff hike in subsequent* *years after the compliance of JERC directives regarding the preparation of accounts on commercial principles and fixed asset register.*

*In view of above, Hon'ble JERC is requested to kindly consider the above submission and allow CED to treat the revenue gap of Rs 149.50 Crores and Rs 74.26 Crores pertaing to FY 2011-12 and DY13 respectively as regulatory asset.*

**-Unquote**

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 CED 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'.*

*(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.*

**As the audited accounts based on commercial accounting principles are still awaited, Commission is of view it would be inappropriate to consider provisional true up of FY 2011-12 and FY 2012-13.**

**The Commission shall, therefore, undertake the true-up for FY 2011-12 and FY 2012-13 once the audited accounts prepared on the Commercial Principles are made available to the Commission by ED-CHD.**

**The Commission had approved a gap of Rs 32.87 Crores after review of ARR of FY 2011-12 in tariff order dated 15th April 2013. The Commission has brought forward this gap of Rs 32.87 Crores in ARR of FY 2013-14 as reviewed in this Order.**

**The Commission would like to emphasize that it has been repeatedly directing the petitioner to prepare accounts on commercial principles since issuance of 1st Tariff Order on 16th July 2011. While, the Commission acknowledges that the efforts have now been initiated by the petitioner for preparation of accounts on commercial principles, considerable time has been lost due to delay in start of actions in this context by the petitioner.**

**However, if the Petitioner had adhered to timelines as per the the directions issued in various orders, the audited accounts (prepared on commercial principles) would have been available by now for True up. The Commission is of the view that the delay, which is on account of petitioner, cannot be burdened on the consumers and therefore no carrying cost will allowed for gap for FY 2011-12 and FY 2012-13 (if any, after true-up is undertaken once the audited accounts on commercial principles are available).**

# 5. REVIEW OF ARR FOR FY 2013-14

## 5.1 Background

The Commission had approved the Aggregate Revenue Requirement for FY 2013-14 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 20th January 2014 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 2013-14.

1. After initial scrutiny/analysis, Commission took the petition on record on 21st January 2014.
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 were sought to be clarified by the petitioner as under:
   a. To provide detailed justification for this non-compliance and reasons why current submission of petitioner for True-Up of FY 2011-12 and FY 2012-13 should be considered by the Commission despite this non-compliance of commission's directives for preparation of accounts on commercial accounting principles and preparation of fixed asset register.
   b. The utility needs to provide details of long term/short term power purchase, month wise and source wise, for FY 2012-13 (actual for whole year) and FY 2013-14 (actual for first 8 months) and station-wise, month-wise details of FPA/FPPCA, tax, past arrears etc. as per Format 4.
   c. Submit month wise bills for PGCIL charges, NRLDC FC, REC, RPO, LC, including any arrear bills, if any for FY 2012-13 and FY 2013-14 (actual for first 8 months);
   d. 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 2013-14 (actual for first 9 months) in support of this to be furnished;
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 18th and 19th February 2014, during validation, few additional clarifications were required to be made by the petitioner as under.
   a. Status note on creation of interstate point within periphery of Chandigarh.
   b. Status note on requirement of additional manpower.
   c. Status note on BBMB Arrears, etc.

4. The Petitioner furnished information on data gaps along with supporting data on 12th February 2014 to substantiate their claims.

The Petitioner has furnished the updated information of actual Power purchase cost, Sales & Revenue for 8 months of FY 2013-14 and provisional Power purchase cost for FY 2013-14 to the Commission during the technical validation session. 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 2013-14.

The Commission has taken into consideration the following for Review of FY 2013-14:

i. The figures for FY 2012-13 as approved in the tariff order dated 15th April 2013;

ii. Provisional figures for FY 2013-14 based on the actual data / information from April 2013 to November 2013;

## 5.2 Review & Analysis of Performance of FY 2013-14

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

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

CED has submitted the category wise connected load (in kW) for FY 2007-08 to FY 2012-13 as follows:

*Table 5.3.1: Category-wise connected load submitted by petitioner for FY 08 to FY 14 (in kW)*

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

CED has submitted the category wise number of consumers for FY 2007-08 to FY 2012-13 as follows:

*Table 5.3.2: Category-wise No. Of Consumers submitted by petitioner for FY 08 to FY 14 (in kW)*

| Category | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 |
|---|---|---|---|---|---|---|
| Domestic | 162,105 | 165,121 | 167,208 | 168,429 | 170,364 | 172,549 |

| Category | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 |
|---|---|---|---|---|---|---|
| Commercial | 23,536 | 24,066 | 24,420 | 24,837 | 25,359 | 20,309 |
| Large Supply | 102 | 103 | 102 | 102 | 104 | 101 |
| Small Power | 1,359 | 1,371 | 1,409 | 1,286 | 1,291 | 1,285 |
| Medium Supply | 865 | 879 | 884 | 1,042 | 1,076 | 1,116 |
| Agriculture | 163 | 163 | 167 | 133 | 122 | 123 |
| Public Lighting | 546 | 554 | 568 | 678 | 775 | 807 |
| Bulk Supply | 190 | 219 | 258 | 286 | 348 | 503 |
| Others-Temporary Supply | 261 | 265 | 266 | 751 | 903 | 922 |
| **Total** | **189,127** | **192,741** | **195,282** | **197,544** | **200,342** | **197,715** |

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

*Table 5.3.3: Category-wise Number of consumers & Connected Load submitted by Petitioner for FY 2013-14*

| Category | Number of Consumers | Connected Load (KW) |
|---|---|---|
| | FY 2013-14 | FY 2013-14 |
| Domestic | 174,717 | 771,893 |
| Commercial | 21,324 | 348,987 |
| Large Supply | 103 | 68,825 |
| Small Power | 1,298 | 19,110 |
| Medium Supply | 1,174 | 62,050 |
| Agriculture | 124 | 714 |
| Public Lighting | 873 | 6,116 |
| Bulk Supply | 518 | 41,716 |
| Others-Temporary Supply | 931 | 5,729 |
| **Total** | **201,063** | **1,325,139** |

CED has submitted the category wise sales for FY 2007-08 to FY 2012-13 as follows:

*Table 5.3.4: Category-wise sales submitted by Petitioner for FY 08 to FY 14 (in KW)*

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

| Category | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 |
|---|---|---|---|---|---|---|
| **Total** | **1,156.00** | **1,192.00** | **1,275.30** | **1,285.00** | **1,301.47** | **1,365.05** |

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.

For estimation of sales for FY 2013-14, CED presently has the actual energy sales information for April 2012 to November 2012 and April'13 to November'13 and the same has been summarized below:

*Table 5.3.5: Category wise sales from April to November for FY 2012-13 and FY 2013-14 (MU)*

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

As the Petitioner already has actual sales for first 8 months of FY 2013-14, sales for last 4 months (except, large industrial supply, public lightning and temporary supply) for FY 2013-14 has been estimated based on the proportion of sales for last 4 months (Dec to March) of FY 2012-13 to the sales for first eight months (April to Nov) of FY 2013-14.

For Industrial supply, applying the above discussed methodology resulted in the sales for FY 2013-14 lower than the than for FY 2012-13. Moreover, also this category has also shown the negative CAGR over the years. Thus, energy sale in large industrial supply has been taken same as that of the corresponding sales for FY 2012-13.

For Public Lightning, it has been observed that this category has witnessed lower sales in first eight months of FY 2013-14 and thus applying the above discussed methodology, sales in FY 2013-14 comes out to be lower than the sales for FY 2012-13 which is 21.98 MU. However, historically this category has witnessed robust growth as per the CAGR of historical sales. Thus, a nominal growth rate of 5% has been considered for this category.

As it can be seen that specific trend was observed in the sales of temporary supply in the past 5 years. Also, the 3-year, 4-year and 5-year CAGR recorded under this category shows a negative trend. Therefore, energy sale in temporary category for FY 2013-14 has been considered same as that of the corresponding sales for FY 2012-13.

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

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

*Table 5.3.6: Petitioner Submission for Category-wise Sales for FY 2013-14 (MU)*

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

CED submits that the growth in sales for FY 2013-14 have been quite low i.e. 2.46%. This is mainly on account of lower than expected growth in consumers (1.69%) and connected load (5.64%) for FY 2012-13 thereby restricting the expected growth in sales for FY 2013-14.

The Petitioner has requested the Commission to approve the above requested energy sales for FY 2013-14 as the revised estimate

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

Commission has considered the actual data of past 8 months for FY 2013-14 provided by the petitioner for assessment of consumer growth, connected load and energy sales. The Commission has considered the past trends in the energy consumption in the previous years for Apr-Nov and Dec- Mar for estimating the energy sales for the remaining period of FY 2013-14 i.e. Dec- March.

For estimation of number of consumers & connected load for FY 2013-14, the Commission has approved the submissions made by the petitioner of FY 2013-14 for all the categories for FY 2013-14.

*Table 5.3.7: No. of Consumers considered by the Commission for FY 2013-14*

| S.No. | Category/Consumption Slab | FY 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| A | Domestic | 187828 | 179642 | 174717 | 174717 |
| 1 | *SPD-JJ Clusters/Unauthorized Colonies/Slum Dwellers* | | | 15080 | 15080 |
| *2* | *0-150 kWh* | 70688 | 67607 | 75658 | 75658 |
| *3* | *151 kWh-400 kWh* | 74470 | 71224 | 60521 | 60521 |
| *4* | *Above 400 kWh* | 42670 | 40810 | 23458 | 23458 |
| B | Commercial | 26261 | 22213 | 21324 | 21324 |
| *4* | *0-150 kWh* | 9486 | 20346 | 9513 | 9513 |
| *5* | *151 kWh-400 kWh* | 5460 | 747 | 4849 | 4849 |
| *6* | *Above 400 kWh* | 11315 | 1120 | 6963 | 6963 |
| C | Large Supply | 104 | 102 | 103 | 103 |
| D | Small Power | 1291 | 1292 | 1298 | 1298 |
| E | Medium Supply | 1233 | 1188 | 1174 | 1174 |
| F | Agriculture | 122 | 123 | 124 | 124 |
| G | Public Lighting | 970 | 890 | 873 | 873 |
| H | Bulk Supply | 422 | 536 | 518 | 518 |
| I | Others-Temporary Supply | 1094 | 1356 | 931 | 931 |
| **Grand Total** | | **219325** | **207341** | **201063** | **201063** |

*Table 5.3.8: Connected Load considered by the Commission for FY 2013-14*

| S.No. | Category/Consumption Slab | FY 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| A | Domestic | 709733.87 | 740354.89 | 771892.80 | 771892.80 |
| 1 | *SPD-JJ Clusters/Unauthorized Colonies/Slum Dwellers* | | | 1496.27 | 1496.27 |
| *2* | *0-150 kWh* | 139572.77 | 145594.55 | 220845.57 | 220845.57 |
| *3* | *151 kWh-400 kWh* | 229972.86 | 239894.89 | 275461.70 | 275461.70 |
| *4* | *Above 400 kWh* | 340188.24 | 354865.45 | 274089.26 | 274089.26 |
| B | Commercial | 363465.65 | 345136.43 | 348987.14 | 348987.14 |
| *4* | *0-150 kWh* | 115561.58 | 109733.92 | 37619.16 | 37619.16 |
| *5* | *151 kWh-400 kWh* | 36346.56 | 34513.64 | 26443.60 | 26443.60 |
| *6* | *Above 400 kWh* | 211557.50 | 200888.86 | 284924.39 | 284924.39 |
| C | Large Supply | 66742.74 | 65191.67 | 68824.53 | 68824.53 |
| D | Small Power | 19538.60 | 19805.68 | 19109.83 | 19109.83 |
| E | Medium Supply | 62292.83 | 64990.76 | 62049.98 | 62049.98 |

| S.No. | Category/Consumption Slab | FY 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| F | Agriculture | 675.00 | 696.33 | 714.07 | 714.07 |
| G | Public Lighting | 6887.48 | 6364.09 | 6115.62 | 6115.62 |
| H | Bulk Supply | 32765.45 | 39846.67 | 41716.03 | 41716.03 |
| I | Others-Temporary Supply | 33686.40 | 54584.60 | 5728.70 | 5728.70 |
| **Grand Total (in kW)** | | **1295788.02** | **1336971.11** | **1325138.71** | **1325138.71** |
| **Grand Total (in MW)** | | **1295.79** | **1336.97** | **1325.14** | **1325.14** |

*Table 5.3.9: Energy Sales approved by the Commission for FY 2013-14 (MU)*

| S.No. | Category/Consumption Slab | FY 2013-14 | | | | | |
|---|---|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Apr-Nov (Submitted by Petitioner) | Dec-Mar (Approved by the Commission) | Total Sales Approved by the Commission |
| A | Domestic | 598.44 | 663.90 | 615.90 | 447.02 | 170.77 | 617.79 |
| 1 | *SPD-JJ Clusters/Unauthorized Colonies/Slum Dwellers* | | | 18.31 | 13.29 | 5.08 | 18.36 |
| *2* | *0-150 kWh* | 58.17 | 64.54 | 52.56 | 38.15 | 14.57 | 52.72 |
| *3* | *151 kWh-400 kWh* | 178.14 | 197.62 | 194.96 | 141.50 | 54.06 | 195.56 |
| *4* | *Above 400 kWh* | 362.13 | 401.74 | 350.07 | 254.08 | 97.06 | 351.15 |
| B | Commercial | 500.30 | 455.90 | 421.61 | 299.95 | 121.49 | 421.44 |
| *4* | *0-150 kWh* | 7.01 | 6.39 | 6.26 | 4.45 | 1.80 | 6.26 |
| *5* | *151 kWh-400 kWh* | 16.46 | 15.00 | 14.77 | 10.51 | 4.26 | 14.77 |
| *6* | *Above 400 kWh* | 476.82 | 434.52 | 400.58 | 284.99 | 115.43 | 400.41 |
| C | Large Supply | 128.72 | 142.53 | 137.50 | 80.81 | 37.94 | 118.75 |
| D | Small Power | 26.16 | 23.14 | 17.89 | 12.66 | 5.19 | 17.85 |
| E | Medium Supply | 105.55 | 109.94 | 92.09 | 62.91 | 29.23 | 92.14 |
| F | Agriculture | 1.50 | 1.58 | 1.37 | 0.97 | 0.47 | 1.44 |
| G | Public Lighting | 20.21 | 22.79 | 23.07 | 11.81 | 6.82 | 18.63 |
| H | Bulk Supply | 115.13 | 106.74 | 80.35 | 53.37 | 24.74 | 78.11 |
| I | Others-Temporary Supply | 12.71 | 11.55 | 8.79 | 4.02 | 2.98 | 7.00 |
| **Total** | | **1508.70** | **1538.08** | **1398.57** | **973.52** | **399.62** | **1373.14** |

## 5.4 Intra-State Transmission & Distribution Loss

### Petitioner's submission

The petitioner has submitted that the Commission had approved T&D loss level of 15.00% for FY 2013-14 for CED in the Tariff Order for FY 2013-14 issued on 15th April 2013. While approving the T&D loss level for FY 2013-14, the approved loss of 16.00% for FY 2012-13 was considered and 1% reduction as per the recommendations of the Abraham Committee report was considered.

The petitioner also submitted that the actual distribution loss for FY 2013-14 are higher than the approved losses as UT of Chandigarh has not been provided any interstate transmission point within the boundaries of Chandigarh and the metering is being done at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB) which has resulted in higher T&D losses for CED. With regard to the interconnection and metering point, petitioner has made representation to the CEA. During the discussion, it was agreed to by the Committee that appropriate actions would be taken in this matter. In addition, petitioner further submits that PGCIL in its letter dated 22.06.2013 have calculated the inter-state losses of around 3.0% on 220 kV Nalagarh-Manimajra line. Further the losses on 66kV Mohali-CHD and 66kV Dholkot-CHD has also been calculated for reference. Accordingly, petitioner has reduced additional 3.0% of the energy towards losses which are attributable towards inter-state losses and requested that same would not form part of the T&D losses of the petitioner. On basis of above computation, the petitioner submitted that T&D losses to be achieved during FY 2013-14 is 15.50% as against the T&D loss of 15.00% approved by the Hon'ble Commission in the Tariff Order for FY 2013-14 dated 15th April 2013.

The petitioner also submitted that around 98% of the consumers in UT Chandigarh are at LT which has an adverse effect on the loss reduction and petitioner is making all efforts for reducing its T&D losses by undertaking various measures i.e. HVDS, replacement of electromechanical meter to static meters, replacement of bare LT conductors with LT ABC in theft prone areas and accordingly proposes to achieve a loss of 15.00% for FY 2013-14.

**Commission's analysis**

Commission during the technical validation session held on 18th and 19th February 2014 directed the petitioner to provide a status note on issues related to interstate point for which the petitioner submitted the following:

**Quote**

*" During the 30th Standing Committee meeting of CES held on dated 02.01.2013, in principal approval for establishment of 2X60 MVA, 200/66 kV Substation along with 200 kV D/C line from Barwala (Panchkula ) was accorded. It was also decided during the meeting that the scheme may be fine tuned after discussion with Chandigarh. HVPNL and CTU Further, it was decided that the*

*M/s Power grid site office would carry out walk over survey from 400/220 kV Barwala (Panchkula) Substation to UT Chandigarh bounding from both proposed locations namely Hallomajra and Raipur Kalan. CED vide memo no. 6170 dated 18.12.2013 requested M/s PGCIL to carry out walk over survey as per the MOM issued by CEA vide letter no. 7/1/2013-SP&PA dated 5.12.2013 and also conveys that the land for 220 kV substation is available at 2 sites namely Hallomajra and Raipur Kalan. Further it is gathered that M/s PGCIL local site office has carried out walk over survey for both the sites and is learnt that report along with BOQ has been sent by the local office to regional HQ of Powergrid."*

**Unquote**

**The Commission acknowledges the efforts being done by the petitioner for identification of various concern areas for high T&D losses and steps being taken for reduction of these losses. While it is acknowledged that creation of interstate point within the periphery of Chandigarh will reduce the losses currently being borne by the petitioner to bring the power to its periphery, the Commission is of view that the efforts currently being undertaken will take atleast another 2 years to materialize. Till such time the interstate point is actually functional within the periphery of the petitioner, the Commission shall continue its existing approach for determination of T&D losses wherein, the Commission, while approving T&D losses, considers the power availability at the licensee's periphery as accounted by Northern Region Power Committee.**

**The T&D losses comprise of intra-state distribution and distribution losses. The Commission would like to reiterate that 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 15% as approved in tariff order dated 15th April 2013 and while approving the same the entire network of CED was covered. Further, the mentioned network belongs to the CED and is accordingly maintained. Accordingly, the Commission does not find any merit in the petitioner's current submission and hence has not considered any additional losses for the same.**

**In absence of energy audit as specified in regulation 15 of tariff regulations, 2009; Commission for the purpose of review of ARR for FY 2013-14, retains the T&D loss level of 15% as approved in Tariff order dated 15th April 2013. 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 2013-14 on the basis of actual T&D loss level and audited figures of Quantum of Power purchase and Sales for FY 2013-14.**

## 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 3.37% for FY 2013-14 by the petitioner by considering the actual losses of FY 2012-13.

### Commission's analysis

The Commission considers the recent 52 weeks moving average of regional losses i.e. 3.38% as the inter-state loss and approves the same for review of ARR of FY 2013-14 which would be revised based on actual during the truing up exercise.

## 5.6 Energy Balance

### Petitioner's submission

Based on the data on projected sales and power purchase obtained, revised energy balance has been prepared for FY 2013-14 by the petitioner which is summarized below:

*Table 5.6.1 : Energy Balance submitted by the Petitioner for review of FY 2013-14*

| S. No. | Particulars | FY 2013-14 | FY 2013-14 |
|---|---|---|---|
| | | Approved | RE |
| **A)** | **ENERGY REQUIREMENT** | | |
| 1 | Energy sales within the State/UT | 1,538.08 | 1398.57 |
| 2 | Energy sales to Agriculture consumers (included in total sales) | | |
| **3** | **Total sales within the State/UT** | **1,538.08** | **1398.57** |
| **4 a)** | **Distribution losses** | | |
| i) | % | 15.00% | 15.50% |
| ii) | MU | 271.43 | 256.54 |
| **b)** | **Losses due to absence of interstate transmission point** | | |
| i) | % | - | 3.00% |
| ii) | MU | - | 51.19 |
| **5** | **Energy required at State Periphery for Sale to Retail Consumers** | **1,809.50** | **1706.31** |
| **6** | **Add: Sales to common pool consumers/ UI** | | **64.09** |
| 7 | Sales outside state/UT : UI/Under drawal | | 39.64 |

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

**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 2013-14 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 2013-14

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| **A)** | **ENERGY REQUIREMENT (in Mus)** | | | | |
| 1 | Energy sales within the State/UT (in Mus) | 1508.70 | 1538.08 | 1398.57 | 1373.14 |
| **2** | **Total sales within the State/UT** | **1508.70** | **1538.08** | **1398.57** | **1373.14** |
| **3** | **Distribution losses** | | | | |
| i) | % | 17.00% | 15.00% | 15.50% | 15.00% |
| ii) | MU | 309.01 | 271.43 | 256.54 | 242.32 |
| | **Losses due to absence of interstate transmission point** | | | | |
| iii) | % | 2.00% | | 3.00% | |
| iv) | MU | 37.10 | 0.00 | 51.19 | 0.00 |
| **4** | **Energy required at State Periphery for Sale to Retail Consumers** | **1854.81** | **1809.50** | **1706.31** | **1615.46** |
| 5 | Add: Sales to common pool consumers/ UI (in Mus) | 0.00 | 0.00 | 64.09 | 6.57 |
| A | Sales outside state/UT : UI/(in Mus) | | | 39.64 | 6.57 |
| B | Sales (in Mus) | 0.00 | 0.00 | 24.45 | 0.00 |
| | a) To electricity traders (in Mus) | | | | |
| | b) Through PX (in Mus) | | | 24.45 | |
| C | Sales to other distribution licensees | 0.00 | 0.00 | 0.00 | 0.00 |
| | a) Bilateral Trade (in Mus) | | | | |
| | b) Banking Arrangement (in Mus) | | | | |
| **6** | **Total Energy Requirement for State (5+6)** | **1854.81** | **1809.50** | **1770.40** | **1622.02** |
| 7 | Transmission losses | | | | |
| i) | % | 3.35% | 3.35% | 3.37% | 3.38% |
| i) | MU | 64.34 | 62.77 | 61.74 | 56.70 |
| **B)** | **ENERGY REQUIRED AT GENERATOR END** | **1919.15** | **1872.27** | **1832.14** | **1678.72** |
| **1** | **Gross Availability (in MUs)** | **1919.15** | **1872.27** | **1832.14** | **1678.72** |
| a | Power Purchase from Renewable Sources | | | | |
| b | NPCIL | 108.10 | 97.03 | 123.90 | 118.19 |
| c | BBMB | 681.41 | 702.23 | 702.88 | 753.23 |
| d | THDC | 41.33 | 43.41 | 62.92 | 62.74 |
| e | SJVNL | 68.31 | 69.80 | 76.48 | 92.22 |
| f | Unscheduled Interchange | 0.00 | 0.00 | 81.78 | 48.58 |
| g | Power Purchase from other sources | 1020.00 | 959.81 | 784.18 | 603.75 |
| **2** | **PXIL (Buy) to match the energy requirement** | | | | |
| **3** | **Gross Purchase including PX (in MUs)** | **1919.15** | **1872.27** | **1832.14** | **1678.72** |

## 5.7 Power Purchase Quantum and Cost

### Petitioner's submission

**Power Purchase Quantum**

The Petitioner has submitted that it procures power from various sources such as:

- Central Generating Stations (CGS) such as that of NTPC, NHPC and NPCIL
- Other Generating Stations such as that of SJVNL, BBMB, THDC, APCPL
- Other Sources such as bilateral agreement, banking arrangement, power exchange, UI etc.

The petitioner has submitted that the allocation from CGS consists of a fixed share of allocation for a year, and a variable share of allocation from the unallocated quota, the quantum of which keeps on changing during the year and since the allocation of power from various sources is inadequate, the Petitioner is required to procure power from short –term sources i.e. power exchange, other trading sources and UI. Also, for meeting the peak demand petitioner is required to procure power from short-term sources. However, strict care is taken to limit the amount of UI drawals.

For estimation of quantum of power purchase for FY 2013-14, actual power available during the first eight months (April '13 - Nov '13), have been considered as per REA. For the estimation of quantum of power to be available from various sources during the balance four months (i.e. Dec'13 to Mar'14), petitioner has considered the actual power available during last four months of FY 2012-13 (Dec'12-March'13). Actual power procured under short-term has also been considered by the petitioner which includes power procured through competitive bidding under bilateral means, UI power and power exchange.

**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 2013-14 has been considered based on the invoices received from various generating stations, short-term sources, etc.
- Estimation of power purchase cost for balance four months from various stations have been considered based on the actual fixed, energy and other charges from the respective generating stations during the first eight months of the FY 2013-14.
- The supplementary and arrear amount for the eight months has been considered based on actual invoices. The additional charges as borne by the petitioner have been incorporated in the total power purchase cost against respective stations. It is further submitted that the

revised estimate on cumulative power purchase cost for FY 2013-14 is on a high side as it includes various additional charges, arrears/ supplementary charges which petitioner has received during April 2013 – November 2013. The petitioner further submitted that the cost due to additional charges and arrears for the next four months of FY 2013-14 i.e. December 2013 – March 2014 has not been considered for projections and requested the Commission to approve the same at the time of true-up of FY 2013-14.

- UI charges for the first eight months have been considered for energy drawn within the specified frequency as per the prevailing UI Regulations notified by CERC.
- The proposed shortage during the balance four months of FY 2013-14 has been considered to be met through PXIL. The rate has been considered similar to the actual average PXIL rate of CED during the first eight months of FY 2013-14.
- The transmission, NRLDC and reactive energy charges for FY 2013-14 has been considered based on the actual invoices received during the first eight months of FY 2013-14, and for the next four months pro-rata of the actual has been considered.
- The petitioner has also included the LC charges incurred towards power purchase in the total power purchase cost for FY 2013-14.
- **BBMB ULDC charges**: With effect from 1 November, 2011, the Ministry of Power has allocated 3.50% firm share to UT Chandigarh from BBMB power projects as per the decision of Hon'ble Supreme Court. Accordingly, all the capital cost after 1st November, 2011 pertaining to BBMB power projects is required to be borne by UT Capital. The BBMB is implementing the ULDC scheme for which the ULDC charges along with AMC, Microwave etc. charges are to be borne by UT Chandigarh. The bills of ULDC charges with effect from 1st November, 2011 to 31st October, 2013 have been received amounting to Rs. 18.43 lakhs for which the payments are likely to be made during this financial year i.e. FY 2013-14. CED submits that the cost amounting Rs. 18.43 lakhs has been considered in the power purchase cost projections for FY 2013-14.

**The estimated power purchase quantum and cost for FY 2013-14 as submitted by the petitioner is tabulated below:**

*Table 5.7.1 : Provisional Power Purchase Cost for FY 2013-14 submitted by the Petitioner*

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

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

## 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 15th April 2013 for FY 2013-14 was 1872.37 million units at an approved power purchase cost of Rs. 605.34 Crores including transmission charges.

The Commission as part of prudence verified the all the station-wise Power purchase bills for FY 2013-14 (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 2013-14. 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 2013-14:

*Table 5.7.2 : Summary Sheet: Quantum of Power Purchase and Cost for FY 2013-14 (April to November) as verified from power purchase bills*

| Sr. No. | Source | Procured till November 2013-Actuals (units and amount verified from bills excluding rebate) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Energy Units(MU) | | Fixed Charges (Rs. Crores) | Variable Cost (Rs. Crores) | Other Charges (Rs. Crores) | Total (Rs. Crores) |
| | | Petitioner | Approved | | | | |
| | | | | | | | |
| A | **Power purchase from Renewable** | | | | | | |
| | | | | | | | |
| | *(2.60% for - Non Solar) RPO (IEX)* | | | | 17.53 | | 17.53 |
| | *(0.40% for Solar)* | | | | | | |

| Sr. No. | Source | Procured till November 2013-Actuals (units and amount verified from bills excluding rebate) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Energy Units(MU) | | Fixed Charges (Rs. Crores) | Variable Cost (Rs. Crores) | Other Charges (Rs. Crores) | Total (Rs. Crores) |
| | | Petitioner | Approved | | | | |
| | | | | | | | |
| **B** | **NPCIL** | | | | | | |
| | *NAPS* | 30.08 | 30.06 | 0.00 | 7.13 | 0.31 | 7.44 |
| | *RAPP (Unit 3 & 4)-B* | 12.55 | 12.39 | 0.00 | 3.44 | 0.06 | 3.50 |
| | *RAPP (Unit 5 & 6)-C* | 43.43 | 43.43 | 0.00 | 14.81 | 0.27 | 15.08 |
| | | | | | | | |
| **C** | **Unscheduled Interchange** | | 48.58 | | | 10.05 | 10.05 |
| | | | | | | | |
| | | | | | | | |
| **D** | **BBMB** | | | | | | |
| | *BBMB 3.5%* | 232.07 | 232.03 | 0.00 | 4.48 | 0.00 | 4.48 |
| | *BBMB 1 LU* | 24.40 | 24.40 | 0.00 | 8.56 | 0.00 | 8.56 |
| | *BBMB 10 LU* | 244.00 | 244.00 | 0.00 | 109.09 | 1.84 | 110.93 |
| | | | | | | | |
| **E** | **THDC** | | | | | | |
| | *Koteshwar* | 11.57 | 11.58 | 1.55 | 2.32 | 0.02 | 3.88 |
| | *Tehri* | 38.42 | 38.47 | 5.55 | 8.21 | 0.74 | 14.50 |
| | | | | | | | |
| **F** | **SLVNL** | | | | | | |
| | *SJVNL* | 71.96 | 71.96 | 7.32 | 8.88 | 0.00 | 16.19 |
| | | | | | | | |
| **G** | **NTPC, NHPC & Other Stations** | | | | | | |
| | *Salal* | 7.33 | 7.33 | 0.36 | 0.36 | 0.00 | 0.72 |
| | *Uri I* | 12.10 | 11.50 | 1.02 | 0.93 | 0.00 | 1.96 |
| | *Uri II* | | 0.57 | 0.05 | 0.05 | 0.00 | 0.10 |
| | *Singrauli* | 42.83 | 42.83 | 2.40 | 3.96 | 0.01 | 6.37 |
| | *Chamera I* | 76.80 | 76.80 | 4.80 | 7.29 | 0.03 | 12.12 |
| | *Tanakpur* | 3.88 | 3.81 | 0.49 | 0.45 | 0.00 | 0.94 |
| | *Rihand III* | 22.98 | 22.98 | 4.29 | 2.83 | 0.00 | 7.13 |
| | *Rihand II* | 51.30 | 51.30 | 5.32 | 6.30 | 0.01 | 11.63 |
| | *Rihand I* | 64.90 | 64.91 | 5.85 | 8.12 | 0.03 | 14.00 |
| | *Chamera II* | 21.85 | 21.80 | 2.65 | 3.02 | 0.01 | 5.68 |
| | *Dhauliganga* | 4.20 | 4.17 | 0.60 | 0.58 | 0.01 | 1.19 |
| | *Chamara III* | 13.13 | 13.13 | 2.22 | 2.57 | 0.01 | 4.80 |
| | *Unchahar III* | 7.10 | 7.10 | 1.28 | 1.59 | 0.00 | 2.87 |
| | *Unchahar II* | 18.34 | 18.34 | 2.30 | 4.12 | 0.01 | 6.42 |
| | *Unchahar I* | 9.52 | 9.52 | 1.18 | 2.16 | 0.01 | 3.35 |
| | *Sewa II* | 6.14 | 5.84 | 1.66 | 1.40 | 0.01 | 3.06 |
| | *Dulhasti* | 24.94 | 24.74 | 5.83 | 7.06 | 0.01 | 12.90 |
| | *Kahalgaon II* | 11.59 | 11.59 | 1.68 | 2.87 | 0.00 | 4.55 |

| Sr. No. | Source | Procured till November 2013-Actuals (units and amount verified from bills excluding rebate) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Energy Units(MU) | | Fixed Charges (Rs. Crores) | Variable Cost (Rs. Crores) | Other Charges (Rs. Crores) | Total (Rs. Crores) |
| | | Petitioner | Approved | | | | |
| | *Dadri II* | 13.63 | 13.63 | 3.47 | 3.85 | 0.00 | 7.32 |
| | *Anta* | 24.68 | 24.62 | 3.35 | 7.20 | 0.01 | 10.56 |
| | *Auriya* | 14.19 | 14.19 | 2.77 | 4.51 | -0.01 | 7.27 |
| | *Dadri* | 20.23 | 20.23 | 2.67 | 6.53 | -0.07 | 9.13 |
| | *Jajjar* | 13.57 | 13.57 | 5.00 | 4.87 | -0.19 | 9.68 |
| | *GMR Power* | 16.35 | 16.35 | 0.00 | 6.78 | 0.00 | 6.78 |
| | *JSW* | 5.35 | 5.35 | 0.00 | 2.27 | 0.00 | 2.27 |
| | *PTC* | 2.85 | 2.85 | 0.00 | 1.01 | 0.00 | 1.01 |
| | **Power Purchase Cost** | **1218.26** | **1265.95** | **75.66** | **259.56** | **30.72** | **365.93** |
| **H** | **PGCIL and Other Charges** | | | | | | |
| | *PGCIL Charges* | | | | | | 22.86 |
| | *NRLDC F&C* | | | | | | 0.28 |
| | *BBMB ULDC* | | | | | | 0.02 |
| | *Reactive Energy Charges* | | | | | | 0.27 |
| | *LC Charges* | | | | | | 0.01 |
| | *Arrears* | | | | | | 19.91 |
| | *Less: Rebate* | | | | | | 5.40 |
| | *Less: Penal UI* | | | | | | 0.08 |
| | **Grand Total of Charges** | | | | | | **403.88** |

**Power Purchase Quantum and Cost for remaining four months of FY 2013-14**

- **Central Generating Stations –NTPC**

While estimating the energy availability from NTPC Stations for remaining four months of 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 latest revised allocation order no. NRPC/ OPR/ 103/ 02/ 2013-14/ dated 26/02/2014 of NRPC, 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. 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 remaining four months of the 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 issued by CERC as per the CERC (Terms and Conditions of Tariff) Regulations, 2009.

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2013 to November 2013 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 remaining four months of 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 latest revised allocation order no. NRPC/ OPR/ 103/ 02/ 2013-14/ dated 26/02/2014 of NRPC, 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 past 2 years. 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. However, no availability has been considered from Dhauliganga HEP as this HEP is under maintenance.

- **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 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 issued by CERC as per the CERC (Terms and Conditions of Tariff) Regulations, 2009.

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2013 to November 2013 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 remaining four months of 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 latest revised allocation order no. NRPC/ OPR/ 103/ 02/ 2013-14/ dated 26/02/2014 of NRPC, 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. 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 2013-14 from the NPCIL stations:

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2013 to November 2013 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 Jhajjar**

While estimating the energy availability from above hydro generating Stations for remaining four months of 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 latest revised allocation order no. NRPC/ OPR/ 103/ 02/ 2013-14/ dated 26/02/2014 of NRPC, 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 previous years. 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 2013-14 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 2013-14.

- **Merit order Dispatch**: The Commission has considered the availability of 11 LUs (1 LU + 10 LU per day) from BBMB as essential (despite its high cost) keeping in view of fact the CED is deficit in power in current scenario and will not get this confirmed allocation again once it surrenders and thus has not subjected this allocation from BBMB 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 2013-14 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 station (except BBMB) have been taken as per the latest Tariff orders for the respective stations issued by CERC as per the CERC (Terms and Conditions of Tariff) Regulations, 2009.

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2013 to November 2013 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. For FY 2013-14, the petitioner has submitted that it has met its almost entire RPO obligation through purchase of Renewable Energy Certificates (RECs) and requested the Commission for approval of Rs. 21.27 Cr for the purchase of RECs during FY 2013-14.

As per the order dated 27th December 2013 in the suo moto petition no. 61/2012, wherein the Commission has stated that:

**Quote:**

*"…..The Commission examined the report and observed that the respondent has submitted the report to meet RPO as per the JERC (Procurement of Renewable Energy) Regulations 2010 of back log for FY 2010-11, FY 2011-12, FY 2012-13 and current financial year FY 2013-14 in the format Annexure "A" of the order dated 25.10.2013. The respondent in the report assured the Commission to meet the RPO as per JERC (Procurement of Renewable Energy) Regulations, 2010 of back log for FY 2010-11, FY 2011-12, FY 2012-13 and current year FY 2013-14 in time.*

*Therefore, the Commission directs the respondent to meet RPO as per the JERC (Procurement of Renewable Energy) Regulations, 2010 of backlog for FY 2010-11, FY 2011-12, FY 2012-13 and current FY 2013-14 in time. The Commission further directs the respondent to submit a detailed compliance report to meet RPO backlog for FY 2010-11, FY 2011-12, FY 2012-13 and current year FY 2013-14 by 17.04.2014. In the default, the Commission shall be constrained to proceed under the*

*Regulation 4 of the JERC (Procurement of the Renewable Energy) Regulations 2010 against the licensee/obligated entities….."*

**Unquote**

**The Commission would like to clarify that while the CED was directed to ensure compliance of RPO from FY 2010-11 onwards as per the provisions of the JERC (Procurement of Renewable Energy) 2010, the Commission had not considered and approved the ARR for FY 2010-11 as detailed in the orders dated 24th January 2011 and 16th July 2011. Therefore, the Commission is of view that since the first tariff order was issued for the FY 2011-12 only, it will not be appropriate to provision, consider or approve expenses for years prior to FY 2011-12 as the Commission has not considered any Revenue Gap/Surplus for the years prior to FY 2011-12.**

Therefore, the Commission considers the RPO Compliance status from FY 2011-12 onwards only as summarized in table below:

*Table 5.7.3 : RPO Compliance Status up to FY 2013-14 (Rs Crores)*

| S. No. | Description | FY 2011-12 | FY 2012-13 | FY 2013-14 |
|---|---|---|---|---|
| 1 | Sales Within State | 1301.48 | 1365.05 | 1373.14 |
| 2 | RPO Obligation (in %) | | | |
| | *- Solar* | 0.30% | 0.40% | 0.40% |
| | *-Non Solar* | 1.70% | 2.60% | 2.60% |
| 3 | RPO Obligation (in MU) | | | |
| | *- Solar* | 3.90 | 5.46 | 5.49 |
| | *-Non Solar* | 22.13 | 35.49 | 35.70 |
| 4 | RPO Compliance (Actual Purchase) | | | |
| | *- Solar* | 0.00 | 0.00 | 0.00 |
| | *-Non Solar* | 0.00 | 0.00 | 0.00 |
| 5 | RPO Compliance (REC Certificate Purchase) | | | |
| | *- Solar* | 0.00 | 2.36 | 15.89 |
| | *-Non Solar* | 10.75 | 52.73 | 43.29 |
| 6 | Total RPO Compliance | | | |
| | *- Solar* | 0.00 | 2.36 | 15.89 |
| | *-Non Solar* | 10.75 | 52.73 | 43.29 |
| 7 | Shortfall in RPO Compliance | | | |
| | *- Solar* | 3.90 | 3.11 | -10.40 |
| | *-Non Solar* | 11.37 | -17.24 | -7.59 |
| 8 | Cumulative Shortfall in RPO Compliance | | | |
| | *- Solar* | 3.90 | 7.01 | -3.39 |
| | *-Non Solar* | 11.37 | -5.87 | -13.46 |
| **6** | **Floor Price of REC Certificates /MWH** | | | |

| S. No. | Description | FY 2011-12 | FY 2012-13 | FY 2013-14 |
|---|---|---|---|---|
| | ***- Solar*** | | | **9300.00** |
| | ***-Non Solar*** | | | **1500.00** |
| **7** | **Provision for meeting shortfall in RPO Compliance** | | | |
| | ***- Solar*** | | | **0.00** |
| | ***-Non Solar*** | | | **0.00** |
| | ***-Total*** | | | **0.00** |

Relying on the submissions made by the petitioner against the suo moto petition 61/2010, it is observed that the petitioner has already ensured partial compliance of RPO since FY 2011-12 onwards. Further, as per the submissions made by the petitioner, it has already purchased REC Certificates totaling Rs 21.27 Crores with an equivalent purchase of 15.89 MUs (Solar) and 43.29 MUs (Non Solar), thereby exceeding the RPO targets for FY 2013-14. Even after adjusting the cumulative shortfall in RPO Compliance up to FY 2012-13, there is net surplus in compliance of RPO targets. The surplus purchase will be adjusted against the RPO compliance in FY 2014-15.

**The Commission thus has provisionally approved the Rs 21.27 Crores as submitted by the petitioner for FY 2013-14 for RPO Compliance.**

**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-1/44/2013- CERC dated 31.12.2013 for approving the Transmission charges for the remaining months of FY 2013-14. Accordingly, the transmission charges for usage of PGCIL network is approved at **Rs. 19.36 Crores.**

Commission also allows the petitioner's claim of other charges for remaining months of FY 2013-14 including NRLDC, Reactive Energy Charges on pro-rata basis amounting to **Rs. 1.55 Crores**.

Accordingly, the total Transmission charges approved for the remaining four months of FY 2013-14 is **Rs. 20.90 Crores.**

*Table 5.7.4: Approved Power purchase quantum from above mentioned stations under merit order dispatch for remaining four months of FY 2013-14*

| Sr. No. | Source | Capacity (MW) | Average PLF/Gross Generation | Latest entitlement | | Gross Generation (MUs) | Auxilliary Consumption (%) | Net Generation (MUs) | Purchase (MUs) | PGCIL Losses (MUs) | Energy Available at Periphery (MUs) | Merit Order Purchase for 4 Months |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | % | MW | | | | | | | |
| | | | | | | | | | | | | |
| A | **Power purchase from Renewable** | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | *(2.60% for - Non Solar) RPO (IEX)* | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| | *(0.40% for Solar)* | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | | | |
| B | **NPCIL** | | | | | | | | | | | |
| | *NAPS* | *440.00* | 58.67 | 1.63% | 7.17 | 749.66 | 10.00% | 674.70 | 11.00 | 0.37 | 10.63 | 11.00 |
| | *RAPP (Unit 3 & 4)-B* | *440.00* | 86.09 | 0.66% | 2.92 | 1100.02 | 10.00% | 990.02 | 6.56 | 0.22 | 6.34 | 6.56 |
| | *RAPP (Unit 5 & 6)-C* | *440.00* | 86.09 | 1.49% | 6.56 | 1100.02 | 10.00% | 990.02 | 14.75 | 0.50 | 14.25 | 14.75 |
| | | | | | | | | | | | | |
| C | **Unscheduled Interchange** | | | | | | | | | | | 0.00 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| D | **BBMB** | | | | | | | | | | | |
| | *BBMB 3.5%* | *2956.00* | 10527.48 | 3.50% | 103.46 | 3489.93 | 2.00% | 3420.13 | 119.70 | 4.04 | 115.66 | 119.70 |
| | *BBMB 1 LU* | | | | | | | | 12.10 | 0.41 | 11.69 | 12.10 |
| | *BBMB 10 LU* | | | | | | | | 121.00 | 4.09 | 116.91 | 121.00 |
| | | | | | | | | | | | | |
| E | **THDC** | | | | | | | | | | | |
| | *Koteshwar* | *400.00* | 887.98 | 0.69% | 2.76 | 294.37 | 2.00% | 288.48 | 1.99 | 0.07 | 1.92 | 1.99 |
| | *Tehri* | *1000.00* | 3542.31 | 0.93% | 9.30 | 1174.30 | 2.00% | 1150.81 | 10.70 | 0.36 | 10.34 | 10.70 |
| | | | | | | | | | | | | |
| F | **SLVNL** | | | | | | | | | | | |
| | *SJVNL* | *1500.00* | 7194.21 | 0.86% | 12.90 | 2384.93 | 1.20% | 2356.31 | 20.26 | 0.68 | 19.58 | 20.26 |
| | | | | | | | | | | | | |
| G | **NTPC, NHPC & Other Stations** | | | | | | | | | | | |
| | *Salal* | *690.00* | 3244.54 | 0.27% | 1.86 | 1075.59 | 1.00% | 1064.83 | 2.88 | 0.10 | 2.78 | 2.88 |
| | *Uri I* | *480.00* | 2833.53 | 0.62% | 2.98 | 939.33 | 1.20% | 928.06 | 5.75 | 0.19 | 5.56 | 5.75 |
| | *Uri II* | *180.00* | 85.00 | 1.13% | 2.04 | 444.31 | 1.20% | 438.98 | 4.97 | 0.17 | 4.81 | 4.97 |
| | *Singrauli* | *2000.00* | 90.57 | 0.21% | 4.20 | 5260.31 | 7.25% | 4878.93 | 10.25 | 0.35 | 9.90 | 10.25 |
| | *Chamera I* | *540.00* | 2550.82 | 3.90% | 21.06 | 845.61 | 1.20% | 835.47 | 32.58 | 1.10 | 31.48 | 32.58 |
| | *Tanakpur* | *94.00* | 484.16 | 1.28% | 1.20 | 160.50 | 1.00% | 158.90 | 2.03 | 0.07 | 1.97 | 2.03 |
| | *Rihand III* | *500.00* | 85.00 | 0.79% | 3.97 | 955.71 | 9.00% | 869.70 | 6.90 | 0.23 | 6.66 | 6.90 |
| | *Rihand II* | *1000.00* | 89.22 | 1.03% | 10.30 | 2590.95 | 9.00% | 2357.76 | 24.28 | 0.82 | 23.46 | 24.28 |
| | *Rihand I* | *1000.00* | 89.22 | 1.21% | 12.10 | 2590.95 | 7.50% | 2396.63 | 29.00 | 0.98 | 28.02 | 5.06 |

| Sr. No. | Source | Capacity (MW) | Average PLF/Gross Generation | Latest entitlement | | Gross Generation (MUs) | Auxilliary Consumption (%) | Net Generation (MUs) | Purchase (MUs) | PGCIL Losses (MUs) | Energy Available at Periphery (MUs) | Merit Order Purchase for 4 Months |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | % | MW | | | | | | | |
| | *Chamera II* | *300.00* | 1476.88 | 1.27% | 3.81 | 489.59 | 1.20% | 483.72 | 6.14 | 0.21 | 5.94 | 0.00 |
| | *Dhauliganga* | *280.00* | 1146.66 | 1.22% | 3.42 | 0.00 | 1.20% | 0.00 | - | 0.00 | 0.00 | 0.00 |
| | *Chamara III* | *231.00* | 958.52 | 1.10% | 2.54 | 317.76 | 1.20% | 313.94 | 3.46 | 0.12 | 3.34 | 0.00 |
| | *Unchahar III* | *210.00* | 91.24 | 0.73% | 1.53 | 556.42 | 9.00% | 506.34 | 3.70 | 0.12 | 3.57 | 0.00 |
| | *Unchahar II* | *420.00* | 91.24 | 0.96% | 4.03 | 1112.84 | 9.00% | 1012.68 | 9.72 | 0.33 | 9.39 | 0.00 |
| | *Unchahar I* | *420.00* | 91.24 | 0.56% | 2.35 | 1112.84 | 9.00% | 1012.68 | 5.67 | 0.19 | 5.48 | 0.00 |
| | *Sewa II* | *120.00* | 523.13 | 1.33% | 1.60 | 173.42 | 1.20% | 171.34 | 2.28 | 0.08 | 2.20 | 0.00 |
| | *Dulhasti* | *390.00* | 2119.69 | 0.97% | 3.78 | 702.69 | 1.20% | 694.26 | 6.73 | 0.23 | 6.51 | 0.00 |
| | *Kahalgaon II* | *1500.00* | 68.56 | 0.20% | 3.00 | 2986.47 | 6.50% | 2792.35 | 5.58 | 0.19 | 5.40 | 0.00 |
| | *Dadri II* | *980.00* | 85.55 | 0.24% | 2.35 | 2434.68 | 6.00% | 2288.60 | 5.49 | 0.19 | 5.31 | 0.00 |
| | *Anta* | *419.00* | 2434.68 | 1.69% | 7.08 | 807.11 | 3.00% | 782.90 | 13.23 | 0.45 | 12.78 | 0.00 |
| | *Auriya* | *663.00* | 3326.76 | 1.10% | 7.29 | 1102.84 | 3.00% | 1069.76 | 11.77 | 0.40 | 11.37 | 0.00 |
| | *Dadri* | *830.00* | 4896.96 | 0.84% | 6.97 | 1623.37 | 3.00% | 1574.67 | 13.23 | 0.45 | 12.78 | 0.00 |
| | *Jajjar* | *1500.00* | 56.60 | 0.25% | 3.75 | 2465.50 | 9.00% | 2243.60 | 5.61 | 0.19 | 5.42 | 0.00 |
| | *GMR Power* | | | | | | | | | | | 0.00 |
| | *JSW* | | | | | | | | | | | 0.00 |
| | *PTC* | | | | | | | | | | | 0.00 |
| | **Power Purchase Quantum** | | | | | | | | **529.33** | **17.88** | **511.45** | **412.77** |

*Table 5.7.5: Approved Power purchase cost from above mentioned stations under merit order dispatch for remaining four months of FY 2013-14*

| Sr. No. | Source | Merit Order Purchase for 4 Months | | | | | |
|---|---|---|---|---|---|---|---|
| | | Energy Units (in MU) | Charges (In Crores) | | | | |
| | | | Fixed | Variable Charges (Ps/kWH) - Average of last 3 Months | Variable | Other | Gross Total |
| | | | | | | | |
| **A** | **Power purchase from Renewable** | | | | | | |
| | | | | | | | |
| | *(2.60% for - Non Solar) RPO (IEX)* | 0.00 | 0.00 | 0 | 3.74 | 0.00 | 3.74 |
| | *(0.40% for Solar)* | 0.00 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |
| | | | | | | | |
| **B** | **NPCIL** | | | | | | |
| | *NAPS* | 11.00 | 0.00 | 237 | 2.92 | 0.00 | 2.92 |
| | *RAPP (Unit 3 & 4)-B* | 6.56 | 0.00 | 274 | 1.86 | 0.00 | 1.86 |
| | *RAPP (Unit 5 & 6)-C* | 14.75 | 0.00 | 341 | 5.30 | 0.00 | 5.30 |
| | | | | | | | |
| **C** | **Unscheduled Interchange** | 0.00 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |
| | | | | | | | |

| Sr. No. | Source | Merit Order Purchase for 4 Months | | | | | |
|---|---|---|---|---|---|---|---|
| | | Energy Units (in MU) | Charges (In Crores) | | | | |
| | | | Fixed | Variable Charges (Ps/kWH) - Average of last 3 Months | Variable | Other | Gross Total |
| | | | | | | | |
| D | **BBMB** | | | | | | |
| | *BBMB 3.5%* | 119.70 | 0.00 | 23 | 2.80 | 0.00 | 2.80 |
| | *BBMB 1 LU* | 12.10 | 0.00 | 351 | 4.25 | 0.00 | 4.25 |
| | *BBMB 10 LU* | 121.00 | 0.00 | 466 | 58.27 | 0.00 | 58.27 |
| | | | | | | | |
| E | **THDC** | | | | | | |
| | *Koteshwar* | 1.99 | 0.57 | 165 | 2.47 | 0.00 | 3.04 |
| | *Tehri* | 10.70 | 2.11 | 173 | 10.25 | 0.00 | 12.37 |
| | | | | | | | |
| F | **SLVNL** | | | | | | |
| | *SJVNL* | 20.26 | 2.89 | 149 | 3.01 | 0.00 | 5.90 |
| | | | | | | | |
| G | **NTPC, NHPC & Other Stations** | | | | | | |
| | *Salal* | 2.88 | 0.14 | 49 | 0.14 | 0.00 | 0.28 |
| | *Uri I* | 5.75 | 0.71 | 81 | 0.46 | 0.00 | 1.18 |
| | *Uri II* | 4.97 | 0.72 | 81 | 0.40 | 0.00 | 1.12 |
| | *Singrauli* | 10.25 | 0.57 | 92 | 0.94 | 0.00 | 1.51 |
| | *Chamera I* | 32.58 | 2.09 | 98 | 3.19 | 0.00 | 5.28 |
| | *Tanakpur* | 2.03 | 0.26 | 117 | 0.24 | 0.00 | 0.50 |
| | *Rihand III* | 6.90 | 1.46 | 123 | 0.85 | 0.00 | 2.31 |
| | *Rihand II* | 24.28 | 2.39 | 127 | 3.08 | 0.00 | 5.47 |
| | *Rihand I* | 5.06 | 2.42 | 127 | 0.64 | 0.00 | 3.06 |
| | *Chamera II* | 0.00 | 0.92 | 139 | 0.00 | 0.00 | 0.92 |
| | *Dhauliganga* | 0.00 | 0.73 | 146 | 0.00 | 0.00 | 0.73 |
| | *Chamara III* | 0.00 | 0.73 | 188 | 0.00 | 0.00 | 0.73 |
| | *Unchahar III* | 0.00 | 0.53 | 208 | 0.00 | 0.00 | 0.53 |
| | *Unchahar II* | 0.00 | 0.94 | 208 | 0.00 | 0.00 | 0.94 |
| | *Unchahar I* | 0.00 | 0.52 | 212 | 0.00 | 0.00 | 0.52 |
| | *Sewa II* | 0.00 | 0.46 | 244 | 0.00 | 0.00 | 0.46 |
| | *Dulhasti* | 0.00 | 1.75 | 261 | 0.00 | 0.00 | 1.75 |
| | *Kahalgaon II* | 0.00 | 0.77 | 261 | 0.00 | 0.00 | 0.77 |
| | *Dadri II* | 0.00 | 0.93 | 306 | 0.00 | 0.00 | 0.93 |
| | *Anta* | 0.00 | 1.32 | 312 | 0.00 | 0.00 | 1.32 |
| | *Auriya* | 0.00 | 1.00 | 340 | 0.00 | 0.00 | 1.00 |
| | *Dadri* | 0.00 | 1.02 | 346 | 0.00 | 0.00 | 1.02 |
| | *Jajjar* | 0.00 | 1.34 | 364 | 0.00 | 0.00 | 1.34 |
| | **Power Purchase Cost** | **412.77** | **29.30** | | **104.81** | **0.00** | **134.12** |
| H | **PGCIL and Other Charges** | | | | | | |

| Sr. No. | Source | Merit Order Purchase for 4 Months | | | | | |
|---|---|---|---|---|---|---|---|
| | | Energy Units (in MU) | Charges (In Crores) | | | | |
| | | | Fixed | Variable Charges (Ps/kWH) - Average of last 3 Months | Variable | Other | Gross Total |
| | *PGCIL Charges* | | | | | | 19.36 |
| | *NRLDC F&C* | | | | | | 0.35 |
| | *Reactive Energy Charges* | | | | | | 0.48 |
| | *LC Charges* | | | | | | 0.71 |
| | **Grand Total of Charges** | **412.77** | **29.30** | | **104.81** | **0.00** | **155.02** |

- **Power Purchase Cost Approved for FY 2013-14**

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 2013-14 for remaining four months have been considered as per the POC charges applicable for FY 2013-14 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 2013 to November 2013 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 2013-14 is mentioned below:

*Table 5.7.6: Power Purchase cost approved for FY 2013-14 after considering MOD principles (Rs Crores)*

| Sr. No. | Source | Merit Order Purchase at Approved Losses | | | | |
|---|---|---|---|---|---|---|
| | | Energy Units (in MU) | Charges (In Crores) | | | |
| | | | Fixed | Variable | Other | Gross Total |
| | | | | | | |
| **A** | **Power purchase from Renewable** | | | | | |
| | | | | | | |
| | *(2.60% for - Non Solar) RPO (IEX)* | | | 21.27 | | 21.27 |
| | *(0.40% for Solar)* | | | | | |
| | | | | | | |
| **B** | **NPCIL** | | | | | |
| | *NAPS* | 41.06 | 0.00 | 10.05 | 0.31 | 10.35 |

| Sr. No. | Source | Merit Order Purchase at Approved Losses | | | | |
|---|---|---|---|---|---|---|
| | | Energy Units (in MU) | Charges (In Crores) | | | |
| | | | Fixed | Variable | Other | Gross Total |
| | *RAPP (Unit 3 & 4)-B* | 18.95 | 0.00 | 5.29 | 0.06 | 5.35 |
| | *RAPP (Unit 5 & 6)-C* | 58.18 | 0.00 | 20.11 | 0.27 | 20.37 |
| | | | | | | |
| **C** | **Unscheduled Interchange** | 48.58 | 0.00 | 0.00 | 10.05 | 10.05 |
| | | | | | | |
| | | | | | | |
| **D** | **BBMB** | | | | | |
| | *BBMB 3.5%* | 351.73 | 0.00 | 7.29 | 0.00 | 7.29 |
| | *BBMB 1 LU* | 36.50 | 0.00 | 12.81 | 0.00 | 12.81 |
| | *BBMB 10 LU* | 365.00 | 0.00 | 167.37 | 1.84 | 169.21 |
| | | | | | | |
| **E** | **THDC** | | | | | |
| | *Koteshwar* | 13.57 | 2.12 | 4.78 | 0.02 | 6.92 |
| | *Tehri* | 49.17 | 7.67 | 18.46 | 0.74 | 26.86 |
| | | | | | | |
| **F** | **SLVNL** | | | | | |
| | *SJVNL* | 92.22 | 10.20 | 11.88 | 0.00 | 22.09 |
| | | | | | | |
| **G** | **NTPC, NHPC & Other Stations** | | | | | |
| | *Salal* | 10.21 | 0.49 | 0.50 | 0.00 | 1.00 |
| | *Uri I* | 17.25 | 1.73 | 1.40 | 0.00 | 3.14 |
| | *Uri II* | 5.54 | 0.77 | 0.45 | 0.00 | 1.22 |
| | *Singrauli* | 53.08 | 2.97 | 4.90 | 0.01 | 7.87 |
| | *Chamera I* | 109.38 | 6.89 | 10.48 | 0.03 | 17.40 |
| | *Tanakpur* | 5.85 | 0.75 | 0.68 | 0.00 | 1.43 |
| | *Rihand III* | 29.88 | 5.75 | 3.68 | 0.00 | 9.44 |
| | *Rihand II* | 75.59 | 7.72 | 9.37 | 0.01 | 17.10 |
| | *Rihand I* | 69.96 | 8.27 | 8.76 | 0.03 | 17.07 |
| | *Chamera II* | 21.80 | 3.57 | 3.02 | 0.01 | 6.60 |
| | *Dhauliganga* | 4.17 | 1.33 | 0.58 | 0.01 | 1.92 |
| | *Chamara III* | 13.13 | 2.95 | 2.57 | 0.01 | 5.53 |
| | *Unchahar III* | 7.10 | 1.80 | 1.59 | 0.00 | 3.40 |
| | *Unchahar II* | 18.34 | 3.24 | 4.12 | 0.01 | 7.36 |
| | *Unchahar I* | 9.52 | 1.70 | 2.16 | 0.01 | 3.87 |
| | *Sewa II* | 5.84 | 2.12 | 1.40 | 0.01 | 3.52 |
| | *Dulhasti* | 24.74 | 7.59 | 7.06 | 0.01 | 14.65 |
| | *Kahalgaon II* | 11.59 | 2.44 | 2.87 | 0.00 | 5.32 |
| | *Dadri II* | 13.63 | 4.40 | 3.85 | 0.00 | 8.25 |
| | *Anta* | 24.62 | 4.67 | 7.20 | 0.01 | 11.88 |
| | *Auriya* | 14.19 | 3.77 | 4.51 | -0.01 | 8.27 |
| | *Dadri* | 20.23 | 3.70 | 6.53 | -0.07 | 10.16 |
| | *Jajjar* | 13.57 | 6.34 | 4.87 | -0.19 | 11.02 |
| | *GMR Power* | 16.35 | 0.00 | 6.78 | 0.00 | 6.78 |
| | *JSW* | 5.35 | 0.00 | 2.27 | 0.00 | 2.27 |
| | *PTC* | 2.85 | 0.00 | 1.01 | 0.00 | 1.01 |

| Sr. No. | Source | Merit Order Purchase at Approved Losses | | | | |
|---|---|---|---|---|---|---|
| | | Energy Units (in MU) | Charges (In Crores) | | | |
| | | | Fixed | Variable | Other | Gross Total |
| | **Power Purchase Cost** | **1678.72** | **104.96** | **381.90** | **13.19** | **500.05** |
| **H** | **PGCIL and Other Charges** | | | | | |
| | *PGCIL Charges* | | | | | 42.22 |
| | *NRLDC F&C* | | | | | 0.63 |
| | *BBMB ULDC* | | | | | 0.02 |
| | *Reactive Energy Charges* | | | | | 0.75 |
| | *LC Charges* | | | | | 0.72 |
| | *Arrears* | | | | | 19.91 |
| | *Less: Rebate* | | | | | 5.40 |
| | *Less: Penal UI* | | | | | 0.08 |
| | **Grand Total of Charges** | **1678.72** | **104.96** | **381.90** | **13.19** | **558.81** |

**Commission considers the Power purchase cost for Review of ARR for FY 2013-14 of Rs. 558.81 Crores for procurement of 1678.72 million units of energy and Renewable Energy Certificates to meet the RPO compliance up to FY 2013-14 as reasonable and approves the same for Review of FY 2013-14.**

## 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

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

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

The petitioner has considered an escalation of 7.35% p.a. based on the increase in Wholesale Price Index as on 1st April, 2013 over the same as on 1st April 2012. The WPI data has been considered as available on the website of Economic Advisor, Ministry of Commerce and Industry.

### 5.8.1 Employee Cost

**Petitioner's submission**

Employee expense estimated by the petitioner comprises cost incurred on present employees as well as on the retired employees. The cost of present employees includes salary, dearness allowance payable to employees and other allowances such as bonus, HRA, LTC, and medical reimbursement etc. The employees who retire are eligible for terminal benefits of Leave Encashment, Pension and Gratuity.

The actual employee expense for FY 2013-14 (up to October'13) is Rs. 30.99 Cr, breakup for which is provided in the formats. For projecting the employee cost for the entire year of FY 2013-14, the petitioner has considered the actual expense occurred during seven months of FY 2013-14 and projected the employee expense for full year of FY 2013-14 on pro-rata bases.

The petitioner has further submitted that it has considered only actual amount capitalized and the prior period expenses occurred for FY 2013-14 available upto October, 2013 and requested that the entire expenses are to be considered for true-up once the actual audited accounts for FY 2013-14 are made available to the Commission.

*Table 5.8.1.1 : Employee Cost submitted by the petitioner for FY 2013-14 in the petition (Rs Crores)*

| Particulars | FY 2013-14 (Approved) | FY 2013-14 (Actual upto Oct) | FY 2013-14 (RE) |
|---|---|---|---|
| Employee Expenses | 58.28 | 31.56 | 54.11 |
| Less: Capitalization | - | 13.09 | 13.09 |
| Net Amount | 58.28 | 18.48 | 41.02 |
| Add: Prior Period Expenses | - | 12.51 | 12.51 |
| **Total Employee Expenses** | **58.28** | **30.99** | **53.53** |

The petitioner further submitted the revised Employee Expenses of Rs 54.11 Crores based on the 8 months actuals during the technical validation session.

**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.*

In absence of availability of audited accounts prepared on the Commercial Principles, the Commission has considered the employee cost for FY 2012-13 approved in order date 15th April

2013 and escalated the same by estimated WPI 5.68%[3] for arriving at the employee cost for FY 2013-14.

*Table 5.8.1.2 : Employee Cost approved for FY 2013-14 (Rs Crores)*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| **A** | **Salaries& Allowances** | | | | |
| 1 | Pay in Band | 26.14 | 25.97 | 23.13 | 25.19 |
| 2 | Grade Pay | 1.97 | 1.96 | 3.01 | 1.90 |
| 3 | Dearness allowance | 19.19 | 19.06 | 20.49 | 18.49 |
| 4 | House rent allowance | 3.00 | 2.98 | 2.69 | 2.89 |
| 5 | Field Duty Allowance | 0.06 | 0.06 | 0.06 | 0.06 |
| 6 | Washing Allowance | 0.01 | 0.01 | 0.01 | 0.01 |
| 7 | Salary to CGRF Staff | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | Personal Pay | 0.05 | 0.05 | 0.03 | 0.05 |
| 9 | Travelling Allowance | 0.03 | 0.03 | 0.01 | 0.03 |
| 10 | Conveyance Allowance | 0.97 | 0.97 | 1.09 | 0.94 |
| 11 | Apprentice | 0.01 | 0.01 | 0.02 | 0.01 |
| 12 | Fixed Medical | 0.78 | 0.77 | 0.68 | 0.75 |
| 13 | Medical Reimburshment | 0.36 | 0.36 | 0.37 | 0.35 |
| 14 | General Incentive | 0.02 | 0.02 | 0.15 | 0.02 |
| 15 | Special Allowance etc | 0.06 | 0.06 | 0.07 | 0.06 |
| 16 | City Compensatory Allowance | 0.19 | 0.19 | 0.16 | 0.18 |
| 17 | Electricity Allowance | 0.06 | 0.06 | 0.08 | 0.06 |
| 18 | Handicap Allowance | 0.01 | 0.01 | 0.02 | 0.01 |
| 19 | Leave Travel Concession | 0.01 | 0.01 | 0.01 | 0.01 |
| 20 | Leave Salary and Pension Contribution | 0.00 | 0.00 | 0.00 | 0.00 |
| 21 | Others | 0.15 | 0.15 | 0.25 | 0.14 |
| | **Sub-Total - A** | **53.08** | **52.72** | **52.31** | **51.14** |
| **B** | **Terminal Benefits** | | | | |
| 22 | Leave encashment | 1.94 | 1.92 | 0.46 | 1.87 |
| 23 | Gratuity | 1.76 | 1.75 | 0.78 | 1.70 |
| 24 | Commutation of Pension | 1.41 | 1.40 | 0.42 | 1.36 |
| 25 | Workmen Compensation | 0.00 | 0.00 | 0.00 | 0.00 |
| 26 | Ex - gratia | 0.05 | 0.05 | 0.00 | 0.05 |
| | **Sub-Total - B** | **5.16** | **5.13** | **1.65** | **4.97** |
| **C** | **Other Salary payments** | | | | |
| 27 | Arrears on account of Vth Pay Commission | 0.43 | 0.43 | 0.00 | 0.41 |
| 28 | Contractual basis | 0.44 | 0.44 | 0.15 | 0.42 |
| | **Sub-Total- C** | **0.87** | **0.87** | **0.15** | **0.84** |
| | **Total (A+B+C)** | **59.11** | **58.71** | **54.11** | **56.95** |
| 29 | Less: Amount capitalized | | | | |
| 30 | Net amount | **59.11** | **58.71** | **54.11** | **56.95** |
| 31 | Add : prior period expenses | | | | |

[3] *The WPI has been estimated for FY 2013-14 considering the actual information available upto Jan 2014.*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| 32 | **Total Employee Expenses** | **59.11** | **58.71** | **54.11** | **56.95** |
| 33 | **Total Employee Expenses (Without Pay Commission Arrears** | **58.68** | **58.28** | **54.11** | **56.54** |

**The Commission considers the employee cost of Rs. 56.54 Crores as reasonable and approves the same for Review of ARR for FY 2013-14.**

### 5.8.2 Administration & General Expenses

**Petitioner's submission**

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

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

***Table 5.8.2.1 : A&G expenses submitted by the petitioner for Review for FY 2013-14 (Rs Crores)***

| Particulars | FY 2013-14 (Approved) | FY 2013-14 (Actual upto Oct) | FY 2013-14 (RE) |
|---|---|---|---|
| A&G Expenses | 2.52 | 1.37 | 2.36 |

**Commission's analysis**

In absence of availability of audited accounts prepared on the Commercial Principles, the Commission has considered the Administrative and General Expenses for FY 2012-13 approved in order date 15th April 2013 and escalated the same by estimated WPI 5.68%[4] for arriving at the A&G Expenses for FY 2013-14.

*Table 5.8.2.2 : A&G expenses Approved for Review for FY 2013-14 (Rs Crores)*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| 1 | Rent, rates & taxes | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | Domestic Travel Allowances | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | Office Expenses | 0.83 | 0.82 | 0.67 | 0.80 |
| 4 | Insurance | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | Membership & Regulatory Fees | 0.60 | 0.60 | 0.55 | 0.58 |
| 6 | Consultancy Fees and other professional fees | 0.17 | 0.17 | 0.00 | 0.16 |
| 7 | Electricity & Water Charges | 0.35 | 0.35 | 0.33 | 0.34 |
| 8 | Advertisement & Publicity | 0.15 | 0.15 | 0.15 | 0.15 |
| 9 | Special Service/Collection and Meter reading | 0.01 | 0.01 | 0.01 | 0.01 |
| 10 | Expenses of CGRF (Office) | 0.00 | 0.00 | 0.01 | 0.00 |
| 11 | Consumer Indexing and Energy Auditing | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | Other material related expenses | 0.00 | 0.00 | 0.20 | 0.00 |
| **13** | **Total** | **2.11** | **2.09** | **1.93** | **2.03** |
| 14 | Add/Deduct share of others (to be specified) | 0.43 | 0.43 | 0.43 | 0.41 |
| **15** | **Total expenses** | **2.54** | **2.52** | **2.36** | **2.45** |
| 16 | Less: Capitalized | | | 0.00 | |
| **17** | **Net expenses** | **2.54** | **2.52** | **2.36** | **2.45** |
| 18 | Add: Prior period | | | 0.00 | |
| **19** | **Total A&G Expenses** | **2.54** | **2.52** | **2.36** | **2.45** |

**Accordingly, the Commission considers the A&G expenses of Rs. 2.45 Crores as reasonable and approves the same for Review of ARR for FY 2013-14.**

### 5.8.3 Repair & Maintenance Expenses

**Petitioner's submission**

The petitioner has submitted that the Repairs and Maintenance Expenses go towards the day-to-day upkeep of the network of the licensee and form an integral part of the utilities efforts towards reliable and quality power supply as also in the reduction of losses in the system.

R&M expenses are dependent on various factors. The assets of petitioner are old and require regular maintenance to ensure uninterrupted operations. Further, due to increase in load and number of consumers, further infrastructure is required to be built which would also require appropriate maintenance. The details of R&M expenses estimated for FY 2013-14 are provided in the table below:

[4] *The WPI has been estimated for FY 2013-14 considering the actual information available upto Jan 2014.*

*Table 5.8.3.1: Details of R&M expenses submitted by the petitioner for FY 2013-14 (Rs Crores)*

| Particulars | FY 2013-14 (Approved) | FY 2013-14 (Actual upto Oct) | FY 2013-14 (RE) |
|---|---|---|---|
| R&M Expenses | 10.42 | 5.14 | 9.98 |

However, the Commission has considered Rs. 8.55 Crores as final submission keeping view the detailed breakup submitted in the formats accompanying the petition.

**Commission's analysis**

In absence of availability of audited accounts prepared on the Commercial Principles, the Commission has considered the R&M Expenses for FY 2012-13 approved in order date 15th April 2013 and escalated the same by estimated WPI 5.68%[5] for arriving at the R&M Expenses for FY 2013-14.

*Table 5.8.3.2: Details of R&M expenses approved by the Commission for FY 2013-14 (Rs Crores)*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| 1 | Plant & machinery * | 2.69 | 2.45 | 0.00 | 2.38 |
| | -Plant & Apparatus | 0.00 | 0.00 | 0.00 | 0.00 |
| | -EHV substations | 0.24 | 0.22 | 0.47 | 0.21 |
| | - 33kV substation | 0.34 | 0.31 | 0.06 | 0.30 |
| | - 11kV substation | 0.01 | 0.01 | 0.09 | 0.01 |
| | - Switchgear and cable connections | 1.02 | 0.93 | 0.67 | 0.90 |
| | - Others | 0.24 | 0.22 | 1.77 | 0.21 |
| | **Total** | **4.53** | **4.13** | **3.05** | **4.01** |
| 2 | Buildings (Electricity Residential & Non-Residential) | 2.40 | 2.19 | 0.14 | 2.13 |
| 3 | Hydraulic works & civil works | 0.15 | 0.13 | 0.04 | 0.13 |
| 4 | Line cable & network | 0.00 | 0.00 | 0.00 | 0.00 |
| | -EHV Lines | 0.00 | 0.00 | 0.00 | 0.00 |
| | - 33kV lines | 0.00 | 0.00 | 0.00 | 0.00 |
| | - 11kV lines | 0.04 | 0.04 | 0.07 | 0.04 |
| | - LT lines | 2.21 | 2.01 | 4.13 | 1.95 |
| | - Meters and metering equipment | 0.00 | 0.00 | 0.03 | 0.00 |
| | - Others | 0.19 | 0.18 | 0.19 | 0.17 |
| | **Total** | **2.44** | **2.23** | **4.41** | **2.16** |
| 5 | Vehicles | 1.14 | 1.04 | 0.84 | 1.01 |
| 6 | Furniture & fixtures | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | Office equipments | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | Minor R&M Works | 0.38 | 0.35 | 0.05 | 0.34 |

[5] *The WPI has been estimated for FY 2013-14 considering the actual information available upto Jan 2014.*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| 9 | **Total** | **11.04** | **10.07** | **8.55** | **9.77** |
| 10 | Add/Deduct share of others (To be specified) | 0.38 | 0.35 | 0.00 | 0.34 |
| 11 | **Total expenses** | **11.42** | **10.42** | **8.55** | **10.11** |
| 12 | Less : Capitalized | | | 0.00 | 0.00 |
| 13 | **Net expenses** | **11.42** | **10.42** | **8.55** | **10.11** |
| 14 | Add: prior period | | | 0.00 | 0.00 |
| **15** | **Total R&M expenses** | **11.42** | **10.42** | **8.55** | **10.11** |

**Commission considers R&M expenses of Rs. 10.11 Crores as reasonable and approves the same for the Review of ARR for FY 2013-14.**

### 5.8.4 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 2013-14 and revised estimates submitted by the Petitioner for review for FY 2013-14 is given below.

*Table 5.8.4.1 : Summary of O&M expenses submitted by the petitioner and approved for FY 2013-14 (Rs Crores)*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| 1 | Employee Expenses | 59.11 | 58.28 | 54.11 | 56.54 |
| 2 | A&G Expenses | 2.54 | 2.52 | 2.36 | 2.45 |
| 3 | R&M Expenses | 11.42 | 10.42 | 8.55 | 10.11 |
| **4** | **Total O&M Expenses** | **73.07** | **71.22** | **65.01** | **69.09** |

## 5.9 Capital Expenditure and Capitalization

**Petitioner's submission**

The petitioner submitted that:

**Quote**

*"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 desirable standards of performance and provide better network reliability and sustainable performance to the consumers of UT Chandigarh. In the Petition for FY 2013-14, CED had proposed a capital expenditure of Rs. 22.50 Cr for FY 2013-14 which*

*was also approved by the Hon'ble Commission in the tariff order for FY 2013-14. However, it is submitted that upto December'13 of FY 2013-14, CED has incurred most of its capital expenditure planned for the year and estimate a total of Rs. 12.50 Cr as capital expenditure for the full year of FY 2013-14.*

*Funding for the capital expenditure works would be entirely from equity. Majority of CED capex schemes are on annual ongoing basis."*

**Unquote**

**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 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. 12.50 Crores proposed by the petitioner for Review of ARR for FY 2013-14. A detailed statement of the capital expenditure incurred quarterly and the asset capitalized up to 31.03.2014 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 has submitted that:

**Quote:**

*"The Gross Fixed Assets at the end of FY 2012-13 is Rs. 408.56 Cr and same has been considered for the purpose of projection for FY 2013-14.*

*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".*

*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. CED has floated a tender (OP-4/19/2013-14) for appointment of consultant for preparation of Assets & Depreciation Register. However, due to certain observations received from 3-4 firms and certain system constrains, the tender was cancelled.*

*It is submitted that the DNIT was further amended and was deliberated by the Standing Committee constituted by the competent authority of Chandigarh Administration on 14.10.2013 & 31.10.2013 and later on approved by the Chief Engineer, UT Chandigarh vide his office memo no. 11891 dated 31.12.2013. The said DNIT is under process of floating on e-tender portal of Chandigarh Administration.*

*CED submits that it is making every effort to comply with the Commission's direction on preparing the Fixed Asset Register. However, due to various reasons, the process has got delayed.*

*In the meanwhile, CED requests the Commission to approve the old assets on a provisional basis till the time such accounts / asset register is made available to the Commission and approve depreciation, return on equity and interest cost in the ARR for FY 2013-14.*

*The Hon'ble Commission may true-up these components based on the audited accounts / fixed asset register at the end of the respective year."*

**Unquote**

*Table 5.10.1 : GFA & Depreciation submitted by the petitioner for FY 2013-14 (Rs Crores)*

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

**Commission's analysis**

The petitioner has stated that since it is working as a department of UT Administration, Chandigarh, appropriate accounting practices were not in place. However, it has initiated steps for proper maintenance of records and preparation of asset register. 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 07th May 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 in the latest submission has stated that it has floated the tender for preparation of Fixed Assets Register. However, while the Commission acknowledges the effort of the petitioner, in absence of the verified Fixed Asset Register, Commission has not approved any depreciation on the opening Gross Fixed Assets as submitted by the petitioner and has considered the closing GFA for FY 2012-13 as approved by the Commission in the order dated 15th April 2013. However, the Petitioner has projected the capital expenditure of Rs. 12.50 Crores for the FY 2013-14 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. 12.50 Crores for the FY 2013-14.

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 calculations are as given in the table below:

*Table 5.10.2 : GFA & Depreciation approved in the review for FY 2013-14 (Rs Crores)*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| 1 | Opening Value of Assets at the beginning of the year | 404.38 | 45.50 | 408.56 | 45.50 |
| 2 | Additions during the year | 22.50 | 22.50 | 12.50 | 12.50 |
| 3 | Gross Fixed Assets at the end of year | 426.88 | 68.00 | 421.06 | 58.00 |
| **4** | **Average Assets** | **415.63** | **56.75** | **414.81** | **51.75** |
| 5 | Average Rate of Depreciation | 5.28% | 5.28% | 5.28% | 5.28% |
| **6** | **Depreciation for the year** | **21.95** | **3.00** | **21.90** | **2.73** |

**Commission considers the depreciation of Rs. 2.73 Crores as reasonable and approves the same for Review of ARR of FY 2013-14.**

## 5.11 Interest on Loan

**Petitioner's submission**

The petitioner has submitted the following:

**Quote:**

*It is submitted that the entire capital expenditure incurred by CED had been funded through equity infusion by GOI through budgetary support without any external borrowings. In the previous Tariff Orders the Hon'ble Commission has disallowed the GFA and depreciation in absence of the Fixed Asset Register (FAR), as a result Interest on loan was disallowed as well.*

*As per Regulation 25 of JERC Tariff Regulations, 2009, "The interest rate on the amount of equity above 30% treated as loan shall be the weighted average rate of interest on loan capital of the generating company / licensee". Therefore, for the purpose of determination of ARR, CED has considered debt equity ratio of 70:30 for projecting normative loan for FY 2013-14.*

*Repayment has been considered to be equal to the depreciation amount computed as per the section on computation of depreciation above. The interest at the SBI PLR rate of 14.50% as on April 1st, 2013 has been applied on the average normative debt in order to project the amount of normative interest on long-term loans for FY 2013-14.*

**Unquote**

**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. 8.75 Cr for FY 2013-14 (being 70% of Rs. 12.50 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 5.11.1 : Interest on Loan approved in the review for FY 2013-14 (Rs Crores)*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| 1 | Opening Normative Loan | 242.62 | 36.85 | 245.44 | 36.85 |
| 2 | Add: Normative Loan during the year | 15.75 | 15.75 | 8.75 | 8.75 |
| 3 | Less: Normative Repayment | 21.95 | 3.69 | 21.90 | 3.69 |
| 4 | Closing Normative Loan | 236.42 | 48.92 | 232.29 | 41.91 |
| **5** | **Average Normative Loan** | **239.52** | **42.88** | **238.87** | **39.38** |
| 6 | Rate of Interest (@SBAR rate) | 14.75% | 14.45% | 14.45% | 14.45% |
| **7** | **Interest on Normative Loan including bank charges** | **35.33** | **6.20** | **34.52** | **5.69** |

**As discussed in para 5.9 and 5.10, Commission has considered the capitalization of Rs. 12.50 Crores proposed by the petitioner for FY 2013-14, approved opening balance of GFA of Rs 45.50 Crores as per TO dated 15th April 2013 and has allowed the interest of Rs. 5.69 Crores, at the SBI Advance Rate as on 1st April 2013.**

## 5.12 Interest on Working Capital

### Petitioner's submission

The petitioner has proposed interest on working capital in accordance with the applicable regulations notified by the Commission. The petitioner has submitted that the Commission had allowed working capital requirement based on the above regulations. However, closing balance of security deposit has been deducted from the total working capital requirement considering that the security deposit available with CED can be treated as available to meet part of working capital required for FY 2013-14.

With regard to the treatment of security deposit to meet partial working capital requirement in the tariff order, the petitioner submitted that the security amount received from various consumers were deposited in the consolidated fund of India and is therefore not available at its disposal and that it had submitted a Review Petition no. 64 of 2012 to the Commission for review of order dated. 07.5.2012 on the same for reconciliation of its order.

It was further submitted that the interest on working capital is claimed by the Petitioner as per Clause 29 of JERC (Terms and Conditions for determination of Tariff Regulations), 2009. The Petitioner further submits that the prevailing Regulations of JERC do not provide any provision for deduction of security deposit amount from the requirement of working capital, therefore, the Petitioner requests the Hon'ble Commission to allow the interest on working capital as per the methodology specified in the prevailing JERC Regulations.

The petitioner has considered an interest rate of 14.45% has been considered as per short-term SBI PLR as on April 1st, 2013 for calculating Interest on working Capital for the FY 2013-14.

**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 2013-14 in ARR & tariff petition for FY 2013-14 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 2013-14. 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 2013-14. 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% for Review of ARR of FY 2013-14. The detailed calculation for the calculation of interest on working capital is mentioned below:

*Table 5.12.1 : Interest on working capital approved in Review for FY 2013-14 (Rs Crores)*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| 1 | Fuel Cost for 2 months | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | Power Purchase Cost for one month | 55.31 | 50.44 | 50.19 | 46.57 |
| 3 | Employee Cost for one month | 4.93 | 4.86 | 4.51 | 4.71 |
| 4 | A&G Expenses for one month | 0.21 | 0.21 | 0.20 | 0.20 |
| 5 | R&M Expenses for one month | 0.95 | 0.87 | 0.71 | 0.84 |
| **6** | **Total Working Capital for one month** | **61.39** | **56.38** | **55.61** | **52.33** |
| **7** | **Total Working after deduction of Security Deposit from Working Capital Requirement** | | **20.46** | **55.61** | **17.21** |
| 8 | SBAR Rate | 14.75% | 14.45% | 14.45% | 14.45% |
| **9** | **Interest on Working Capital** | **9.06** | **2.96** | **8.04** | **2.49** |

**The Commission considers Rs. 2.49 Crores as Interest on Working Capital as reasonable and approves the same for Review of ARR for FY 2013-14.**

## 5.13 Interest on Security Deposit

### Petitioner’s submission

The petitioner has stated that the provision of Regulation 25 (4) of Tariff Regulations 2009 & in accordance with Clause 47(4) of Electricity Act 2003, the distribution licenses shall pay interest on security deposit collected from the consumers, equivalent to the bank rate or more as may be specified by the commission.

The petitioner has proposed addition in consumer security deposit during FY 2013-14 equivalent to average addition during FY 2012-13 and FY 2011-12. Further bank rate of 8.50% as on 1st April, 2013 has been applied for computation of interest on consumer security deposit.

**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 petitioner has submitted that it has paid Interest on Consumer Security Deposit in FY 2011-12 and FY 2012-13 as Rs 0.68 Crores and Rs 1.22 Crores respectively. However, the Commission observed that it has not paid any interest on security deposit for the current year till date. 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 and should explicitly mention the same as the 'Interest on security deposit for FY 2013-14' on the bills of the consumers.

However, as the petitioner has not given any detailed justification for sudden increase in consumer security deposit in FY 2013-14 to Rs 61.92 Crores as compared to Rs 29.21 Crores actually held by the petitioner in FY 2012-13. Therefore, in absence of any substantial ground for increased consumer deposit, the Commission provisionally approves the same consumer deposit for purpose of review as approved for FY 2013-14 in the previous tariff order.

*Table 5.13.1 : Interest on Consumer Security Deposit approved in Review for FY 2013-14 (Rs Crores)*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| 1 | Opening Security Deposit | 28.96 | 34.31 | | 34.31 |
| 2 | Add: Deposits during the Year | 2.63 | 1.62 | | 1.62 |
| 3 | Less: Deposits refunded | | 0.02 | | 0.02 |
| 4 | Closing Security Deposit | 31.59 | 35.92 | | 35.92 |
| 5 | Average Security Deposit | **30.28** | **35.12** | 61.92 | **35.12** |
| 6 | Bank Rate | 9.50% | 8.75% | 8.50% | 8.50% |
| **7** | **Interest on Security Deposit** | **2.88** | **3.14** | **5.26** | **2.85** |

**In view of the above, the Commission allowed Rs. 2.85 Crores as the interest on security deposits as claimed by the petitioner and considered as an expenditure in ARR in Review for FY 2013-14.**

## 5.14 Return on Capital

**Petitioner's submission**

The petitioner has stated that the 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 Commission has not considered any GFA of the petitioner prior to FY 2011-12. GFA approved by the Hon'ble Commission during FY 2012-13 was considered for the purpose of computation of reasonable return.

The Petitioner submitted 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 submitted to the 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 was requested that the 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**

Electricity Department of 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 for historical assets is the basic information in the form of the assets and depreciation registers besides other data. CED 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 45.50 Crores as per TO dated 15$^{th}$ April 2013 and has allowed Return on Capital Base of Rs. 1.31 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.**

*Table 5.14.1 : Interest on Consumer Security Deposit approved in Review for FY 2013-14 (Rs Crores)*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| 1 | Gross block at beginning of the Year/Opening GFA or equity | 404.38 | 45.50 | 308.54 | 45.50 |
| 2 | Less accumulated depreciation/Addition in Equity | 112.41 | 1.86 | 21.90 | 2.52 |
| 3 | Net block at beginning of the year /Closing Equity | 291.97 | 43.64 | 286.64 | 42.98 |
| 4 | Less accumulated consumer contribution | 0.00 | 0.00 | 0.00 | 0.00 |
| **5** | **Net fixed assets at beginning of the year /Average Equity Amount** | **292.53** | **43.64** | **286.64** | **42.98** |
| **6** | **Reasonable return @3% of NFA /Return on Equity @16%** | **8.77** | **1.31** | **8.60** | **1.29** |

**Accordingly, Commission approves Rs 1.29 Crores for FY 2013-14 based on accumulated depreciation and opening balance of GFA as approved as 3% Return on Capital Base.**

## 5.15 Provision 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 2013-14.

**Commission's analysis**

Commission observed 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 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*

| *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 2013-14. 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.

**Accordingly, Commission has not considered any provision for bad & doubtful debt for Review of ARR for FY 2013-14 and consider the same at the time of True-Up only.**

## 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 Commission had approved a non-tariff income of Rs. 14.63 Cr for FY 2013-14 in the tariff order for FY 2013-14. For the purposes of projections of NTI for FY 2013-14, petitioner has considered actual non-tariff income for seven months of FY 2013-14 and projected for balance five months of FY 2013-14. The petitioner had projected Rs. 15.50 Crores as its Non-Tariff Income for FY 2013-14, which the licensee requests the Hon'ble Commission to approve.

**Commission's analysis**

In absence of availability of audited accounts prepared on the Commercial Principles, the Commission has considered the NTI for FY 2012-13 approved in order date 15th April 2013 and escalated the same by estimated WPI 5.68% for arriving at the NTI for FY 2013-14. 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 2013-14 (Rs Crores)*

| Sr. No. | Particulars | 2012-13 | 2013-14 | | | |
|---|---|---|---|---|---|---|
| | | Petitioner Submission (FY 2012-13) | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| 1 | Sale Proceeds of dead stock, waste paper etc | 0.00 | 0.00 | 1.94 | | 2.04 |
| 2 | Receipt from State Electrical Inspectorate | 0.00 | 0.00 | 0.00 | | 0.00 |
| 3 | Theft/pilferage of energy | 0.32 | 1.10 | 1.10 | 0.46 | 1.15 |
| 4 | Wheeling charges under open access | 0.00 | 0.36 | 0.36 | | 0.38 |
| 5 | Interest on staff loans & advance | 0.00 | 0.03 | 0.03 | | 0.03 |
| 6 | Income from trading | 0.00 | 0.00 | 0.00 | | 0.00 |
| 7 | Income staff welfare activities | 0.00 | 0.00 | 0.00 | | 0.00 |
| 8 | Investment & bank balances | 0.00 | 0.00 | 0.00 | | 0.00 |
| 9 | Misc. Receipts/income | 4.09 | 6.51 | 6.51 | 7.54 | 6.84 |
| 10 | Meter/Service Rent | 5.11 | 3.58 | 3.58 | 5.80 | 3.76 |
| 11 | Late Payment Surcharge | 1.36 | 1.12 | 1.12 | 1.70 | 1.17 |
| **12** | **Total income** | **10.88** | **12.69** | **14.63** | **15.50** | **15.36** |
| 13 | Add: prior period income | | | | | |
| | **Total Non-Tariff Income** | **10.88** | **12.69** | **14.63** | **15.50** | **15.36** |

**The Commission considers Non-Tariff Income of Rs. 15.36 Crores as reasonable and approves the same for Review of ARR for FY 2013-14.**

## 5.17 Revenue from Sale of Surplus Power

### Petitioner's submission

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

### 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 2013-14. However, the Commission has considered the actual revenue from UI as per the weekly UI details issued by NRPC. The Commission has considered the actual revenue for the period April to November 2013. However, the Commission has not considered any surplus sale in the remaining 4 months of the FY 2013-14 as it has considered the availability as per the merit order dispatch.

**After verification of statement/bills, the Commission considers the total sale of Surplus Power for FY 2013-14 at Rs. 0.20 Crores for Sale of 6.57 MUs in UI mechanism as reasonable and approves for Review of ARR for FY 2013-14.**

## 5.18 Revenue at approved retail tariff of FY 2013-14

### Petitioner's submission

The petitioner has submitted that it has computed the revenue at existing tariff for FY 2013-14 as per Tariff Order for FY 2013-14 considering sales for FY 2013-14 as detailed earlier.

### Commission's analysis

Commission has accepted the actual revenue submitted by the Petitioner for 8 months of FY 2013-14 and has projected the revenue for the remaining period (December to March) of FY 2013-14 based on estimated energy sales during that period. The detail of revenue considered by the Commission for review of ARR of FY 2013-14 is given below:

*Table 5.18.1 : Revenue submitted by petitioner and considered by the Commission for FY 2013-14 (Rs Cr)*

| S.No. | Category/Consumption Slab | FY 2013-14 | | | | | |
|---|---|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | H1 (Submitted by Petitioner) | H2 (Approved by the Commission) | Approved by the Commission |
| A | Domestic | 247.54 | 274.61 | 221.24 | 185.00 | 69.93 | 254.93 |
| 1 | *JJ Cluster* | | | | 2.33 | 1.17 | 3.49 |
| *2* | *0-150 kWh* | 13.38 | 14.84 | 16.30 | 6.67 | 3.35 | 10.03 |
| *3* | *151 kWh-400 kWh* | 74.82 | 83.00 | 61.19 | 57.00 | 22.70 | 79.70 |
| *4* | *Above 400 kWh* | 159.34 | 176.77 | 143.76 | 119.00 | 42.71 | 161.71 |
| B | Commercial | 256.19 | 234.28 | 222.94 | 143.00 | 65.75 | 208.75 |
| *4* | *0-150 kWh* | 3.85 | 3.54 | 2.96 | 2.00 | 0.87 | 2.87 |
| *5* | *151 kWh-400 kWh* | 10.46 | 9.65 | 8.69 | 4.00 | 2.66 | 6.66 |
| *6* | *Above 400 kWh* | 241.88 | 221.10 | 211.29 | 137.00 | 62.23 | 199.23 |
| C | Large Supply | 66.10 | 72.47 | 70.41 | 38.00 | 19.76 | 57.76 |
| D | Small Power | 11.65 | 10.32 | 8.01 | 6.00 | 2.33 | 8.33 |
| E | Medium Supply | 52.73 | 54.93 | 46.65 | 29.00 | 14.89 | 43.89 |
| F | Agriculture | 0.34 | 0.36 | 0.32 | 0.22 | 0.11 | 0.33 |
| G | Public Lighting | 9.27 | 10.33 | 10.44 | 5.00 | 3.10 | 8.10 |
| H | Bulk Supply | 54.56 | 51.38 | 39.66 | 24.00 | 12.30 | 36.30 |
| I | Others-Temporary Supply | 8.51 | 7.74 | 5.89 | 3.00 | 2.00 | 5.00 |
| **Total** | | **706.89** | **716.43** | **625.55** | **433.22** | **190.17** | **623.39** |

**The Commission has estimated the Revenue from Sale of Power at existing tariff of Rs. 623.39 Crores for FY 2013-14 as reasonable and approves the same for FY 2013-14.**

## 5.19 FPPCA billed during the year

The Petitioner had submitted that during FY 2013-14 it has billed FPPCA of Rs. 71.38 Cr till October'13 based on the actual sales. However, it further submitted that for the next five months, a negative FSA would be recovered from the consumers. Accordingly, the petitioner had projected an FPPCA recovery of Rs. 60 Cr in FY 2013-14 and requested the Commission to consider the same.

**As the petitioner has actually submitted the computations of negative FPPCA for 3rd Quarter for FY 2013-14, the Commission provisionally accepts the submission of the petitioner and approves Rs 60.38 Crores as FPPCA for the FY 2013-14 which will be subject to true-up.**

## 5.20 Aggregate Revenue Requirement and Revenue Surplus/Deficit for Review of FY 2013-14

The Commission has considered and approved the review of ARR for FY 2013-14 based on the items of expenditure discussed in the preceding sections & updated information submitted by the Petitioner. The revised estimates of Aggregate revenue Requirement submitted by the petitioner and approved by the Commission for FY 2013-14 in Tariff order dated 15th April 2013, revised estimates submitted for review of FY 2013-14 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 2013-14 – Petitioner Vs. Approved (Rs Cr)*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| 1 | Cost of fuel | 0.00 | 0.00 | | |
| 2 | Cost of power purchase for full year | 663.67 | 605.34 | 602.33 | 558.81 |
| 3 | Employee costs | 59.11 | 58.28 | 54.11 | 56.54 |
| 4 | Administration and general expenses | 2.54 | 2.52 | 2.36 | 2.45 |
| 5 | R&M expenses | 11.42 | 10.42 | 8.55 | 10.11 |
| 6 | Depreciation | 21.95 | 3.00 | 21.90 | 2.73 |
| 7 | Interest and finance charges | 35.33 | 6.20 | 34.52 | 5.69 |
| 8 | Interest on working capital & Interest on Security Deposit | 11.93 | 6.10 | 13.30 | 5.34 |
| 9 | Return on NFA /Equity | 8.77 | 1.31 | 8.60 | 1.29 |
| 10 | Provision for Bad Debt | 7.07 | 3.58 | 6.86 | 0.00 |
| 11 | Advance Against Depreciation | | | | |
| **12** | **Total Revenue Requirement** | **821.78** | **696.75** | **752.52** | **642.95** |
| 13 | Less: Non Tariff Income | 12.69 | 14.63 | 15.50 | 15.36 |
| 14 | Less: Revenue from Sale through UI | | | 9.53 | 0.20 |
| 15 | Less: Revenue from Sale of Power-Exchanges | | | | |
| **16** | **Net Revenue Requirement (12-13-14-15)** | **809.09** | **682.11** | **727.49** | **627.39** |

The revenue deficit projected by the petitioner and approved by the Commission for FY 2013-14 are mentioned below:

*Table 5.20.2 : Estimation of Deficit/Surplus approved for FY 2013-14 (RS Crores)*

| Sr. No. | Particulars | 2013-14 | | | |
|---|---|---|---|---|---|
| | | (Petitioner's submission) | Approved in T.O. 15.04.13 | Petitioner's submission for review | Approved by the Commission |
| **16** | **Net Revenue Requirement (12-13-14-15)** | **809.09** | **682.11** | **727.49** | **627.39** |
| 17 | Revenue from Retail Sales at Existing Tariff | 706.89 | 716.43 | 625.55 | 623.39 |
| 18 | FPPPCA billed during the year | | | 60.38 | 60.38 |
| **19** | **Net Gap (16-17-18)** | **102.20** | **-34.32** | **41.55** | **-56.38** |
| 20 | Gap for the previous year | 241.93 | 32.87 | 224.29 | 32.87 |
| 21 | Carrying Cost | | | | |
| **22** | **Total gap (19+20+21)** | **344.13** | **-1.45** | **265.84** | **-23.51** |
| 23 | Additional revenue from proposed tariff | 344.13 | | | |
| **24** | **Revenue Gap/ (Surplus), if any, after proposed tariffs (22-23)** | **0.00** | **-1.45** | **265.84** | **-23.51** |
| 25 | Budgetary Support from Government | | | | |
| **26** | **Net Final Revenue Gap/ (Surplus) (24-25)** | **0.00** | **-1.45** | **265.84** | **-23.51** |

**The Commission has estimated the surplus revenue of Rs. 23.51 Crores for FY 2013-14 (after taking into consideration the revenue gap of Rs 32.87 Crores for FY 2012-13 approved in the order dated 15th April 2013) as reasonable and approves the same for review of FY 2013-14.**

# 6. AGGREGATE REVENUE REQUIREMENT OF FY 2014-15

## 6.1 Background

The CED filed the ARR & Tariff Petition for FY 2014-15 on 20th January 2014 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 2014-15 on the basis of audited accounts/actuals of previous year i.e. FY 2012-13 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 2014-15 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 and FY 2012-13, pre-actuals of FY 2013-14 submitted by the petitioner. The Commission has taken into consideration the following:

i. Approved figures of FY 2012-13 in the tariff order dated 15th April 2013.

ii. Revised estimates submitted by the petitioner along with actuals of 8 months corresponding to Power purchase, Sales and Revenue for FY 2013-14;

## 6.2 Analysis of Aggregate Revenue Requirement of FY 2014-15

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
  - 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,
*Quote "*

*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. " Unquote*

## 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 2013-14 to estimate the growth for various consumer categories for FY 2014-15.

The petitioner has considered sales projections for FY 2014-15 across various consumer categories as per submission below:.

**Quote**

*CED submits that in FY 2013-14, growth in sales have been much lower due to lower than expected growth in consumers and connected load for FY 2013-14. This trend is also expected to continue in FY 2014-15 and thus, the growth in sales for FY 2014-15 is similar to that in FY 2013-14. In FY 2014-15, growth in consumer and connected load has been projected to be 1.71% and 5.75% respectively and based on this along with the expected growth in sales for FY 2013-14, the Petitioner the growth in sales for FY 2014-15 to be 3.31%.*

*The assumptions and methodology adopted in estimating the sales under different categories has been detailed in the following paragraphs:*

***Domestic Sales***

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

***Commercial Sales***

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

***Large Industrial Supply***

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

***Small Industrial Power***

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

***Medium Industrial Supply***

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

***Agriculture***

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

***Street Light***

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

***Bulk Supply***

*The bulk supply tariff is applicable to general /mixed loads exceeding 10 kW to MES, Defense establishments, Railways, Central PWD, institutions, Hospitals, Departmental Colonies and other similar establishments.*

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

***Temporary Supply***

*The Petitioner submits that there is no specific trend in sales to temporary supply in the past 5 years. Also, the 3-year, 4-year and 5-year CAGR recorded under this category shows a negative trend. Also, the energy sale in this category declined during FY 2012-13 and was estimated to remain same for FY 2013-14.*

*It is also submitted that the consumption in this category cannot be projected with certainty owing to the nature of the category. Therefore, energy sale in temporary category for FY 2014-15 has been taken same as that estimated for FY 2013-14.*

**Unquote**

The projected number of consumers, connected load and Energy Sales for FY 2014-15 are given in the tables below:

*Table 6.3.1 : Number of Consumers and Connected Load projected for FY 2014-15*

| Category | Number of Consumers | Connected Load (kW) |
|---|---|---|
| Domestic | 176,913 | 814,810 |
| Commercial | 22,391 | 373,416 |
| Large Supply | 105 | 73,986 |
| Small Power | 1,311 | 19,472 |
| Medium Supply | 1,236 | 64,373 |

| Category | Number of Consumers | Connected Load (kW) |
|---|---|---|
| Agriculture | 125 | 721 |
| Public Lighting | 944 | 6,699 |
| Bulk Supply | 534 | 42,133 |
| Others-Temporary Supply | 941 | 5,786 |
| **Total** | **204,498** | **1,401,397** |

*Table 6.3.2 : Energy Sales projected for FY 2014-15 (MU)*

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

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

The Commission has considered the actual (un-audited) figures of FY 2012-13 & the estimates of FY 2013-14 (including actual data till November 30, 2013 for all categories) for projecting the category wise connected load, number of consumers and Energy sales for FY 2014-15.

The modified CAGR (%) for a period of four years (from FY 2012-13 over FY 2008-09) 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 2014-15 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 2013-14 as detailed in Chapter 5 to arrive at the figures of FY 2014-15.** 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 2014-15*

| S.No. | Category/Consumption Slab | Sales | Connected Load | No. Of Consumers |
|---|---|---|---|---|
| A | Domestic | 7% | 6% | 1% |
| B | Commercial | 0% | 6% | 0% |
| C | Large Supply | 0% | 1% | 0% |
| D | Small Power | 0% | 1% | 0% |
| E | Medium Supply | 0% | 4% | 6% |
| F | Agriculture | 10% | 0% | 0% |
| G | Public Lighting | 5% | 20% | 10% |
| H | Bulk Supply | 8% | 0% | 23% |
| I | Others-Temporary Supply | 0% | 0% | 37% |

*Table 6.4.2 : No. of Consumers considered by the Commission for FY 2014-15*

| S.No. | Category/Consumption Slab | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| A | Domestic | 176913 | 176650 |
| 1 | *JJ Cluster* | 15270 | 15247 |
| *2* | *0-150 kWh* | 76609 | 76495 |
| *3* | *151 kWh-400 kWh* | 61282 | 61191 |
| *4* | *Above 400 kWh* | 23753 | 23718 |
| B | Commercial | 22391 | 21324 |
| *4* | *0-150 kWh* | 9989 | 9513 |
| *5* | *151 kWh-400 kWh* | 5091 | 4849 |
| *6* | *Above 400 kWh* | 7311 | 6962 |
| C | Large Supply | 105 | 103 |
| D | Small Power | 1311 | 1298 |
| E | Medium Supply | 1236 | 1247 |
| F | Agriculture | 125 | 124 |
| G | Public Lighting | 944 | 959 |
| H | Bulk Supply | 534 | 638 |
| I | Others-Temporary Supply | 941 | 1272 |
| **Grand Total** | | **204498** | **203615** |

**The modified CAGR as approved in the table 6.4.1 has been applied on the approved No of Consumers for FY 2013-14 as detailed in Chapter 5 to arrive at the no. of consumers for FY 2014-15.**

*Table 6.4.3 : Connected Load considered by the Commission for FY 2014-15*

| S.No. | Category/Consumption Slab | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| A | Domestic | 814810.08 | 818701.73 |
| 1 | *JJ Cluster* | 1579.46 | 1587.01 |
| *2* | *0-150 kWh* | 233124.60 | 234238.03 |
| *3* | *151 kWh-400 kWh* | 290777.39 | 292166.18 |
| *4* | *Above 400 kWh* | 289328.63 | 290710.51 |
| B | Commercial | 373416.24 | 370531.88 |
| *4* | *0-150 kWh* | 40252.50 | 39941.58 |
| *5* | *151 kWh-400 kWh* | 28294.65 | 28076.09 |
| *6* | *Above 400 kWh* | 304869.09 | 302514.21 |
| C | Large Supply | 73986.36 | 69565.95 |
| D | Small Power | 19471.90 | 19269.57 |
| E | Medium Supply | 64373.15 | 64373.15 |
| F | Agriculture | 721.21 | 714.07 |
| G | Public Lighting | 6699.05 | 7328.38 |
| H | Bulk Supply | 42133.19 | 41716.03 |
| I | Others-Temporary Supply | 5785.99 | 5728.70 |
| **Grand Total (in kW)** | | **1401397.18** | **1397929.46** |
| **Grand Total (in MW)** | | **1401.40** | **1397.93** |

**The modified CAGR as approved in the table 6.4.1 has been applied on the approved Connected Load for FY 2013-14 as detailed in Chapter 5 to arrive at the connected load for FY 2014-15.**

*Table 6.4.4 : Energy Sales considered by the Commission for FY 2014-15 (MU)*

| S.No. | Category/Consumption Slab | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| A | Domestic | 646.70 | 660.82 |
| 1 | *JJ Cluster* | 19.22 | 19.64 |
| *2* | *0-150 kWh* | 55.19 | 56.39 |
| *3* | *151 kWh-400 kWh* | 204.71 | 209.18 |
| *4* | *Above 400 kWh* | 367.58 | 375.61 |
| B | Commercial | 434.26 | 421.44 |
| *4* | *0-150 kWh* | 6.45 | 6.26 |
| *5* | *151 kWh-400 kWh* | 15.21 | 14.77 |
| *6* | *Above 400 kWh* | 412.59 | 400.41 |
| C | Large Supply | 137.50 | 118.75 |
| D | Small Power | 17.89 | 17.85 |
| E | Medium Supply | 93.01 | 92.14 |
| F | Agriculture | 1.39 | 1.59 |
| G | Public Lighting | 24.23 | 19.63 |
| H | Bulk Supply | 81.15 | 84.25 |
| I | Others-Temporary Supply | 8.79 | 7.00 |
| **Total** | | **1444.91** | **1423.46** |

**The modified CAGR as approved in the table 6.4.1 has been applied on the approved Energy Sales for FY 2013-14 as detailed in Chapter 5 to arrive at the sales for FY 2014-15.**

## 6.5 Intra-State Transmission & Distribution Loss

**Petitioner's submission**

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

The petitioner also submitted that the actual distribution loss for FY 2013-14 are higher than the approved losses as UT of Chandigarh has not been provided any interstate transmission point within the boundaries of Chandigarh and the metering is being done at 400kV Nalagarh, 220kV Mohali and 220kV Dhoolkot (BBMB) which has resulted in higher T&D losses for CED. With regard to the interconnection and metering point, 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. In addition, petitioner further submits that PGCIL in its letter dated 22.06.2013 have calculated the inter-state losses of around 3.0% on 220 kV Nalagarh-Manimajra line. Further the losses on 66kV Mohali-CHD and 66kV Dholkot-CHD has also been calculated for reference. Accordingly, petitioner has reduced additional 3.0% of the energy towards losses which are attributable towards inter-state losses and requested that same would not form part of the T&D losses of the petitioner. On basis of above computation, the petitioner submitted that T&D losses to be achieved during FY 2013-14 is 15.50% as against the T&D loss of 15.00% approved by the Hon'ble Commission in the Tariff Order for FY 2013-14 dated 15th April 2013.

The petitioner also submitted that around 98% of the consumers in UT Chandigarh are at LT level which has an adverse effect on the loss reduction and petitioner is making all efforts for reducing its T&D losses by undertaking various measures i.e. HVDS, replacement of electromechanical meter to static meters, replacement of bare LT conductors with LT ABC in theft prone areas and accordingly proposes to achieve a loss of 15.50% for FY 2013-14 and 15.00% for FY 2014-15.

**Commission's analysis**

Commission during the technical validation session held on 18th and 19th February 2014 directed the petitioner to provide a status note on the issues related to interstate point for which the petitioner submitted the following:

**Quote**

*" During the 30th Standing Committee meeting of CES held on dated 02.01.2013, in principal approval for establishment of 2X60 MVA, 200/66 kV Substation along with 200 kV D/C line from Barwala (Panchkula ) was accorded. It was also decided during the meeting that the scheme may be fine tuned after discussion with Chandigarh. HVPNL and CTU Further, it was decided that the M/s Power grid site office would carry out walk over survey from 400/220 kV Barwala (Panchkula) Substation to UT Chandigarh bounding from both proposed locations namely Hallomajra and Raipur Kalan. CED vide memo no. 6170 dated 18.12.2013 requested M/s PGCIL to carry out walk over survey as per the MOM issued by CEA vide letter no. 7/1/2013-SP&PA dated 5.12.2013 and also conveys that the land for 220 kV substation is available at 2 sites namely Hallomajra and Raipur Kalan. Further it is gathered that M/s PGCIL local site office has carried out walk over survey for both the sites and is learnt that report along with BOQ has been sent by the local office to regional HQ of Powergrid."*

**Unquote**

**The Commission acknowledges the efforts being done by the petitioner for identification of various concern areas for high T&D losses and steps being taken for reduction of these losses. While it is acknowledged that creation of interstate point within the periphery of Chandigarh will reduce the losses currently being borne by the petitioner to bring the power to its periphery, the Commission is of view that the efforts currently being undertaken will take atleast another 2 years to finally materialize. Till such time the interstate point is actually functional within the periphery of the petitioner, the Commission shall continue its existing approach for determination of T&D losses wherein, the Commission, while approving T&D losses, considers the power availability at the licensee's periphery as accounted by Northern Region Power Committee.**

**The T&D losses comprise of intra-state distribution and distribution losses. The Commission would like to reiterate that 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 15% as approved in tariff order dated 15th April 2013 and 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 current submission and hence has not considered any additional losses for the same.**

**In absence of energy audit as specified in regulation 15 of tariff regulations, 2009; Commission for the purpose of determination of ARR for FY 2014-15, approves the T&D loss level of 14%, 1% reduction in line with the recommendations of Abraham Committee.**

**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 2014-15 on the basis of actual T&D loss level and audited figures of Quantum of Power purchase and Sales for FY 2014-15.**

## 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 3.00% for FY 2014-15 in line with actual losses for FY 2012-13.

**Commission's view**

The Commission considers the recent 52 weeks moving average of regional losses i.e. 3.38% as the inter-state loss and approves the same for review of ARR of FY 2013-14 which would be revised based on actual during the truing up exercise.

## 6.7 Power Purchase Quantum and Cost

**Petitioner's submission**

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

The Petitioner has submitted that it procures power from various sources such as:

- Central Generating Stations (CGS) such as that of NTPC, NHPC and NPCIL
- Other Generating Stations such as that of SJVNL, BBMB, THDC, APCPL
- Other Sources such as bilateral agreement, banking arrangement, power exchange, UI etc.

The petitioner has submitted that the allocation from CGS consists of a fixed share of allocation for a year, and a variable share of allocation from the unallocated quota, the quantum of which keeps on changing during the year and since the allocation of power from various sources is inadequate, the Petitioner is required to procure power from short –term sources i.e. power exchange, other trading sources and UI. Also, for meeting the peak demand petitioner is required to procure power from short-term sources. However, strict care is taken to limit the amount of UI drawals.

Considering this the Petitioner has estimated the power availability for FY 2014-15 as below:

- Average plant wise power purchase of last 24 months for computing the power purchase quantum from various sources for FY 2014-15.
- For Uri II, normative PLF of 75% has been considered on the allocated share of Chandigarh. Auxiliary Consumption has been considered on normative basis as per CERC norms.
- For BBMB (including Dehar & Pong), the total units estimated (eight months actual and four months projected) for FY 2013-14 has been projected for FY 2014-15.
- For Rihand-III, the total quantum of purchase as estimated for FY 2013-14 has been considered for FY 2014-15 projections;

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 3.00% as per actuals of FY 2012-13, has been projected to be 1806.67 MUs for FY 2014-15.

**Power Purchase Cost**

The estimation of power purchase cost for FY 2014-15 has been done in the steps to include:

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

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

- CED further submits an issue related to long pending payment of Rs. 123.55 Cr towards energy supplied of UT Chandigarh against its 3.5% share out of the share of composite Punjab for the period 2.5.1967 to 31.03.2006. BBMB has been raising bills at the rate varying from 10 paisa/kWh to 34 paisa/kWh from May 1967 to May 2006 for the energy supplied to UT Chandigarh but CED had been releasing payment @ 5.63 Paisa/kWh which is the cost of energy from Bhakra worked out in the year 1972. Hence Rs 123.55 Cr is the difference of bill raised by BBMB and payment made by UT Chandigarh against energy supplied to UT Chandigarh. The matter is still under conciliation in BBMB

*Table 6.7.1 : Power Purchase Cost estimated by the petitioner for FY 2014-15*

| S. No | Generating Company | Name of Project | Units (MU) | Capacity Charges (Rs. Cr) | Energy Charges (Rs. Cr) | Total Charges (Rs. Cr) | Total Charges (Rs/kWh) |
|---|---|---|---|---|---|---|---|
| 1 | NTPC | Anta | 35.51 | 5.15 | 11.07 | 16.22 | 4.57 |
| 2 | | Auraiya | 21.58 | 4.49 | 7.31 | 11.80 | 5.47 |
| 3 | | Dadri GPP | 29.07 | 4.10 | 10.01 | 14.10 | 4.85 |
| 4 | | Dadri II TPP | 30.71 | 8.33 | 9.23 | 17.56 | 5.72 |
| 5 | | Kahalgaon II | 18.42 | 2.84 | 4.86 | 7.70 | 4.18 |
| 6 | | Rihand I | 103.09 | 9.91 | 13.75 | 23.66 | 2.30 |
| 7 | | Rihand II | 101.89 | 11.27 | 13.33 | 24.61 | 2.42 |
| 8 | | Rihand III | 32.04 | 6.38 | 4.21 | 10.59 | 3.31 |
| 9 | | Singrauli | 84.34 | 5.04 | 8.30 | 13.34 | 1.58 |
| 10 | | Unchahar I | 18.11 | 2.40 | 4.38 | 6.78 | 3.74 |
| 11 | | Unchahar II | 35.52 | 4.75 | 8.50 | 13.25 | 3.73 |
| 12 | | Unchahar III | 14.31 | 2.74 | 3.42 | 6.16 | 4.31 |
| | | **Total** | **524.60** | **67.39** | **98.39** | **165.78** | **3.16** |
| 13 | NHPC | Chamera I | 92.48 | 6.07 | 9.21 | 15.28 | 1.65 |
| 14 | | Chamera II | 24.97 | 3.19 | 3.64 | 6.83 | 2.73 |
| 15 | | Chamera III | 14.73 | 2.62 | 3.03 | 5.65 | 3.83 |
| 16 | | Dhauliganga | 12.40 | 1.88 | 1.80 | 3.68 | 2.97 |
| 17 | | Dulhasti | 27.43 | 6.79 | 8.21 | 15.00 | 5.47 |
| 18 | | Salal | 8.84 | 0.45 | 0.46 | 0.91 | 1.03 |
| 19 | | Sewa II | 7.07 | 0.95 | 0.87 | 1.82 | 2.57 |
| 20 | | Tanakpur | 6.58 | 1.96 | 1.65 | 3.62 | 5.49 |
| 21 | | Uri | 17.35 | 1.70 | 1.55 | 3.25 | 1.87 |
| 22 | | Uri II | 7.37 | 0.72 | 0.66 | 1.38 | 1.87 |
| | | **Total** | **219.23** | **26.34** | **31.07** | **57.41** | **2.62** |
| 22 | NPCIL | NAPP | 42.97 | - | 10.42 | 10.42 | 2.43 |
| 23 | | RAPP B | 20.62 | - | 7.03 | 7.03 | 3.41 |
| 24 | | RAPP C | 60.66 | - | 20.68 | 20.68 | 3.41 |

| S. No | Generating Company | Name of Project | Units (MU) | Capacity Charges (Rs. Cr) | Energy Charges (Rs. Cr) | Total Charges (Rs. Cr) | Total Charges (Rs/kWh) |
|---|---|---|---|---|---|---|---|
| | | **Total** | **124.25** | **-** | **38.14** | **38.14** | **3.07** |
| 25 | SJVNL | SJVNL/NJPC | 76.48 | 8.16 | 9.90 | 18.07 | 2.36 |
| 26 | BBMB | BBMB 3.5 % | 295.88 | 13.27 | - | 14.79 | 0.45 |
| 27 | | BBMB 1 LU | 37.00 | - | 13.12 | 13.12 | 3.55 |
| 28 | | BBMB 10 LU | 370.00 | - | 176.09 | 176.09 | 4.76 |
| | | **Total** | **702.88** | **14.79** | **189.21** | **204.10** | **2.90** |
| 29 | APCPL | IGSTPP | 20.69 | 8.12 | 7.80 | 15.92 | 7.69 |
| 30 | THDC | Koteshwar | 14.85 | 2.09 | 3.12 | 5.20 | 3.50 |
| 31 | | Tehri | 48.07 | 7.29 | 10.77 | 18.05 | 3.76 |
| 32 | | Bilateral | - | - | - | - | - |
| 33 | | Power Exchange (Buy) | 75.62 | | 34.03 | 34.03 | 4.50 |
| 34 | | UI (Buy) | - | - | - | - | - |
| 35 | Others | PGCIL Charges | | | 42.76 | 42.29 | |
| 36 | | NRLDC F&C | | | 0.70 | 0.70 | |
| 37 | | Reactive Energy Charges | | | 0.50 | 0.50 | |
| 38 | | LC Charges | | | 0.80 | 0.80 | |
| **Total Power Purchase Cost excluding REC Certificates** | | | **1,806.67** | **132.65** | **467.17** | **600.99** | **3.33** |

## Commission's Analysis of Power Purchase Quantum and Cost

### ➢ Central Generating Stations –NTPC

While estimating the energy availability from NTPC Stations for FY 2014-15, 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 latest revised allocation order no. NRPC/ OPR/ 103/ 02/ 2013-14/ dated 26/02/2014 of NRPC, 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. 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 2014-15 from the NTPC stations:

- **Fixed Charges:** The fixed charges are considered on the basis of the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Commission would like to highlight that no tariff order has been issued by CERC for the FY 2014-15 till date as per the latest regulations CERC (Terms and Conditions of Tariff) Regulations, 2014 notified on 21st February 2014. Therefore, the Annual Fixed Charges for each station have been taken as per the latest Tariff orders for the respective stations issued by CERC as per the CERC (Terms and Conditions of Tariff) Regulations, 2009.

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2013 to November 2013 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2014-15.

- **Central Generating Stations –NHPC**

While estimating the energy availability from NHPC Stations for FY 2014-15, 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 latest revised allocation order no. NRPC/ OPR/ 103/ 02/ 2013-14/ dated 26/02/2014 of NRPC, 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 past 2 years. 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 2014-15 from the NHPC stations:

- **Fixed Charges:** The fixed charges are considered on the basis of the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Commission would like to highlight that no tariff order has been issued by CERC for the FY 2014-15 till date as per the latest regulations CERC (Terms and Conditions of Tariff) Regulations, 2014 notified on 21st February 2014. Therefore, the Annual Fixed Charges for each station have been taken as per the latest Tariff orders for the respective stations issued by CERC as per the CERC (Terms and Conditions of Tariff) Regulations, 2009.

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2013 to November 2013 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2014-15.

- **Central Generating Stations –NPCIL**

While estimating the energy availability from NPCIL Stations for remaining four months of 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 latest revised allocation order no. NRPC/ OPR/ 103/ 02/ 2013-14/ dated 26/02/2014 of NRPC, 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. 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 2014-15 from the NPCIL stations:

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2013 to November 2013 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2014-15.

➢ **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 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 latest revised allocation order no. NRPC/ OPR/ 103/ 02/ 2013-14/ dated 26/02/2014 of NRPC, 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 previous years. 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 2014-15 from the above mentioned hydro generating stations and APCPL-IGSTPP:

- **Fixed Charges:** The fixed charges are considered on the basis of the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Commission would like to highlight that no tariff order has been issued by CERC for the FY 2014-15 till date as per the latest regulations CERC (Terms and Conditions of Tariff) Regulations, 2014 notified on 21$^{st}$ February 2014. Therefore, the Annual Fixed Charges for each hydro station and IGSTPP have been taken as per the latest Tariff orders for the respective stations issued by CERC as per the CERC (Terms and Conditions of Tariff) Regulations, 2009.

- **Variable Charges:** The Commission has considered the average variable cost for the period September 2013 to November 2013 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2014-15.

➢ **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 3.3% of total energy purchase from renewable sources for FY 2014-15 including 0.60% for Solar and 2.70% for Non-Solar. For FY 2014-15, the petitioner has submitted that it will meet its entire RPO obligation through purchase of Renewable Energy Certificates (RECs) and requested the Commission for approval of Rs. 11.01 Crores for the purchase of RECs during FY 2014-15. The actual requirement of REC Certificates along with the cost is summarized below:

*Table 6.7.2: RPO Compliance for FY 2014-15 (Rs Crores)*

| S.N. | Description | FY 2014-15 |
|---|---|---|
| 1 | Sales Within State | 1423.46 |
| 2 | RPO Obligation (in %) | |
| | *- Solar* | 0.60% |
| | *-Non Solar* | 2.70% |
| 3 | RPO Obligation (in MU) | |
| | *- Solar* | 8.54 |
| | *-Non Solar* | 38.43 |
| 4 | Cumulative Shortfall in RPO Compliance after adjusting excess purchase approved for FY 2013-14 | |
| | *- Solar* | 5.15 |
| | *-Non Solar* | 24.98 |
| **5** | **Floor Price of REC Certificates /MWH** | |
| | ***- Solar*** | **9300.00** |
| | ***-Non Solar*** | **1500.00** |
| **6** | **Provision for RPO Compliance** | |
| | ***- Solar*** | **4.79** |
| | ***-Non Solar*** | **3.75** |
| | ***-Total*** | **8.54** |

**The Commission would like to highlight that from solar power will also be available from Rooftop Solar Photovoltaic Power Projects of Chandigarh Renewal Energy Science & Technology Promotion Society (CREST) during the FY 2014-15 which will ensure RPO Compliance (Solar) to**

**certain extent. However, as the approximate availability from CREST is not currently available, the Commission provisionally approves Rs 8.54 Crores for FY 2014-15 for RPO Compliance through REC Certificates.**

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

The Commission has considered the power purchase of power of 91.33 million units for meeting the shortfall of energy, which is likely to be met at the provisional rate of Rs. 3.00 per kWh as per for FY 2014-15.

- **BBMB Arrears**

The petitioner has submitted that there is an issue related to long pending payment of Rs. 123.55 Cr towards energy supplied of UT Chandigarh against its 3.5% share out of the share of composite Punjab for the period 2.5.1967 to 31.03.2006. The petitioner further submitted that BBMB has been raising bills at the rate varying from 10 paisa/kWh to 34 paisa/kWh from May 1967 to May 2006 for the energy supplied to UT Chandigarh but CED had been releasing payment @ 5.63 paisa/kWh which is the cost of energy from Bhakra worked out in the year 1972. Hence, Rs 123.55 Cr is the difference of bill raised by BBMB and payment made by UT Chandigarh against energy supplied to UT Chandigarh and the matter is still under conciliation in BBMB.

During the technical validation session, the Commission asked the petitioner to submit the detailed status note on the BBMB Arrears. The petitioner submitted the detailed note as follows:

**Quote:**

"*The UT Chandigarh is getting power through BBMB Generating stations as mentioned below:*

1. *3.5% allocation out of share of composite Punjab in Bhakra Project*
2. *Adhoc Allocation of 1 LU per day*
3. *Special assistance of 10 LU per day.*

*The UT Chandigarh has been releasing the payments of 3.5% allocation out of the share allocation of composite Punjab in Bhakra Project frozen @ 5.63 paise per unit since May 1967 on the plea that it is a successor state of Punjab. The rate of 5.63 per unit was derived on the basis of fixed charges covering O&M expenses, interest, depreciation, audit charges, percentage of profit etc as on year 1972. The BBMB was of opinion that the partner constituents of BBMB have been reimbursing the actual O&M cost incurred by BBMB form time to time and UT Chandigarh should also reimburse the same on their pattern. The stand of UT Chandigarh was that if they start making payments at the rate of which the partner states are reimbursing then the issue of becoming the partner state would be weakened. The case of according partner status to Chandigarh was considered in various board* *meetings but the final decision has not been taken. The total amount outstanding pertaining to period 02.05.1967 to Rs 31.03.2006 got accumulated to Rs 123.29 Crores. The case of reconciliation is under process with the competent authority for which the month wise details of liability of UT Chandigarh has been sought from the BBMB authorities. Accordingly, Rs 123.29 Crores (in parts or full) shall be paif to the BBMB after due reconciliation in due course of time."*

**Unquote**

The Commission is of view that it is apparent from the submissions of the petitioner that while the actual bills were raised on time by BBMB, certain portion of payment was withheld by the petitioner owing to administrative issues. However, as the bills were available with the department, had the petitioner prepared the accounts on commercial principles as directed by the Commission, the bills would have been accounted for long back. The Commission also observes from the submissions made by the petitioner that these arrears pertain to period of FY 1966-67 to FY 2005-06.

**As the Commission has stated functioning since August 2008 and as the first tariff order was issued for FY 2011-12 for the CED, the Commission is of view that it will not be appropriate to provision, consider or approve expenses for years prior to FY 2011-12 as the Commission has not considered any revenue gap/surplus for the years prior to FY 2011-12. The Commission would also like to add that as these arrears had accumulated over a period of approx. 40 years owing to particular stand/decision of the Chandigarh Administration, it will not be appropriate to burden present consumers for the liability that had started accumulating nearly 50 years back and thus directs the petitioner to request the Chandigarh Administration to pay this liability as it was the responsibility of Chandigarh Administration to settle any liability on account of purchase / supply/ sale of power during the period under consideration i.e. FY 1966-67 to FY 2005-06**.

- **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-1/44/2013- CERC dated 31.12.2013 for approving the Transmission charges for FY 2014-15. Accordingly the Transmission charges for usage of PGCIL network is approved at **Rs. 56.16 Crores.**

Commission also allows the claim of other charges for FY 2014-15 including NRLDC, Reactive Energy Charges on the basis of the submissions made by the petitioner, amounting to **Rs. 2.02 Crores**.

Accordingly, the total Transmission charges approved for FY 2014-15 is **Rs. 55.44 Crores.**

*Table 6.7.3: Approved Power purchase quantum for FY 2014-15*

| Sr. No. | Source | Capacity (MW) | Average PLF/Gross Generation | Latest entitlement | | Gross Generation (MUs) | Auxilliary Consumption (%) | Net Generation (MUs) | Purchase (MUs) | PGCIL Losses (MUs) | Energy Available at Periphery (MUs) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | % | MW | | | | | | |
| | | | | | | | | | | | |
| A | **Power purchase from other sources** | | | | | | | | | | |
| | | | | | | | | | | | |
| | *(2.60% for - Non Solar) RPO (IEX)* | | | | | | | | 0.00 | 0.00 | 0.00 |
| | *(0.40% for Solar)* | | | | | | | | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | | |
| B | **NPCIL** | | | | | | | | | | |
| | *NAPS* | *440.00* | 58.67 | 1.63% | 7.17 | 2261.38 | 10.00% | 2035.24 | 33.17 | 1.12 | 32.05 |
| | *RAPP (Unit 3 & 4)-B* | *440.00* | 86.09 | 0.66% | 2.92 | 3318.25 | 10.00% | 2986.43 | 19.79 | 0.67 | 19.12 |
| | *RAPP (Unit 5 & 6)-C* | *440.00* | 86.09 | 1.49% | 6.56 | 3318.25 | 10.00% | 2986.43 | 44.50 | 1.50 | 42.99 |
| | | | | | | | | | | | |
| C | **Unscheduled Interchange** | | | | | | | | | | |
| | | | | | | | | | | | |
| D | **BBMB** | | | | | | | | | | |
| | *BBMB 3.5%* | *2956.00* | 10527.48 | 3.50% | 103.46 | 10527.48 | 2.00% | 10316.93 | 361.09 | 12.20 | 348.90 |
| | *BBMB 1 LU* | | | | | | | | 36.50 | 1.23 | 35.27 |
| | *BBMB 10 LU* | | | | | | | | 365.00 | 12.33 | 352.67 |
| | | | | | | | | | | | |
| E | **THDC** | | | | | | | | | | |
| | *Koteshwar* | *400.00* | 1168.33 | 0.69% | 2.76 | 1168.33 | 2.00% | 1144.96 | 7.90 | 0.27 | 7.63 |
| | *Tehri* | *1000.00* | 3542.31 | 0.93% | 9.30 | 3542.31 | 2.00% | 3471.46 | 32.28 | 1.09 | 31.19 |
| | | | | | | | | | | | |
| F | **SLVNL** | | | | | | | | | | |
| | *SJVNL* | *1500.00* | 7194.21 | 0.86% | 12.90 | 7194.21 | 1.20% | 7107.87 | 61.13 | 2.06 | 59.06 |
| | | | | | | | | | | | |
| G | **NTPC, NHPC & Other Stations** | | | | | | | | | | |
| | *Salal* | *690.00* | 3244.54 | 0.27% | 1.86 | 3244.54 | 1.00% | 3212.09 | 8.67 | 0.29 | 8.38 |
| | *Uri I* | *480.00* | 2833.53 | 0.62% | 2.98 | 2833.53 | 1.20% | 2799.52 | 17.36 | 0.59 | 16.77 |
| | *Uri II* | *180.00* | 85.00 | 1.13% | 2.04 | 1340.28 | 1.20% | 1324.20 | 15.00 | 0.51 | 14.50 |
| | *Singrauli* | *2000.00* | 90.57 | 0.21% | 4.20 | 15867.86 | 7.25% | 14717.44 | 30.91 | 1.04 | 29.86 |
| | *Chamera I* | *540.00* | 2550.82 | 3.90% | 21.06 | 2550.82 | 1.20% | 2520.21 | 98.29 | 3.32 | 94.97 |
| | *Tanakpur* | *94.00* | 484.16 | 1.28% | 1.20 | 484.16 | 1.00% | 479.32 | 6.14 | 0.21 | 5.93 |
| | *Rihand III* | *500.00* | 85.00 | 0.79% | 3.97 | 3723.00 | 9.00% | 3387.93 | 26.87 | 0.91 | 25.96 |
| | *Rihand II* | *1000.00* | 89.22 | 1.03% | 10.30 | 7815.67 | 9.00% | 7112.26 | 73.26 | 2.47 | 70.78 |
| | *Rihand I* | *1000.00* | 89.22 | 1.21% | 12.10 | 7815.67 | 7.50% | 7229.50 | 87.48 | 2.95 | 84.52 |
| | *Chamera II* | *300.00* | 1476.88 | 1.27% | 3.81 | 1476.88 | 1.20% | 1459.15 | 18.53 | 0.63 | 17.91 |
| | *Dhauliganga* | *280.00* | 1146.66 | 1.22% | 3.42 | 1146.66 | 1.20% | 1132.90 | 13.82 | 0.47 | 13.35 |
| | *Chamara III* | *231.00* | 958.52 | 1.10% | 2.54 | 958.52 | 1.20% | 947.02 | 10.43 | 0.35 | 10.07 |

| Sr. No. | Source | Capacity (MW) | Average PLF/Gross Generation | Latest entitlement | | Gross Generation (MUs) | Auxilliary Consumption (%) | Net Generation (MUs) | Purchase (MUs) | PGCIL Losses (MUs) | Energy Available at Periphery (MUs) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | % | MW | | | | | | |
| | *Unchahar III* | *210.00* | 91.24 | 0.73% | 1.53 | 1678.45 | 9.00% | 1527.39 | 11.15 | 0.38 | 10.77 |
| | *Unchahar II* | *420.00* | 91.24 | 0.96% | 4.03 | 3356.90 | 9.00% | 3054.78 | 29.33 | 0.99 | 28.34 |
| | *Unchahar I* | *420.00* | 91.24 | 0.56% | 2.35 | 3356.90 | 9.00% | 3054.78 | 17.11 | 0.58 | 16.53 |
| | *Sewa II* | *120.00* | 523.13 | 1.33% | 1.60 | 523.13 | 1.20% | 516.85 | 6.87 | 0.23 | 6.64 |
| | *Dulhasti* | *390.00* | 2119.69 | 0.97% | 3.78 | 2119.69 | 1.20% | 2094.25 | 20.31 | 0.69 | 19.63 |
| | *Kahalgaon II* | *1500.00* | 68.56 | 0.20% | 3.00 | 9008.78 | 6.50% | 8423.21 | 16.85 | 0.57 | 16.28 |
| | *Dadri II* | *980.00* | 85.55 | 0.24% | 2.35 | 7344.30 | 6.00% | 6903.64 | 16.57 | 0.56 | 16.01 |
| | *Anta* | *419.00* | 2434.68 | 1.69% | 7.08 | 2434.68 | 3.00% | 2361.64 | 39.91 | 1.35 | 38.56 |
| | *Auriya* | *663.00* | 3326.76 | 1.10% | 7.29 | 3326.76 | 3.00% | 3226.95 | 35.50 | 1.20 | 34.30 |
| | *Dadri* | *830.00* | 4896.96 | 0.84% | 6.97 | 4896.96 | 3.00% | 4750.05 | 39.90 | 1.35 | 38.55 |
| | *Jajjar* | *1500.00* | 56.60 | 0.25% | 3.75 | 7437.24 | 9.00% | 6767.89 | 16.92 | 0.57 | 16.35 |
| | | | | | | | | | | | |
| **H** | **PXIL/IEX** | | | | | | | | | | |
| | *PXIL/IEX* | | | | | | | | 91.33 | | 91.33 |
| | **Power Purchase** | | | | | | | | **1709.84** | **54.66** | **1655.18** |

*Table 6.7.4: Approved Power purchase cost from above mentioned stations for FY 2014-15 (Rs Crores)*

| Sr. No. | Source | Merit Order Purchase at Approved Losses | | | | |
|---|---|---|---|---|---|---|
| | | Energy Units (in MU) | Charges (In Crores) | | | |
| | | | Fixed | Variable | Other | Gross Total |
| | | | | | | |
| **A** | **Power purchase from other sources** | | | | | |
| | | | | | | |
| | *(2.60% for - Non Solar) RPO (IEX)* | 0.00 | 0.00 | 3.75 | 0.00 | 3.75 |
| | *(0.40% for Solar)* | 0.00 | 0.00 | 4.79 | 0.00 | 4.79 |
| | | | | | | |
| **B** | **NPCIL** | | | | | |
| | *NAPS* | 33.17 | 0.00 | 7.88 | 0.00 | 7.88 |
| | *RAPP (Unit 3 & 4)-B* | 19.79 | 0.00 | 5.42 | 0.00 | 5.42 |
| | *RAPP (Unit 5 & 6)-C* | 44.50 | 0.00 | 15.17 | 0.00 | 15.17 |
| | | | | | | |
| **C** | **Unscheduled Interchange** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | |
| | | | | | | |
| **D** | **BBMB** | | | | | |
| | *BBMB 3.5%* | 361.09 | 0.00 | 8.46 | 0.00 | 8.46 |
| | *BBMB 1 LU* | 36.50 | 0.00 | 12.81 | 0.00 | 12.81 |
| | *BBMB 10 LU* | 365.00 | 0.00 | 170.23 | 0.00 | 170.23 |
| | | | | | | |

| Sr. No. | Source | Merit Order Purchase at Approved Losses | | | | |
|---|---|---|---|---|---|---|
| | | Energy Units (in MU) | Charges (In Crores) | | | |
| | | | Fixed | Variable | Other | Gross Total |
| **E** | **THDC** | | | | | |
| | *Koteshwar* | 7.90 | 1.73 | 1.31 | 0.00 | 3.04 |
| | *Tehri* | 32.28 | 6.38 | 5.57 | 0.00 | 11.95 |
| | | | | | | |
| **F** | **SLVNL** | | | | | |
| | *SJVNL* | 61.13 | 8.71 | 9.08 | 0.00 | 17.79 |
| | | | | | | |
| **G** | **NTPC, NHPC & Other Stations** | | | | | |
| | *Salal* | 8.67 | 0.41 | 0.43 | 0.00 | 0.83 |
| | *Uri I* | 17.36 | 2.14 | 1.40 | 0.00 | 3.54 |
| | *Uri II* | 15.00 | 2.18 | 1.21 | 0.00 | 3.39 |
| | *Singrauli* | 30.91 | 1.71 | 2.84 | 0.00 | 4.55 |
| | *Chamera I* | 98.29 | 6.30 | 9.62 | 0.00 | 15.93 |
| | *Tanakpur* | 6.14 | 0.78 | 0.72 | 0.00 | 1.49 |
| | *Rihand III* | 26.87 | 4.41 | 3.30 | 0.00 | 7.71 |
| | *Rihand II* | 73.26 | 7.21 | 9.28 | 0.00 | 16.49 |
| | *Rihand I* | 87.48 | 7.31 | 11.10 | 0.00 | 18.41 |
| | *Chamera II* | 18.53 | 2.77 | 2.58 | 0.00 | 5.35 |
| | *Dhauliganga* | 13.82 | 2.20 | 2.02 | 0.00 | 4.22 |
| | *Chamara III* | 10.43 | 2.19 | 1.96 | 0.00 | 4.16 |
| | *Unchahar III* | 11.15 | 1.59 | 2.32 | 0.00 | 3.91 |
| | *Unchahar II* | 29.33 | 2.84 | 6.10 | 0.00 | 8.94 |
| | *Unchahar I* | 17.11 | 1.57 | 3.63 | 0.00 | 5.20 |
| | *Sewa II* | 6.87 | 1.40 | 1.68 | 0.00 | 3.07 |
| | *Dulhasti* | 20.31 | 5.29 | 5.30 | 0.00 | 10.59 |
| | *Kahalgaon II* | 16.85 | 2.32 | 4.40 | 0.00 | 6.71 |
| | *Dadri II* | 16.57 | 2.80 | 5.06 | 0.00 | 7.87 |
| | *Anta* | 39.91 | 3.99 | 12.44 | 0.00 | 16.43 |
| | *Auriya* | 35.50 | 3.01 | 12.08 | 0.00 | 15.09 |
| | *Dadri* | 39.90 | 3.09 | 13.80 | 0.00 | 16.89 |
| | *Jajjar* | 16.92 | 4.06 | 6.15 | 0.00 | 10.21 |
| | | | | | | |
| **H** | **PXIL/IEX** | | | | | |
| | *PXIL/IEX* | 91.33 | 0.00 | 27.40 | 0.00 | 27.40 |
| | **Power Purchase Cost** | **1709.84** | **88.40** | **391.30** | **0.00** | **479.69** |
| **H** | **PGCIL and Other Charges** | | | | | |
| | *PGCIL Charges* | | | | | 56.16 |
| | *NRLDC F&C* | | | | | 0.70 |
| | *BBMB ULDC* | | | | | |
| | *Reactive Energy Charges* | | | | | 0.52 |

| Sr. No. | Source | Merit Order Purchase at Approved Losses | | | | |
|---|---|---|---|---|---|---|
| | | Energy Units (in MU) | Charges (In Crores) | | | |
| | | | Fixed | Variable | Other | Gross Total |
| | *LC Charges* | | | | | 0.80 |
| | *Arrears* | | | | | |
| | *Less: Rebate* | | | | | 0.00 |
| | *Less: Penal UI* | | | | | 0.00 |
| | **Grand Total of Charges** | **1709.84** | **88.40** | **391.30** | **0.00** | **537.87** |

**Commission considers the Power purchase cost for ARR for FY 2014-15 of Rs. 537.87 Crores for procurement of 1709.84 million units of energy and Renewable Energy Certificates to meet the RPO compliance for FY 2014-15 as reasonable and approves the same for ARR of FY 2014-15.**

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 2014-15.

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 337 paisa per unit for FY 2014-15**. The approved per unit cost of power purchase for FY 2014-15 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

Based on the data on projected sales and power purchase obtained, projected energy balance for FY 2014-15 is as follows:

*Table 6.8.1 : Energy Balance for FY 2014-15 Projected by petitioner (MU)*

| S. No. | Particulars | FY 2014-15 |
|---|---|---|
| | | Projected |
| A) | **ENERGY REQUIREMENT** | |
| 1 | Energy sales within the State/UT | 1444.91 |
| 2 | Energy sales to Agriculture consumers (included | |

| S. No. | Particulars | FY 2014-15 |
|---|---|---|
| | in total sales) | |
| **3** | **Total sales within the State/UT** | **1444.91** |
| **4 a)** | **Distribution losses** | |
| i) | % | 15.00% |
| ii) | MU | 254.98 |
| **b)** | **Losses due to absence of interstate transmission point** | |
| i) | % | 3.00% |
| ii) | MU | 52.57 |
| **5** | **Energy required at State Periphery for Sale to Retail Consumers** | **1752.47** |
| **6** | **Add: Sales to common pool consumers/ UI** | **-** |
| 7 | Sales outside state/UT : UI/Under drawal | |
| 8 | Sales | |
| | a) To electricity traders | |
| | b) Through PXIL/Exchange | |
| 9 | Sales to other distribution licensees | |
| | a) Bilateral Trade | |
| | b) Banking Arrangement | |
| **10** | **Total Energy Requirement for State (5+6)** | **1752.47** |
| 11 | Inter-state Transmission losses | |
| i) | % | 3.00% |
| j) | MU | 54.20 |
| **12** | **Total Energy Requirement including transmission losses (10+11)** | **1806.67** |
| **B)** | **ENERGY AVAILABILITY / PURCHASED** | |
| **1** | **Net Generation ((Share from CGS & shared plants) (in Mus)** | **1,647.44** |
| A | NTPC | 524.60 |
| B | NHPC | 219.23 |
| C | NPCIL | 124.25 |
| D | SJVNL/NJPC | 76.48 |
| E | BBMB (including dehar& pong) | 702.88 |
| **2** | **Power Purchased from (Other Sources)** | **159.23** |
| A | THDC | 62.92 |
| B | Jhajjar | 20.69 |
| C | Power Exchange (Buy) | |
| D | Bilateral Trade (Buy) / Short term power purchase | - |
| E | RPO (Buy) | - |
| F | UI (Buy) | |
| G | Banking Arrangements (Buy) | - |
| **3** | **Net Energy purchase (MU)** | **1806.67** |
| H | PXIL (Buy) to match the energy requirement | 75.62 |

| S. No. | Particulars | FY 2014-15 |
|---|---|---|
| **4** | **Gross Purchase including PX (MU)** | **1806.67** |

## Commission's analysis

Based on the Energy requirement, Energy availability and Transmission & Distribution Losses for FY 2014-15 as discussed in earlier paras. The Energy balance for FY 2014-15 is presented below. As can be seen, there will be an additional power requirement to meet the energy requirement for FY 2014-15. The power from short-term sources/power exchanges has been considered to balance the energy requirement for FY 2014-15.

*Table 6.8.2 : Energy Balance for FY 2014-15 as approved by the Commission*

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| **A)** | **ENERGY REQUIREMENT (in Mus)** | | |
| 1 | Energy sales within the State/UT (in Mus) | 1444.91 | 1423.46 |
| **2** | **Total sales within the State/UT** | **1444.91** | **1423.46** |
| **3** | **Distribution losses** | | |
| i) | % | 15.00% | 14.00% |
| ii) | MU | 254.98 | 231.73 |
| | **Losses due to absence of interstate transmission point** | | |
| iii) | % | 3.00% | |
| iv) | MU | 52.57 | 0.00 |
| **4** | **Energy required at State Periphery for Sale to Retail Consumers** | **1752.47** | **1655.18** |
| 5 | Add: Sales to common pool consumers/ UI (in Mus) | 0.00 | 0.00 |
| A | Sales outside state/UT : UI/(in Mus) | | |
| B | Sales (in Mus) | 0.00 | 0.00 |
| | a) To electricity traders (in Mus) | | |
| | b) Through PX (in Mus) | | |
| C | Sales to other distribution licensees | 0.00 | 0.00 |
| | a) Bilateral Trade (in Mus) | | |
| | b) Banking Arrangement (in Mus) | | |
| **6** | **Total Energy Requirement for State (5+6)** | **1752.47** | **1655.18** |
| 7 | Transmission losses | | |
| i) | % | 3.00% | 3.38% |
| i) | MU | 54.20 | 54.66 |
| **B)** | **ENERGY REQUIRED AT GENERATOR END** | **1806.67** | **1709.84** |
| **1** | **Gross Availability (in MUs)** | **1731.05** | **1618.52** |
| a | Power Purchase from Renewable Sources | | |
| b | NPCIL | 124.25 | 97.46 |
| c | BBMB | 702.88 | 762.59 |
| d | THDC | 62.92 | 40.18 |

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| e | SJVNL | 76.48 | 61.13 |
| f | Unscheduled Interchange | | |
| g | Power Purchase from other sources | 764.52 | 657.16 |
| **2** | **PXIL (Buy) to match the energy requirement** | **75.62** | **91.33** |
| **3** | **Gross Purchase including PX (in MUs)** | **1806.67** | **1709.84** |

## 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

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

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

The petitioner has considered an escalation of 7.35% p.a. based on the increase in Wholesale Price Index as on 1st April, 2013 over the same as on 1st April 2012. The WPI data has been considered as available 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.

In addition, petitioner submitted that it has planned to hire 42 nos. of LDCs in FY 2014-15 for IT and administrative section and requested the Commission to allow addition of employees towards positions proposed to be hired during FY 2014-15. It further requested to true-up the actual employee cost of CED based on actual at the end of the year. The details of the salary expenses projected for FY 2014-15 is given in the below table. The total employee cost estimated for FY 12-13, has been escalated by WPI factor of 7.35%.

*Table 6.9.1.1 : Employee Cost projected by the petitioner for FY 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 (Petitioner's submission) |
|---|---|---|
| **A** | **Salaries& Allowances** | |
| 1 | Pay in Band | 30.49 |
| 2 | Grade Pay | 3.23 |
| 3 | Dearness allowance | 21.99 |
| 4 | House rent allowance | 2.88 |
| 5 | Field Duty Allowance | 0.06 |
| 6 | Washing Allowance | 0.01 |
| 7 | Salary to CGRF Staff | 0.00 |
| 8 | Personal Pay | 0.03 |
| 9 | Travelling Allowance | 0.01 |
| 10 | Conveyance Allowance | 1.18 |
| 11 | Apprentice | 0.02 |
| 12 | Fixed Medical | 0.73 |
| 13 | Medical Reimburshment | 0.40 |
| 14 | General Incentive | 0.16 |
| 15 | Special Allowance etc | 0.07 |
| 16 | City Compensatory Allowance | 0.17 |
| 17 | Electricity Allowance | 0.09 |
| 18 | Handicap Allowance | 0.02 |
| 19 | Leave Travel Concession | 0.01 |
| 20 | Leave Salary and Pension Contribution | 0.00 |
| 21 | Others | 0.27 |
| | **Sub-Total - A** | **61.81** |
| **B** | **Terminal Benefits** | |
| 22 | Leave encashment | 0.49 |
| 23 | Gratuity | 0.83 |
| 24 | Commutation of Pension | 0.45 |
| 25 | Workmen Compensation | 0.00 |
| 26 | Ex - gratia | 0.00 |

| Sr. No. | Particulars | FY 2014-15 (Petitioner's submission) |
|---|---|---|
| | **Sub-Total - B** | **1.77** |
| **C** | **Other Salary payments** | |
| 27 | Arrears on account of Vth Pay Commission | 0.00 |
| 28 | Contractual basis | 0.16 |
| | **Sub-Total- C** | **0.16** |
| | **Total (A+B+C)** | **63.75** |
| 29 | Less: Amount capitalized | |
| 30 | Net amount | **63.75** |
| 31 | Add : prior period expenses | |
| 32 | **Total Employee Expenses** | **63.75** |

**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. "*

The Commission had asked the petitioner to provide detailed justification of requirement of hiring 42 nos. of LDC's in FY 2014-15 for IT and administrative section. The petitioner replied to it as follows:

*"The electricity department is a revenue earning department. The LDC deployed for maintainening records, type work , preparation of ledger of the consumers, issue of the new connections orders of meter and disconnection of old/disputed meters, maintaining data for preparation of bills, to put up files, diary and dispatch work, to work in Audit section and to work in Computer cell for checking revenue collection and a such the service of LDC is essentially required. As such, 42. No.s of posts which are lying vacant of the category are very essential to be filled for day to day work as well as to safeguard the interest of commercial department to deal with the consumers complaints and other official works etc. It is submitted that there were the 171 posts of Lower Division clerks/Asstt. Storekeeper/Meter reader/Typist were sanctioned before 1990 and at present only 64 No.s LDCs/MR are working against the sanctioned posts of 171. As such, it is proposed that 42 No.s posts of LDC be filled for smooth functioning of department. It is pertiitent to mention that in the manpower sanction, CED has requested for sanction of 171 posts of LDCs/MR."*

The Commission is of the view that that the petitioner is required to fill the vacancies created due to superannuation of employees. Similar concerns were also raised by various stakeholders during the public hearing wherein they acknowledged that current man-power of CED is not adequate to carry out the functioning of the department in smooth and efficient manner. In fact, as a compliance of one of the directions of the Commission, the petitioner has submitted the petition in respect of detailed study on manpower requirement at Chandigarh Electricity Department, which has been admitted as petition no. 129/2014.

Pending the decision of the petition no. 129/2014, the Commission provisionally acknowledges the submission of petitioner to fill the post of 42 No.s LDCs for smooth functioning of the department who will continue to provide the service in line with the Standard of Performance Regulations, 2009 and Distribution Code Regulations, 2010.

As may be seen from para 5.8.2, Commission has considered Employee cost as Rs 56.54 Crores for Review of ARR for FY 2013-14 for reasons explained therein. Taking Rs 56.54 Crores as base for FY 2013-14 and applying WPI escalation of 5.68%, employee Cost for FY 2014-15 works out to Rs 59.75 Crores.

**Commission considers the employee cost of Rs. 59.75 Crores as reasonable and approves the same for FY 2014-15.**

### 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 2014-15 are provided in the table below:

*Table 6.9.2.1 : Details of A&G expenses projected by the petitioner for FY 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 (Petitioner's submission) |
|---|---|---|
| 1 | Rent, rates & taxes | 0.00 |
| 2 | Domestic Travel Allowances | 0.00 |
| 3 | Office Expenses | 0.72 |
| 4 | Insurance | 0.00 |
| 5 | Membership & Regulatory Fees | 0.59 |
| 6 | Consultancy Fees and other professional fees | 0.00 |
| 7 | Electricity & Water Charges | 0.36 |
| 8 | Advertisement & Publicity | 0.16 |
| 9 | Special Service/Collection and Meter reading | 0.01 |
| 10 | Expenses of CGRF (Office) | 0.01 |
| 11 | Consumer Indexing and Energy Auditing | 0.00 |
| 12 | Other material related expenses | 0.21 |
| **13** | **Total** | **2.07** |

| Sr. No. | Particulars | FY 2014-15 (Petitioner's submission) |
|---|---|---|
| 14 | Add/Deduct share of others (to be specified) | 0.46 |
| **15** | **Total expenses** | **2.53** |
| 16 | Less: Capitalized | 0.00 |
| **17** | **Net expenses** | **2.53** |
| 18 | Add: Prior period | 0.00 |
| **19** | **Total A&G Expenses** | **2.53** |

**Commission's analysis**

As may be seen from para 5.8.3, Commission has considered A&G expenses as Rs 2.45 Crores for Review of ARR for FY 2013-14 for reasons explained therein. Taking Rs 2.45 Crores as base for FY 2013-14 and applying WPI escalation of 5.68%, the A&G expense works out to Rs. 2.58 Crores for FY 2014-15.

*Table 6.9.2.2 : Details of A&G expenses for FY 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| 1 | Rent, rates & taxes | 0.00 | 0.00 |
| 2 | Domestic Travel Allowances | 0.00 | 0.00 |
| 3 | Office Expenses | 0.72 | 0.84 |
| 4 | Insurance | 0.00 | 0.00 |
| 5 | Membership & Regulatory Fees | 0.59 | 0.62 |
| 6 | Consultancy Fees and other professional fees | 0.00 | 0.17 |
| 7 | Electricity & Water Charges | 0.36 | 0.36 |
| 8 | Advertisement & Publicity | 0.16 | 0.15 |
| 9 | Special Service/Collection and Meter reading | 0.01 | 0.01 |
| 10 | Expenses of CGRF (Office) | 0.01 | 0.00 |
| 11 | Consumer Indexing and Energy Auditing | 0.00 | 0.00 |
| 12 | Other material related expenses | 0.21 | 0.00 |
| **13** | **Total** | **2.07** | **2.15** |
| 14 | Add/Deduct share of others (to be specified) | 0.46 | 0.44 |
| **15** | **Total expenses** | **2.53** | **2.58** |
| 16 | Less: Capitalized | 0.00 | |
| **17** | **Net expenses** | **2.53** | **2.58** |
| 18 | Add: Prior period | 0.00 | |
| **19** | **Total A&G Expenses** | **2.53** | **2.58** |

**The Commission considers the A&G expenses of Rs. 2.58 Crores as reasonable and approves the same for FY 2014-15.**

### 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 2014-15 are provided in the table below:

*Table 6.9.3.1 : Details of R&M expenses submitted by the petitioner for FY 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 (Petitioner's submission) |
|---|---|---|
| 1 | Plant & machinery * | 0.00 |
| | -Plant & Apparatus | 0.00 |
| | -EHV substations | 0.58 |
| | - 33kV substation | 0.08 |
| | - 11kV substation | 0.11 |
| | - Switchgear and cable connections | 0.84 |
| | - Others | 2.22 |
| | **Total** | **3.83** |
| 2 | Buildings (Electricity Residential & Non-Residential) | 0.18 |
| 3 | Hydraulic works & civil works | 0.05 |
| 4 | Line cable & network | - |
| | -EHV Lines | - |
| | - 33kV lines | - |
| | - 11kV lines | 0.09 |
| | - LT lines | 5.17 |
| | - Meters and metering equipment | 0.04 |
| | - Others | 0.23 |
| | **Total** | **5.54** |
| 5 | Vehicles | 1.06 |
| 6 | Furniture & fixtures | 0.00 |
| 7 | Office equipments | 0.00 |
| 8 | Minor R&M Works | 0.06 |
| 9 | **Total** | **10.72** |
| 10 | Add/Deduct share of others (To be specified) | 0.00 |
| 11 | **Total expenses** | **10.72** |
| 12 | Less : Capitalized | 0.00 |
| 13 | **Net expenses** | **10.72** |
| 14 | Add: prior period | 0.00 |
| **15** | **Total R&M expenses** | **10.72** |

**Commission's analysis**

As may be seen from para 5.8.4, Commission has considered R&M expenses as Rs 10.11 Crores for Review of ARR for FY 2013-14 for reasons explained therein. Taking Rs 10.11 Crores as base for FY 2013-14 and applying escalation of 5.68%, the R&M expense works out to Rs. 10.68 Crores for FY 2014-15.

*Table 6.9.3.2 : Details of R&M expenses submitted and approved for FY 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| 1 | Plant & machinery * | 0.00 | 2.51 |
| | -Plant & Apparatus | 0.00 | 0.00 |
| | -EHV substations | 0.58 | 0.22 |
| | - 33kV substation | 0.08 | 0.32 |
| | - 11kV substation | 0.11 | 0.01 |
| | - Switchgear and cable connections | 0.84 | 0.95 |
| | - Others | 2.22 | 0.22 |
| | **Total** | **3.83** | **4.24** |
| 2 | Buildings (Electricity Residential & Non-Residential) | 0.18 | 2.25 |
| 3 | Hydraulic works & civil works | 0.05 | 0.14 |
| 4 | Line cable & network | - | 0.00 |
| | -EHV Lines | - | 0.00 |
| | - 33kV lines | - | 0.00 |
| | - 11kV lines | 0.09 | 0.04 |
| | - LT lines | 5.17 | 2.07 |
| | - Meters and metering equipment | 0.04 | 0.00 |
| | - Others | 0.23 | 0.18 |
| | **Total** | **5.54** | **2.28** |
| 5 | Vehicles | 1.06 | 1.06 |
| 6 | Furniture & fixtures | 0.00 | 0.00 |
| 7 | Office equipments | 0.00 | 0.00 |
| 8 | Minor R&M Works | 0.06 | 0.36 |
| 9 | **Total** | **10.72** | **10.33** |
| 10 | Add/Deduct share of others (To be specified) | 0.00 | 0.36 |
| 11 | **Total expenses** | **10.72** | **10.68** |
| 12 | Less : Capitalized | 0.00 | 0.00 |
| 13 | **Net expenses** | **10.72** | **10.68** |
| 14 | Add: prior period | 0.00 | 0.00 |
| **15** | **Total R&M expenses** | **10.72** | **10.68** |

**The Commission considers the R&M expenses of Rs. 10.68 Crores as reasonable and approves the same for FY 2014-15.**

### 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 2014-15 is given below:

*Table 6.9.4.1 : Summary of O&M expenses submitted by the petitioner and approved for FY 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| 1 | Employee Expenses | 63.75 | 59.75 |
| 2 | A&G Expenses | 2.53 | 2.58 |
| 3 | R&M Expenses | 10.72 | 10.68 |
| **4** | **Total O&M Expenses** | **76.99** | **73.02** |

## 6.10 Capital Expenditure and Capitalization

**Petitioner's submission**

The petitioner has 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. 39.69 Crores during FY 2014-15 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 2014-15 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 submitted the scheme wise capital investment plan as per the regulations.

**Therefore, Commission provisionally approves the capitalization of Rs. 39.60 Crores proposed by the petitioner for FY 2014-15.** 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 2014-15 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 2014-15 is given below:

*Table 6.11.1 : GFA & Depreciation projected by the petitioner for FY 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 (Petitioner's submission) |
|---|---|---|
| 1 | Opening Value of Assets at the beginning of the year | 421.06 |
| 2 | Additions during the year | 39.60 |
| 3 | Gross Fixed Assets at the end of year | 460.66 |
| **4** | **Average Assets** | **440.86** |
| 5 | Average Rate of Depreciation | 5.28% |
| **6** | **Depreciation for the year** | **23.28** |

**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. 39.60 Crores for the FY 2014-15. As discussed in earlier para, it is provisionally considered to capitalize Rs 39.60 Crores during the FY 2014-15.

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 2014-15 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. 4.11 Crores as reasonable considering Rs. 58 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 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| 1 | Opening Value of Assets at the beginning of the year | 421.06 | 58.00 |
| 2 | Additions during the year | 39.60 | 39.60 |
| 3 | Gross Fixed Assets at the end of year | 460.66 | 97.59 |
| **4** | **Average Assets** | **440.86** | **77.80** |
| 5 | Average Rate of Depreciation | 5.28% | 5.28% |
| **6** | **Depreciation for the year** | **23.28** | **4.11** |

**The Commission therefore considers the depreciation of Rs. 4.11 Crores as reasonable and approves the same for FY 2014-15.**

## 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 2014-15.

*Table 6.12.1 : Interest on loans submitted by the petitioner for FY 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 (Petitioner's submission) |
|---|---|---|
| 1 | Opening Normative Loan | 232.29 |
| 2 | Add: Normative Loan during the year | 27.72 |
| 3 | Less: Normative Repayment pegged at Depreciation | 23.28 |
| 4 | Closing Normative Loan | 236.73 |
| **5** | **Average Normative Loan** | **234.51** |
| 6 | Rate of Interest (@SBAR rate) | 14.45% |
| **7** | **Interest on Normative Loan including bank charges** | **33.89** |

**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. 27.72 Cr for FY 2014-15 (being 70% of Rs. 39.60 Cr provisionally considered to be capitalized during FY 2014-15) 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 2014-15 approved by the Commission:

*Table 6.12.2 : Interest on loans considered by the Commission for FY 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| 1 | Opening Normative Loan | 232.29 | 41.91 |
| 2 | Add: Normative Loan during the year | 27.72 | 27.72 |
| 3 | Less: Normative Repayment pegged at Depreciation | 23.28 | 4.19 |
| 4 | Closing Normative Loan | 236.73 | 65.44 |
| **5** | **Average Normative Loan** | **234.51** | **53.68** |
| 6 | Rate of Interest (@SBAR rate) | 14.45% | 14.75% |
| **7** | **Interest on Normative Loan including bank charges** | **33.89** | **7.92** |

**The Commission therefore considers the depreciation of Rs. 7.92 Crores as reasonable and approves the same for FY 2014-15.**

## 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 14.45% as on 1st April 2013. Accordingly, the Petitioner requests the Hon'ble Commission to approve an amount of Rs. 8.30 Crores for FY 2014-15 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 prevailing SBI PLR rate which is now substituted as SBI advance rate, at 14.75% for FY 2014-15. 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 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| 1 | Fuel Cost for 2 months | 0.00 | 0.00 |
| 2 | Power Purchase Cost for one month | 51.00 | 44.82 |
| 3 | Employee Cost for one month | 5.31 | 4.98 |
| 4 | A&G Expenses for one month | 0.21 | 0.22 |
| 5 | R&M Expenses for one month | 0.89 | 0.89 |
| **6** | **Total Working Capital for one month** | **57.42** | **50.91** |
| **7** | **Total Working after deduction of Security Deposit from Working Capital Requirement** | **57.42** | **14.19** |
| 8 | SBAR Rate | 14.45% | 14.75% |
| **9** | **Interest on Working Capital** | **8.30** | **2.09** |

**The Commission considers the Interest on Working Capital of Rs. 2.09 Crores as reasonable and approves the same for FY 2014-15.**

## 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 2014-15 equivalent to the addition during FY 2012-13 and the interest on security deposit to be paid to the consumer will be Rs. 5.35 Crores at the available interest rate of bank i.e. 8.50% per annum.

**Commission's analysis**

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*.

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 2014-15 (at the Bank Rate i.e. 8.75% per annum currently applicable) with effect from 1st April 2014 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 2014-15' on the bills of the consumers. **Any non-compliance in this regard shall be viewed seriously by the Commission.**

However, the petitioner has not given any detailed justification for sudden increase in consumer security deposit in FY 2013-14 to Rs 61.92 Crores and Rs 62.97 Crores in FY 2014-15 as compared to Rs 29.21 Crores actually held by the petitioner in FY 2012-13. Therefore, in absence of any substantial ground for increased consumer deposit, the Commission provisionally approves the same increase in consumer deposit for purpose of determination of ARR for FY 2014-15 as approved for FY 2013-14 in the previous sections.

*Table 6.14.1 : Interest on Security Deposit submitted by the petitioner and approved by the Commission for FY 14-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| 1 | Opening Security Deposit | | 35.92 |
| 2 | Add: Deposits during the Year | | 1.62 |
| 3 | Less: Deposits refunded | | 0.02 |
| 4 | Closing Security Deposit | | 37.52 |
| 5 | Average Security Deposit | **62.97** | **36.72** |
| 6 | Bank Rate | 8.50% | 8.75% |
| **7** | **Interest on Security Deposit** | **5.35** | **3.07** |

**In view of the above, Commission considers the Interest on Security Deposit of Rs. 3.07 Crores as reasonable and approves the same for FY 2014-15.**

## 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 9.09 Crores for FY 2014-15.

**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.

*Table 6.15.1 : Return on Equity/NFA as submitted by the petitioner and approved by the Commission for FY 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| 1 | Gross block at beginning of the Year/Opening GFA or equity | 326.23 | 58.00 |
| 2 | Less accumulated depreciation/Addition in Equity | 23.28 | 5.25 |
| 3 | Net block at beginning of the year /Closing Equity | 302.95 | 52.74 |

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| 4 | Less accumulated consumer contribution | 0.00 | 0.00 |
| **5** | **Net fixed assets at beginning of the year** | **302.95** | **52.74** |
| **6** | **Reasonable return @3% of NFA** | **9.09** | **1.58** |

**As discussed in earlier para 5.9, 5.10, 5.11, 5.12, 5.14; the Commission has considered Rs. 58.00 Crores as the gross block at the beginning of FY 2014-15 and accumulated depreciation of Rs. 5.25 Crores. Commission has therefore considered the reasonable return of 1.58 Crores at the rate of 3% on net fixed asset of Rs. 52.74 Crores at the beginning of FY 2014-15.**

**In view of the above, Commission considers the Return on Equity/NFA of Rs. 1.58 Crores as reasonable and approves the same for FY 2014-15.**

## 6.16 Provision for Bad and Doubtful debts

**Petitioner's submission**

The petitioner had projected the amount of Rs. 6.47 Crores for FY 2014-15.

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 that 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 2014-15. 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 3.34 Crores of receivables for FY 2014-15 and the same is included in the total ARR.**

## 6.17 Non-Tariff Income

### Petitioner's submission

For the FY 2014-15, 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 2014-15, which the licensee requests the Hon'ble Commission to approve.

### Commission's analysis

In absence of availability of audited accounts prepared on the Commercial Principles, the Commission has considered the NTI for FY 2012-13 approved in order date 15th April 2013 and escalated the same by estimated WPI 5.68% for arriving at the NTI for FY 2013-14 and subsequently escalated further by 5.68% for arriving NTI for FY 2014-15. The detailed calculations have been presented in the table below:

*Table 6.17.1 : Non-Tariff Income submitted by petitioner and approved by the Commission for FY 2014-15 (Rs Cr)*

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| 1 | Sale Proceeds of dead stock, waste paper etc | | 2.14 |
| 2 | Theft/pilferage of energy | 0.46 | 1.21 |
| 3 | Wheeling charges under open access | | 0.39 |
| 4 | Interest on staff loans & advance | | 0.03 |
| 5 | Misc. Receipts/income | 7.54 | 7.18 |
| 6 | Meter/Service Rent | 5.80 | 3.95 |
| 7 | Late Payment Surcharge | 1.70 | 1.23 |
| **8** | **Total income** | **15.50** | 16.13 |
| 9 | Add: prior period income | | |
| | **Total Non-Tariff Income** | **15.50** | **16.13** |

**The Commission considers the non-tariff income of Rs. 16.13 crore as reasonable and approves the same for FY 2014-15**.

## 6.18 Revenue at existing tariff for FY 2014-15

For projecting the revenue at existing tariff, the Commission has considered category wise/ slab wise sale approved in previous paras and tariff approved by the Commission in the order dated 15th April 2013. Total Revenue projected by the petitioner and approved by the Hon'ble Commission, the category-wise Revenue from the existing Tariff for FY 2014-15 is given below:

*Table 6.18.1 : Details of Revenue at existing tariff projected by petitioner and approved by Commission for FY 14-15*

| S.No. | Category/Consumption Slab | FY 2014-15 (Rs Crores) | |
|---|---|---|---|
| | | Petitioner's submission | Approved @ Existing Tariff |
| A | Domestic | 233.46 | 270.61 |
| 1 | *SPD-JJ Clusters/ Unauthorized Colonies/ Slum Dwellers* | 4.42 | 4.52 |
| *2* | *0-150 kWh* | 12.69 | 12.97 |
| *3* | *151 kWh-400 kWh* | 65.02 | 87.86 |
| *4* | *Above 400 kWh* | 151.33 | 165.27 |
| B | Commercial | 230.67 | 225.59 |
| *4* | *0-150 kWh* | 3.06 | 2.98 |
| *5* | *151 kWh-400 kWh* | 9.04 | 9.00 |
| *6* | *Above 400 kWh* | 218.56 | 213.61 |
| C | Large Supply | 70.84 | 61.65 |
| D | Small Power | 8.01 | 7.99 |
| E | Medium Supply | 47.26 | 46.87 |
| F | Agriculture | 0.32 | 0.37 |
| G | Public Lighting | 10.98 | 9.05 |
| H | Bulk Supply | 40.06 | 41.42 |
| I | Others-Temporary Supply | 5.89 | 4.69 |
| **Total** | | **647.49** | **668.24** |

**The Commission considers the expected revenue of Rs. 668.24 Crores at existing tariff as reasonable for FY 2014-15.**

## 6.19 Aggregate Revenue requirement and Revenue Surplus/Deficit during FY 2014-15

### Petitioner's submission

The estimates of Aggregate Revenue requirement for FY 2014-15 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 2014-15 (Rs Crores)*

| Sr. No. | Particulars | (Petitioner's submission) |
|---|---|---|
| 1 | Cost of fuel | |
| 2 | Cost of power purchase for full year | 612.00 |
| 3 | Employee costs | 63.75 |
| 4 | Administration and general expenses | 2.53 |
| 5 | R&M expenses | 10.72 |
| 6 | Depreciation | 23.28 |
| 7 | Interest and finance charges | 33.89 |
| 8 | Interest on working capital & Interest on Security Deposit | 13.65 |
| 9 | Return on NFA /Equity | 9.09 |
| 10 | Provision for Bad Debt | 6.47 |
| 11 | Advance Against Depreciation | |
| **12** | **Total Revenue Requirement** | **775.36** |
| 13 | Less: Non Tariff Income | 15.50 |
| 14 | Less: Revenue from Sale through UI | 0.00 |
| 15 | Less: Revenue from Sale of Power-Exchanges | 0.00 |
| **16** | **Net Revenue Requirement (12-13-14-15)** | **759.86** |

The Petitioner has proposed a hike in tariff and estimated the additional revenue of Rs. 156.97 Crores to recover the cumulative revenue gap of Rs. 156.97 Crores for FY 2014-15. The revenue deficit projected by the petitioner in its petition for FY 2014-15 including the impact of additional revenue from proposed tariff is given below:

***Table 6.19.2 : Estimation of Deficit submitted by petitioner for FY 2014-15 (Rs Crores)***

| Sr. No. | Particulars | FY 2014-15 (Petitioner's submission) |
|---|---|---|
| **16** | **Net Revenue Requirement (12-13-14-15)** | **759.86** |
| 17 | Revenue from Retail Sales at Existing Tariff | 647.49 |
| 18 | FPPPCA billed during the year | |
| **19** | **Net Gap (16-17-18)** | **112.37** |
| 20 | Gap for the previous year | 41.55 |
| 21 | Carrying Cost | 6.19 |
| **22** | **Total gap (19+20+21)** | **160.12** |
| 23 | Additional revenue from proposed tariff | 156.97 |
| **24** | **Revenue Gap/ (Surplus), if any, after proposed tariffs (22-23)** | **3.15** |
| 25 | Budgetary Support from Government | |
| **26** | **Net Final Revenue Gap/ (Surplus) (24-25)** | **3.15** |

**Commission's analysis**

The Commission has considered and approved the ARR for FY 2014-15 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 2014-15 (Rs Cr)*

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| 1 | Cost of fuel | | |
| 2 | Cost of power purchase for full year | 612.00 | 537.87 |
| 3 | Employee costs | 63.75 | 59.75 |
| 4 | Administration and general expenses | 2.53 | 2.58 |
| 5 | R&M expenses | 10.72 | 10.68 |
| 6 | Depreciation | 23.28 | 4.11 |
| 7 | Interest and finance charges | 33.89 | 7.92 |
| 8 | Interest on working capital & Interest on Security Deposit | 13.65 | 5.17 |
| 9 | Return on NFA /Equity | 9.09 | 1.58 |
| 10 | Provision for Bad Debt | 6.47 | 3.34 |
| 11 | Advance Against Depreciation | | |
| **12** | **Total Revenue Requirement** | **775.36** | **633.00** |
| 13 | Less: Non Tariff Income | 15.50 | 16.13 |
| 14 | Less: Revenue from Sale through UI | 0.00 | 0.00 |
| 15 | Less: Revenue from Sale of Power-Exchanges | 0.00 | 0.00 |
| **16** | **Net Revenue Requirement (12-13-14-15)** | **759.86** | **616.87** |

The estimated revenue deficit including the approved gap of FY 2012-13 (As approved in TO dated 15$^{th}$ April 2013) & reviewed gap of FY 2013-14 (As dealt in Chapter 5 in current TO) is as given in the table below:

*Table 6.19.4 : Approved Revenue gap/surplus for FY 2014-15 (Rs Crores)*

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| **16** | **Net Revenue Requirement (12-13-14-15)** | **759.86** | **616.87** |
| 17 | Revenue from Retail Sales at Existing Tariff | 647.49 | 668.24 |
| 18 | FPPPCA billed during the year | | |
| **19** | **Net Gap (16-17-18)** | **112.37** | **-51.37** |
| 20 | Gap for the previous year | 41.55 | (23.51) |
| 21 | Carrying Cost | 6.19 | |

| Sr. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | (Petitioner's submission) | Approved by the Commission |
| **22** | **Total gap (19+20+21)** | **160.12** | **-74.89** |
| 23 | Additional revenue from proposed tariff | 156.97 | 0.00 |
| **24** | **Revenue Gap/ (Surplus), if any, after proposed tariffs (22-23)** | **3.15** | **-74.89** |
| 25 | Budgetary Support from Government | | |
| **26** | **Net Final Revenue Gap/ (Surplus) (24-25)** | **3.15** | **-74.89** |

As the Commission has not considered any true-up for FY 2011-12 and FY 2012-13 as submitted by the petitioner owing to reasons detailed earlier, the Commission has not considered any consequential revenue gap on this account.

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

**The Commission has already stated in Chapter 4 that it has been repeatedly directing the petitioner to prepare accounts on commercial principles since issuance of 1st Tariff Order on 16th July 2011. While, the Commission acknowledges that the efforts have now been initiated by the petitioner for preparation of accounts on commercial principles, considerable time has been lost due to delay in start of actions in this context by the petitioner.**

**However, in case the petitioner had adhered to timelines as per the directions issued in various orders, the audited accounts (prepared on commercial principles) would have been available by now for the True up. The Commission is of view that the delay, which is on account of petitioner, cannot be burdened on the consumers and therefore no carrying cost will allowed for gap for FY 2011-12 and FY 2012-13 (if any, after true-up is undertaken once the audited accounts on commercial principles are available).**

## 6.20 Treatment of Revenue Surplus during FY 2014-15

Further, as can be seen from the table mentioned above, there is a cumulative revenue surplus of Rs. 74.89 Crores till FY 2014-15 as estimated by the Commission against the cumulative revised gap of Rs. 160.12 Crores furnished by the petitioner in its petition. The major reason for the surplus for as compared to the projections of the Petitioner is the T&D losses trajectory approved and disallowance of extra 3% losses, non-consideration of actual expenditure including Interest Charges, Depreciation and Return on Equity, in the absence of audited accounts and Fixed asset register. 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 and fixed asset registers, the surplus assessed (as of now) in the revenue requirement on account of above shall be mitigated.

**The Commission would also like to emphasize that there is likelihood that tariff revision orders for most of the Central Generating Stations will be issued within FY 2014-15 itself. While any increase in the tariff can be recovered through FPPCA, the Commission directs the petitioner to adjust the recoveries on account of positive FPPCA in the approved surplus and not to charge the consumers till such time the approved surplus is exhausted. The Commission also directs the petitioner to pass on the benefits of negative FPPCA directly to the consumers**.

**Keeping in view of above mentioned facts, the Commission is not considering any tariff hike for the current year.**

# 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 2014-15, it has been observed that the directives issued in tariff order for FY 2013-14 and before, 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 mentioned in ARR and tariff petition for FY 2013-14**
**Petitioner's Submission**

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 30$^{th}$ 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.

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's submission**

CED submits that Tender (OP-4/19/2013-14) for appointment of consultant for (i) preparation of Annual Statement of Accounts on commercial accounting principles and (ii) Asset & Depreciation Register was floated on 23.8.2013 with opening date of 17.3.2013. However, due to some observations raised by 3-4 firms, the date of opening of tender is further extended upto 11.10.2013. As no any EMD was received from any firm till 11.10.2013 and due to system constraints, the tender was made cancelled.

The DNIT said was got amended by including comments/ suggestions furnished by various firms including M/S Deloitte Touche Tohmatsu India Pvt Ltd , M/S Feedback Infra and M/S S.K. Bhasin & Associates. The amended DNIT was deliberated by the Standing Committee constituted by the competent authority of Chandigarh Administration on 14.10.2013 & 31.10.2013 and later on approved by the Chief Engineer, UT Chandigarh vide his office memo no. 11891 dated 31.12.2013. The said DNIT has been refloated on 17.1.2014 at e-tender portal of Chandigarh Administration.

In view of above cited constraints, CED kindly request Hon'ble JERC to further extend the submission date of Annual statement of account on commercial accounting principles as CED is sincerely putting its best to comply with the directive of Hon'ble Commission.

**Commission's Comments**

While the Commission acknowledges that efforts have been initiated by the petitioner for preparation of accounts on the commercial principles, there have been serious delays in the compliance of this direction on the account of petitioner. The Commission has already clarified in detail in previous sections that the no carrying cost of revenue gaps (if any, at the time of final true-up) will be entertained. The Commission now directs the petitioner to file the true up for FY 2011-12 and FY 2012-13 by 31$^{st}$ October 2014 (to be prepared on the basis of the accounts prepared on the Commercial Accounting principles), failing which the Commission would be constraint to take action according to the JERC Regulations and the Electricity Act, 2003 which may also include the non-consideration of True-Up of FY 2011-12 and FY 2012-13 in all the future orders.

**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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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.

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

CED submits that Tender (OP-4/19/2013-14) for appointment of consultant for (i) preparation of Annual Statement of Accounts on commercial accounting principles and (ii) Asset & Depreciation Register was floated on 23.8.2013 with opening date of 17.3.2013. However, due to some observations raised by 3-4 firms, the date of opening of tender is further extended upto 11.10.2013. As no any EMD was received from any firm till 11.10.2013 and due to system constraints, the tender was made cancelled.

The DNIT said was got amended by including comments/ suggestions furnished by various firms including M/S Deloitte Touche Tohmatsu India Pvt Ltd , M/S Feedback Infra and M/S S.K. Bhasin & Associates. The amended DNIT was deliberated by the Standing Committee constituted by the competent authority of Chandigarh Administration on 14.10.2013 & 31.10.2013 and later on approved by the Chief Engineer, UT Chandigarh vide his office memo no. 11891 dated 31.12.2013. The said DNIT has been refloated on 17.1.2014 at e-tender portal of Chandigarh Administration.

In view of above cited constraints, CED kindly request Hon'ble JERC to further extend the submission date of Annual statement of account on commercial accounting principles as CED is sincerely putting its best to comply with the directive of Hon'ble Commission.

**Commission's Comments**

While the Commission acknowledges that efforts have been initiated by the petitioner for preparation of fixed assets register, there have been serious delays in the compliance of this direction on the account of petitioner. The Commission of view that the preparation of fixed assets registers will take considerable time from award of work to any particular agency. As the work is yet to be awarded to any particular agency as per the latest submissions of the petitioner, the Commission has serious doubts about the early availability of verified fixed assets register. The Commission now directs the petitioner prepare and submit the Fixed Assets Register by 31st October 2014, failing which the Commission would be constraint to take action according to the JERC Regulations and the Electricity Act, 2003 which may also include the non-consideration of asset addition of period when the direction was first imparted and when the Fixed Asset Registers are actually made available in all the future orders.

**3. <u>Directive-3</u>: 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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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.*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

CED submits that M/S NIELIT has been entrusted the work of computerized billing and accordingly MIS reports are being generated on regular basis regarding units billed, no. of consumers, sanctioned load, defaulting amount, exception list and other ARR related reports.

However, the implementation of Part-A of R-APDRP is under process and recently a meeting of Distribution Reform Committee (DRC) in the chairmanship of Advisor to Administrator, UT Chandigarh was held on 20.9.2013 in which it was in principally decided that the work of allotment of M/S SPANCO (ITIA of PSPCL, Punjab) would be put up before the Standing Financial Committee, Chandigarh Administration (Upper) for its financial approval.

However, the DPR of SCADA and Part-B of R-APDRP have already been prepared by the respective consultants viz M/S Reliance Infrastructure and M/S Feedback Infra. The same would be forwarded to M/S PFC after approval of the competent authority of the Chandigarh Administration.

**Commission's Comments**

*Action taken is noted.*

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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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.*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

In order to replace the non functional / defective meters, CED has placed order on DGS&D for Single phase meters (Qty 15000 Nos) and almost same has been received in Store and the due date of delivery is around end of January, 2014. Besides this matter has also been taken up for allocation of 15000 single phase meters with UHBVN/DHBVN.

This office has placed order on DGS&D for three phase meters (Qty 3500 Nos) and same will be received in Store soon.

The current non-functional/ defective meters as identified shall be replaced within this financial year. However, it is submitted that the replacement of defective meters is a continuous process.

However, as per this office memo no. 5982 dated 9.12.2013 to Hon'ble commission regarding pending complaints for the month of Oct 2013, 1900 nos. of meters are defective/ burnt which shall be replaced in regular exercise. However, such no. of defective/ burnt meters is approx 1% which is much lesser than standard 3%.

**Commission's Comments**

*Action taken is noted. The Commission directs the Petitioner to ensure replacement of such meters on a continuous basis and report to the Commission the quarterly status.*

**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 30$^{th}$ September, 2012.

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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.*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

Energy Audit of Chandigarh Electricity Department to assess actual technical and commercial losses shall be covered in Part-A (IT Implementation) of R-APDRP project and allotment of work of IT Implementation to the M/S SPANCO (ITIA of Punjab) is under process.

**Commission's Comments**

*The Commission is of the view that it is apparent from the submissions of the petitioner that considerable delay has been occurred on the account of allotment of work to a particular agency. As per the regulation 15(4) of JERC Tariff regulations, 2009 wherein it is stated that the licensee shall conduct regular energy audit to substantiate its estimation of T&D losses. The licensee shall also furnish six monthly energy audit reports to the Commission.*

*Therefore, the Commission directs the petitioner that, pending the award of work to specialized agencies and assessment of actual losses as covered under R-APDRP, the petitioner shall prepare the interim energy audit report in house for FY 2011-12, FY 2012-13 and FY 2013-14 and submit for review of Commission by 30$^{th}$ September 2014.*

## 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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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.*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

The interest on consumer security has been given in consumer bills and the compliance report of the same has already been provided to Hon'ble JERC vide memo no. 4997 dated 4.10.2013.

However, additional consumption security has also been demanded in the above cited bills in compliance to the clause 6.10(3) of JERC Electricity Supply Code Regulation 2010..

**Commission's Comments**

*Action taken is noted.*

### 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 mentioned in ARR and tariff petition for FY 2013-14**
**Petitioner's Submission**
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.*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**
**Petitioner's Submission**
1. DNIT for appointment of consultant for demand side management and energy conservation shall be prepared after receiving the approved regulation on DSM from Hon'ble commission. Hon'ble JERC has already invited suggestions/ comments on above cited draft regulation and CED has also submitted its comments to JERC vide memo no. 4047 dated 14.8.13.
2. CED has started the process of procurement of Trivector DLMS meters which have multiple function capability and ToD feature. However the whole project covers under R-APDRP which is under process. After the procurement, these meters shall be installed..

**Commission's Comments**
*The Commission would like to reiterate its direction to conduct a detailed study on demand side management and energy conservation through an external accredited agency for efficient use of electricity by various means and submit the compliance report to the Commission by 30$^{th}$ September 2014.*

**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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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.*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

The Manpower Study has been conducted by the Consultant M/S Deloitte and has also recently been approved by the competent authority of Chandigarh Administration vide his office memo no. 8 dated 1.1.2014. The petition in this regard has already been submitted to Hon'ble JERC vide memo no. 75 dated 14.01.2014 for its acceptance and implementation, very shortly..

**Commission's Comments**

*Action taken is noted. The Commission has admitted the petition as petition no. 129/2014 and will deal this report through separate order.*

**<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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

The interstate losses of these interstate points of Nalagarh, Dhulkot etc. were not included in the approved target by Hon'ble commission while these losses are contributed in the T&D losses of CED . The interstate losses of Nalagarh - Kishangarh line is 2.97 % for the FY-2012-13 as intimated by PGCIL authorities. Moreover the T&D losses (un-audited) of CED for the FY-2012-13 are 19.21 %. If total average interstate T&D losses of CED in respect of Nalagarh- Kishangarh and Dhulkot- Chandigarh line are assumed to be 3%, the actual T&D losses of CED will become 16% (as per unaudited data) which is very near to the targets as fixed by Hon'ble JERC for the FY-2012-13..

**Commission's Comments**

*The Commission directs the petitioner that, pending the award of work to specialized agencies and assessment of actual voltage wise losses as covered under R-APDRP, the petitioner shall prepare the interim voltage wise energy audit report in house for FY 2011-12, FY 2012-13 and FY 2013-14 and submit for review of Commission by 30th September 2014. As regard to the losses existing in the system the Commission has given its view in this order at appropriate places which may be taken note off.*

**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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

The scope of work of previous DNIT for appointment of consultant for load forecasting has been amended in view of the draft JERC regulations of Multi Year Distribution Tariff (MYT) Regulation 2013 and Demand Side Management Regulation 2013 and accordingly, amended DNIT has been put up to competent authority for approval.

**Commission's Comments**

*Action taken is noted. Petitioner is directed to inform the time bound action plan for the same by 30.09.2014*

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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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.*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

No Submission from petitioner.

**Commission's Comments**

*The Commission directs the petitioner to continue compliance of this directive as a part of normal operations and submit the compliance report along with the FPPCA computations.*

**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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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.

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**
**Petitioner's Submission**
No Submission from petitioner.

**Commission's Comments**
*The Commission has found the compliance satisfactory and now drops this directive.*

**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 mentioned in ARR and tariff petition for FY 2013-14**
**Petitioner's Submission**
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.

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**
**Petitioner's Submission**
No Submission from petitioner.

**Commission's Comments**

*The Commission has noted that the petitioner has fully complied with this directive and directs the petitioner to ensure RPO compliance for future years also.*

**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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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

**Commission's Comments**

*Action taken is noted.*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

No Submission from petitioner.

**Commission's Comments**

*The Commission noted that the petitioner has fully complied with this directive and accordingly drops this directive.*

**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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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.*

*(b) Government recognized education institutions*

*(c) Government and public sports institution*

*(d) Religious Institutions*

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

*(f) Orphanage /Cheshire homes etc*

*(g) Electric Crematorium*

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

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

No Submission from petitioner.

**Commission's Comments**

*The Commission directs the petitioner to submit the analysis as directed for review of Commission latest by 30th September 2014.*

**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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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.*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

No Submission from petitioner.

**Commission's Comments**

*The Commission has noted that it has not received any compliance for this directive. The Commission again directs the petitioner to submit the detailed statement of capital expenditure incurred and capitalization for every quarter, within 15 days in subsequent quarter failing which the Commission will be bound to take failing which the Commission would be constraint to take action according to the JERC Regulations and the Electricity Act, 2003 which may include the non-consideration of capital expenditure of FY 2011-12 and FY 2012-13 for purpose of true-up in all the future orders.*

**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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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.*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

No Submission from petitioner.

**Commission's Comments**

*The Commission directs the petitioner to submit quarterly status report of the cases booked and action taken thereof .*

**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 mentioned in ARR and tariff petition for FY 2013-14**

**Petitioner's Submission**

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.*

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

No Submission from petitioner.

**Commission's Comments**

*The Commission with a view to have a uniform consumer classification based on usage of electricity, voltage-wise contract load/demand limits and terms & conditions of LT and HT supply to various consumer categories had prepared a draft consultation paper and sought suggestions/comments from its stakeholders. Having received the suggestions/comments from the stakeholders, the Commission found that all seven-distribution licensees under its jurisdiction have different consumer-mix, socio-economic conditions, govt. policies, transmission and distribution network at different voltage levels. Therefore, the Commission opines that uniformity across all the utilities is not possible and it is wiseful and practical that the respective utility should propose voltage-wise and use-wise consumer classification and tariff proposal in the next ARR & tariff petition. Thus, the Commission* *directs the Petitioner to submit voltage-wise and use-wise consumer classification and tariff proposal in its next ARR.*

**Compliance of Directives issued by the Commission in the tariff order for FY 2013-14**

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.

**Compliance/Action Taken mentioned in ARR and tariff petition for FY 2014-15**

**Petitioner's Submission**

CED has prepared the information regarding number of consumers, load, consumption and status of metering for JJ Cluster / Unauthorized colonies for the proposal of new tariff category and placed as Annexure III for kind consideration. The same is being submitted along with ARR & tariff petition for FY 2014-15.

**Commission's Comments**

*The Commission has created a separate sub category for SPD-JJ Clusters/Unauthorized Colonies/ Slum Dwellers in the current tariff order. Thus the direction is now dropped in the current tariff order.*

**New Directive**

The Commission hereby directs the licensee to provide sales/consumption data of the ''Signboards'' category, which has so far not been submitted 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 2014-15 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 2014-15 proposed by the Petitioner (in Rs.)*

| S.No. | Category/Consumption Slab | Existing Tariff | | Hike Proposed for FY 2014-15 | | Proposed Tariff | |
|---|---|---|---|---|---|---|---|
| | | Demand Charges (Rs./KW/Month) | Variable Charges (Rs/ Kwh) | Demand Charges | Variable Charges | Demand Charges (Rs./KW/Month) | Variable Charges (Rs/ Kwh) |
| A | Domestic | | | | | | |
| 1 | *SPD-JJ Clusters/ Unauthorized Colonies/ Slum Dwellers*[6] | | 2.30 | No Change | 21% | | 2.78 |
| *2* | *0-150 kWh* | | 2.30 | No Change | 21% | | 2.78 |
| *3* | *151 kWh-400 kWh* | | 4.20 | New Proposal | 10% | 20 | 4.60 |
| *4* | *Above 400 kWh* | | 4.40 | New Proposal | 13% | 50 | 4.95 |
| B | Commercial | | | | | | |
| *4* | *0-150 kWh* | 6 | 4.30 | 400% | 9% | 30 | 4.70 |
| *5* | *151 kWh-400 kWh* | 70 | 4.50 | 43% | 18% | 100 | 5.30 |
| *6* | *Above 400 kWh* | 70 | 4.70 | 43% | 21% | 100 | 5.70 |
| C | Large Supply | 70 | 4.70 | 43% | 22% | 100 | 5.75 |
| D | Small Power | 6 | 4.40 | 400% | 19% | 30 | 5.25 |
| E | Medium Supply | 70 | 4.50 | 43% | 24% | 100 | 5.60 |

[6] *The petitioner has proposed the creation of separate category.*

| S.No. | Category/Consumption Slab | Existing Tariff | | Hike Proposed for FY 2014-15 | | Proposed Tariff | |
|---|---|---|---|---|---|---|---|
| | | Demand Charges (Rs./KW/Month) | Variable Charges (Rs/ Kwh) | Demand Charges | Variable Charges | Demand Charges (Rs./KW/Month) | Variable Charges (Rs/ Kwh) |
| F | Agriculture | | 2.30 | No Change | 21% | | 2.78 |
| G | Public Lighting | | 0.00 | | | | |
| | Public Lightning system | 70 | 4.30 | 43% | 30% | 100 | 5.60 |
| | Sign Boards | 70 | 6.00 | 43% | 17% | 100 | 7.00 |
| H | Bulk Supply | 70 | 4.50 | 43% | 28% | 100 | 5.75 |
| I | Others-Temporary Supply | 0 | 6.70 | No Change | No Change | | 6.70 |

**Commission's analysis**

The Petitioner has proposed increase in average tariff on the existing tariff for FY 2014-15. Commission has determined the retail tariff for FY 2014-15, keeping in view the guiding principles as stated in Section 61 of the Act and considered the suggestions/objections of the stakeholders in this regard. **Keeping in mind the approved Aggregate Revenue Requirement for FY 2014-15 and reviewed gap of FY 2013-14, Commission is of the view that there is a surplus of Rs 74.89 Crores, so there is no need to revise the tariff**.

The petitioner has requested for creation of separate category for single point delivery for JJ Clusters/ Unauthorized Colonies/ Slum Dwellers. The petitioner has also submitted the judgment of the Hon'ble High Court of Punjab and Haryana dated 05th September 2011 in the LPA No. 631 of 2010 (O&M).

The relevant statements of the judgment are reiterated as follows:

**Quote:**

*"…..7. at the resumed hearing, Mr. V.K. Singh, Secretary, Electricity Wing, Engineering Department, U.T., Chandigarh is present in the court and states that the department has sent the policy titled 'Appointment of Distribution Franchisees' to the Administrator and thereafter the policy is required to be approved by the Joint Electricity Regulatory Commission for U.T. Chandigarh which is based in Gurgaon, under the provisions of the Electricity Act 2003. He undertakes that the whole process is to be completed within a period of 3 months from today.*

*8. In view of the above statement, the order dated 09.12.2009 passed by the learned single judge as well as the order dated 10.06.2009 passed by the Permanent Lok Adalat are upheld and instant appeal is disposed off with the hope that the department will adhere to the statement made. However, till the finalization of said proposal, the interim arrangement as has been directed in the order dated 28.07.2011 shall continue i.e. sub-meters be installed in the premises of the respondents and the charges be permitted to be deposited with the U.T. Administration*

*Chandigarh in accordance with the consumption as per rules. However, it is made clear that the this is an interim arrangement which will not confer any right to permanent installation of meters."* ***Unquote***

**Keeping in view of above judgment by the Hon'ble High Court, the Commission hereby approves separate tariff for the single point delivery – JJ Clusters/Unauthorized colonies/ Slum Dwellers. However, the Commission is of view that there is no requirement of creation of separate category all together and therefore, approves separate sub-category in the domestic category as "SPD-JJ Clusters/ Unauthorized Colonies/ Slum Dwellers".**

**The Commission has approved the flat tariff for this slab as equivalent to 0-150 kWh slab of the Domestic Category as the current consumption for 15247 consumers (projected for FY 2014-15) comes out to be 19.64 MUs annually i.e. approx. 107 units per consumer per month which is well within the range of 0-150 kWh.**

**Further, as the projected revenue in FY 2014-15 from these consumers is only Rs 4.52 Crores, the Commission is of view that recovery because of FPPCA will be negligible from these consumers and thus exempts this slab from recovery of FPPCA.**

**However, if the monthly consumption of a consumer exceeds 150 kWh in any month in any month, then billing for that month shall be on applicable slab of the domestic category and FPPCA shall be applicable for that month.**

The approved 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 2014-15*

| S.No. | Category/Consumption Slab | FY 2014-15 @ Approved Tariff | |
|---|---|---|---|
| | | Demand Charges (Rs./KW/Month) | Variable Charges (Rs/ Kwh) |
| A | Domestic | | |
| 1 | *SPD-JJ Clusters/ Unauthorized Colonies/ Slum Dwellers* | | 2.30 |
| *2* | *0-150 kWh* | | 2.30 |
| *3* | *151 kWh-400 kWh* | | 4.20 |
| *4* | *Above 400 kWh* | | 4.40 |
| B | Commercial | | 0.00 |
| *4* | *0-150 kWh* | 6 | 4.30 |
| *5* | *151 kWh-400 kWh* | 70 | 4.50 |
| *6* | *Above 400 kWh* | 70 | 4.70 |
| C | Large Supply | 70 | 4.70 |
| D | Small Power | 6 | 4.40 |
| E | Medium Supply | 70 | 4.50 |

| S.No. | Category/Consumption Slab | FY 2014-15 @ Approved Tariff | |
|---|---|---|---|
| | | Demand Charges (Rs./KW/Month) | Variable Charges (Rs/ Kwh) |
| F | Agriculture | | 2.30 |
| G | Public Lighting | | |
| | Public Lightning system | 70 | 4.30 |
| | Sign Boards | 70 | 6.00 |
| H | Bulk Supply | 70 | 4.50 |
| I | Others-Temporary Supply | | 6.70 |

# 9. Determination of open access charges

**Petitioner Submission:**

CED in its data gaps reply has stated that:

*Quote "CED at present has no manpower to deal with the matters of open access. However, CED has already filed a petition of manpower study with the Hon'ble Commission and is admitted wide petition no. 129/2014. It is requested that bare minimum employee structure may be considered and approved so that matter related to open access can be initiated". Unquote*

**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 2014-15. The Commission has therefore in order to facilitate the open access has approved the Open Access related charges for FY 2014-15.

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 2013-14 and FY 2014-15 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 2013-14 & FY 2014-15*

| 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%* | - | *558.81* | *558.81* | - | *537.87* | *537.87* |
| 3 | Employee cost | *70%* | *30%* | *39.58* | *16.96* | *56.54* | *41.82* | *17.92* | *59.75* |
| 4 | Repair & Maintenance expenses | *90%* | *10%* | *2.20* | *0.24* | *2.45* | *2.33* | *0.26* | *2.58* |
| 5 | Administration & General expenses | *50%* | *50%* | *5.05* | *5.05* | *10.11* | *5.34* | *5.34* | *10.68* |
| 6 | Depreciation | *90%* | *10%* | *2.46* | *0.27* | *2.73* | *3.70* | *0.41* | *4.11* |
| 7 | Interest & Finance Charges | *90%* | *10%* | *5.12* | *0.57* | *5.69* | *7.13* | *0.79* | *7.92* |
| 8 | Interest on working capital Interest on Security Deposit | *22%* | *78%* | *1.17* | *4.16* | *5.34* | *1.14* | *4.03* | *5.17* |
| 9 | Return on Net Fixed Assets /Equity | *90%* | *10%* | *1.16* | *0.13* | *1.29* | *1.42* | *0.16* | *1.58* |
| 10 | Provision for Bad & Doubtful Debt | *0%* | *100%* | - | - | - | - | *3.34* | *3.34* |
| 11 | Advance against Depreciation | *90%* | *10%* | - | - | - | - | - | - |
| 12 | **Total Revenue Requirement** | | | ***56.75*** | ***586.21*** | ***642.95*** | ***62.88*** | ***570.12*** | ***633.00*** |
| 13 | Less: Non Tariff Income | *0%* | *100%* | - | *15.36* | *15.36* | - | *16.13* | *16.13* |
| 14 | Less: Revenue from Sale through UI | *0%* | *100%* | - | *0.20* | *0.20* | - | - | - |
| 15 | Less: Revenue from Sale of Power (Exchanges) | *0%* | *100%* | - | - | - | - | - | - |
| 16 | **Net Revenue Requirement (13-14-15-16)** | | | ***56.75*** | ***570.64*** | ***627.39*** | ***62.88*** | ***553.99*** | ***616.87*** |
| 17 | **Total Energy to be wheeled by the distribution licensee (energy required at discom's periphery)** | | | | | | | | ***1,655.18*** |
| 18 | **Wheeling Charges (Rs./KWh) to be paid by long term open access users** | | | | | | ***0.38*** | | |
| 19 | ST RATE | | | | | | | | |
| | TSC-Annual Distribution Charges of discom for the immediately preceding financial year (Rs. Crores) | | | | | | ***56.75*** | | |
| | Av CAP (in MW) | | | | | | ***1,325.14*** | | |
| | **ST RATE = 0.25*[TSC/Av CAP]/365 (Rs. per MW per day)** | | | | | | ***293.3*** | | |

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 has approved the loss for FY 2014-15 at 15% in this order. 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 9.2: Determination of input energy for network usage percentage*

| Particulars | UoM | Amount |
|---|---|---|
| Total Input | MU | 1,655.18 |
| Input for HT and EHT Sales | MU | 307.27 |
| Losses for HT and EHT | % | 3.95% |
| Losses | MU | 12.14 |
| Sales at 11 kV and above | MU | 295.13 |
| | | |
| Input for LT | MU | 1,347.91 |
| Losses at LT level | % | 16% |
| Losses | MU | 219.59 |
| Sales at 11 kV and above | Mu | 1,128.32 |
| Balance | MU | - |

Accordingly, the wheeling cost has been considered in the ratio of 20: 80 and the wheeling charge so arrived has been shown in the table below:

*Table 9.3: Wheeling Charges for FY 2014-15*

| Particulars | UoM | Formulae | FY 2013-14 |
|---|---|---|---|
| Wheeling Cost | Rs Crores | A | 62.88 |
| Wheeling Cost at EHT and HT (80%) | Rs Crores | B=A*80% | 11.67 |
| Wheeling Cost at LT (20%) | Rs Crores | C=A*20% | 51.20 |
| Energy Input at Discom Periphery | MU | D | 1,655.18 |
| **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 | 65.38 |
| Sales at EHT and HT level | MU | H | 295.13 |
| Energy Input at LT | MU | I=D-G-H | 1,294.67 |
| **Wheeling Charge at LT level** | Rs per Unit | J=C/I*10 | 0.40 |
| Sales at LT level | MU | K | 1,128.32 |
| LT Losses | MU | L=I-K | 166.35 |
| Total Losses | MU | M=G+L | 231.73 |
| | % | | 14.00% |

## 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 9.4: Cross Subsidy Charges for FY 2014-15*

| Cross Subsidy Surcharge | UoM | Industry |
|---|---|---|
| T | Rs Per kWh | 5.08 |
| C | Rs Per kWh | 4.60 |
| D | Rs Per kWh | 0.07 |
| L | % | 3.95% |
| Surcharge | Rs Per kWh | 0.41 |

## 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. CONCLUSION OF COMMISSION'S ORDER

Having considered the Petition no. 126/2014 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 Chandigarh.

1. The break-up of the Aggregate Revenue Requirement approved for Chandigarh for the year 2014-15 is given below.

| Sr. No. | Particulars | FY 2014-15 |
|---|---|---|
| | | Approved by the Commission |
| 1 | Cost of fuel | |
| 2 | Cost of power purchase for full year | 537.87 |
| 3 | Employee costs | 59.75 |
| 4 | Administration and general expenses | 2.58 |
| 5 | R&M expenses | 10.68 |
| 6 | Depreciation | 4.11 |
| 7 | Interest and finance charges | 7.92 |
| 8 | Interest on working capital & Interest on Security Deposit | 5.17 |
| 9 | Return on NFA /Equity | 1.58 |
| 10 | Provision for Bad Debt | 3.34 |
| 11 | Advance Against Depreciation | |
| **12** | **Total Revenue Requirement** | **633.00** |
| 13 | Less: Non Tariff Income | 16.13 |
| 14 | Less: Revenue from Sale through UI | - |
| 15 | Less: Revenue from Sale of Power-Exchanges | - |
| **16** | **Net Revenue Requirement (12-13-14-15)** | **616.87** |
| 17 | Revenue from Retail Sales at Existing Tariff | 668.24 |
| 18 | FPPPCA billed during the year | |
| **19** | **Net Gap (16-17-18)** | **-51.37** |
| 20 | Gap for the previous year | (23.51) |
| 21 | Carrying Cost | |
| **22** | **Total gap (19+20+21)** | **-74.89** |
| 23 | Additional revenue from proposed tariff | 0.00 |
| **24** | **Revenue Gap/ (Surplus), if any, after proposed tariffs (22-23)** | **-74.89** |
| 25 | Budgetary Support from Government | |
| **26** | **Net Final Revenue Gap/ (Surplus) (24-25)** | **-74.89** |

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 2014-15.

| S.No. | Category/Consumption Slab | Approved Tariff | |
|---|---|---|---|
| | | Demand Charges (Rs./KW/Month) | Variable Charges (Rs/ Kwh) |
| A | Domestic | | |
| 1 | *SPD-JJ Clusters/ Unauthorized Colonies/ Slum Dwellers* | | 2.30 |
| *2* | *0-150 kWh* | | 2.30 |
| *3* | *151 kWh-400 kWh* | | 4.20 |
| *4* | *Above 400 kWh* | | 4.40 |
| B | Commercial | | 0.00 |
| *4* | *0-150 kWh* | 6 | 4.30 |
| *5* | *151 kWh-400 kWh* | 70 | 4.50 |
| *6* | *Above 400 kWh* | 70 | 4.70 |
| C | Large Supply | 70 | 4.70 |
| D | Small Power | 6 | 4.40 |
| E | Medium Supply | 70 | 4.50 |
| F | Agriculture | | 2.30 |
| G | Public Lighting | | |
| | Public Lightning system | 70 | 4.30 |
| | Sign Boards | 70 | 6.00 |
| H | Bulk Supply | 70 | 4.50 |
| I | Others-Temporary Supply | | 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 |
|---|---|---|
| A | Domestic | |
| 1 | *SPD-JJ Clusters/ Unauthorized Colonies/ Slum Dwellers* | N/A |
| *2* | *0-150 kWh* | 0.49 |
| *3* | *151 kWh-400 kWh* | 0.89 |
| *4* | *Above 400 kWh* | 0.94 |
| B | Commercial | 1.14 |
| *4* | *0-150 kWh* | 1.01 |
| *5* | *151 kWh-400 kWh* | 1.30 |
| *6* | *Above 400 kWh* | 1.14 |
| C | Large Supply | 1.11 |
| D | Small Power | 0.95 |
| E | Medium Supply | 1.08 |
| F | Agriculture | N/A |
| G | Public Lighting | |
| | Public Lightning system | 0.98 |
| | Sign Boards | 1.27 |
| H | Bulk Supply | 1.05 |
| 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 ($R_{Approved}$) for use in the FPPCA formula (paisa per unit) is 337 paisa per unit for FY 2014-15.** The approved per unit cost of power purchase for FY 2014-15 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. The order will be come into force from **01$^{st}$ April 2014** onwards and will continue to be applicable till such time new order is issued by the Commission.

7. 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/-**
**(S.K. Chaturvedi)**

**Chairman**

Place: Gurgaon
Date: 11$^{th}$ April 2014

**Certified Copy**
**(Rajeev Amit)**
**Secretary**

# 11. TARIFF SCHEDULE

## GENERAL CONDITIONS FOR LT & HT SUPPLY

The above mentioned LT/HT Tariffs are subject 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 from 90% |
| **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 2014-15.

## 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<br>(6:00 a.m. to 6:00 p.m) | Normal Rate | Normal rate of energy charges |
| Evening peak load period<br>(6:00 p.m to 10.00 p.m) | Normal Rate | 120% of normal rate of energy charges |
| Off-peak load period<br>(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 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 |

| Sr. No | Description | Approved |
|---|---|---|
| iv | Trivector and special type meters | 1200/- per meter |
| v | HT/ EHV metering equipment | 3000/- per meter |
| C | **Meter Inspection & Testing Charges** | |
| | (In case correctness/accuracy of a meter belonging to the Licensee is challenged by the consumer) | |
| i | Single phase | 150/- per meter |
| ii | 3-phase whole current i.e. without C.T | 500/- per meter |
| iii | L.T. meter with CTs | 1500/- per meter |
| iv | H.T. & E.H.F metering equipment. | 3000/- per meter |
| | NOTE: If the challenged meter is found to be incorrect ,the credit of these charges will be given to the consumer, otherwise these will be forfeited. | |
| D | **Re-sealing charges (irrespective of the number of seals involved against each item below and where seals found to have been broken by the consumer):** | |
| i | Meter cupboard | 50/- |
| ii | Where cut-out is independently sealed | 50/- |
| iii | Meter cover or Meter Terminal cover (Single phase) | 150/- |
| iv | Meter cover or Meter Terminal cover (3-phase) | 375/- |
| v | Maximum Demand Indicator or C.T.s Chamber | 900/- |
| vi | Potential fuses | 900/- |
| | Note :If M&T and ME seals are found to be broken/tempered cost of meter shall be recoverable and the case shall be treated as theft case. | |
| E | **Reconnection Charges** | |
| a | Reconnecting/connecting the premises of any consumer who was previously disconnected on account of breach of his agreement with the department or of any other provisions of the Act as may be relevant. | |
| i | Domestic supply | Rs 250/- |
| ii | Non-Domestic Supply | Rs 500/- |
| iii | SP, MS and street lighting supply. | Rs 500/- |
| iv | LS and bulk supply | Rs 1000/- |
| v | AP supply | Rs 250/- |

| Sr. No | Description | Approved |
|---|---|---|
| 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 | |
| iii | Domestic & NRS | Rs 5/- per card |
| iv | SP and AP | Rs 10/- per card |
| v | MS | Rs 25/- per card |
| vi | LS | Rs 45/- per card |

| Sr. No | Description | Approved |
|---|---|---|
| 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/- |
| 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) | |

| Sr. No | Description | Approved |
|---|---|---|
| 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/- |
| 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/- |

| Sr. No | Description | Approved |
|---|---|---|
| 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.

**k) Single Point Delivery – JJ Clusters / Unauthorized Colonies / Slum Dwellers**[7]

**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 are 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.

[7] *New Classification*

**TARIFF**

| Consumption range | Fixed charge | Energy charge |
|---|---|---|
| | Rs. per KW per Month | Rs./KWh |
| SPD-JJ Clusters/Unauthorized Colonies/Slum Dwellers | 0.00 | 2.30 |
| 0-150 kWh | 0.00 | 2.30 |
| 151 kWh-400 kWh | 0.00 | 4.20 |
| Above 400 kWh | 0.00 | 4.40 |

**Note: SPD - JJ Clusters/Unauthorized Colonies/Slum Dwellers sub-category shall be applicable limited to maximum 150 kWh/month and FPPCA shall be exempted for this category. If the monthly consumption under this sub-category exceeds 150 kWh in any month, then billing for that month shall be done on applicable slab of the domestic category and FPPCA shall be applicable for that month.**

## 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 Slab | Fixed charge | Energy charge |
|---|---|---|
| | Rs. per KW per Month | Rs./KWh |
| 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 Slab | Fixed charge | Energy charge |
|---|---|---|
| | Rs. per KW per Month | Rs./KWh |
| 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 Slab | Fixed charge | Energy charge |
|---|---|---|
| | Rs. per KW per Month | Rs./KWh |
| 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 Slab | Fixed charge | Energy charge |
|---|---|---|
| | Rs. per KW per Month | Rs./KWh |
| 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 Lighting system** - | All units | 70 | 4.30 |
| Public lighting system managed by Municipal Corporation, Panchayat and Street lights maintained/outsourced to an external agency | | | |
| **Advertisement /Neon sign boards** - Advertisement boards, bill boards, sign boards (apart from advertisement boards installed on the commercial establishments & charged under commercial tariff) | | 70 | 6.00 |

## 8. BULK SUPPLY (BS)

**APPLICABILITY**

This tariff schedule shall apply to general or mixed loads exceeding 10 kW to MES, Defense establishments, Railways, Central PWD, Institutions, Hospitals, Departmental Colonies and other similar establishments where further distribution is to be done by the consumer. Above schedule shall not be applicable, if 50 % or more of the total sanctioned load is motive/ manufacturing load.

**CHARACTER OF SERVICE**

AC, 50 cycles, three phase, 400 volts or 11 kV or higher voltage at the option of the department. Loads exceeding 60 kW shall be released on HT only.

**TARIFF**

| Consumption Slab | Fixed charge | Energy charge |
|---|---|---|
| | Rs. per KW per Month | Rs./KWh |
| 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 Slab | Fixed charge | Energy charge |
|---|---|---|
| | Rs. per KW per Month | Rs./KWh |
| 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.